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November 16, 2018

VIA FEDERAL EXPRESS

Ms. Elizabeth Burrell
General Counsel
Twitch Interactive, Inc.
225 Bush Street, Suite 900
San Francisco, CA 94104

RE: Offer to Sell Patents and Notice of U.S. Patents
CP Studios, LLC
Our Ref. No.: 10177-01001 US

Dear Ms. Burrell,

This firm represents CP Studios, LLC ("CP Studios") on various matters including intellectual property.

CP Studios is a company formed by the investors in Checkpoint Studios to hold its intellectual property. Checkpoint Studios was established in 2010 and invested significant resources to develop technologies related to socially-connected gaming experiences as well as to protect them with U.S. patents. CP Studios treats intellectual property protection and the unauthorized use of its rights as a serious matter.

Our client has asked us to inform you, among others, of their intent to sell their patent portfolio including granted patents and pending patent applications. In particular, the U.S. Patent Office has granted 3 patents to CP Studios, specifically U.S. Patent Nos. 9,889,373; 9,597,586; and 9,604,132. Appendix A provides a list of the CP Studios patents and applications, a family tree, and copies of the patents.

These patents and patent applications relate to your business including social network interactions between a video gaming player and one or more non-players. In particular, we call your attention to U.S. patent 9,604,132 and U.S. patent 9,889,373. U.S. patent 9,604,132 covers modifying play of the video gaming application based on one or more social network interactions from one or more non-players. U.S. patent 9,889,373 covers a video gaming environment which includes users that have different levels of access and play within the video gaming environment,

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and comments posted on the social network that affect elements of gameplay on the video gaming environment. We believe these patents are highly relevant to Twitch Interactive's live streaming video platform, especially the video game live streaming platform. Appendix B includes a claims chart showing the Twitch Interactive functionality covered by at least one of CP Studios' patents. We also note that a recently granted patent of Twitch Interactive, USPN 10,105,596, cites two of these patents as prior art so they are clearly related to your technology.

CP Studios is willing to sell its patent portfolio to your company. The ultimate purchaser will remove any exposure or liability due to their product offering by purchasing the patents. Moreover, since CP Studios has not engaged in any patent enforcement litigation and there are no current licenses granted under the CP Studios patents, the ultimate purchaser will also be able to use the CP Studios patents offensively against others. For example, see claims charts against some of your competitors' products in Appendix C.

This letter also constitutes notice under U.S. patent law, in particular 35 U.S.C. §287(a), of the patents listed in the Appendix A.

If you have any questions, I can be reached directly at 801-258-9821 or via email at gsueoka@patentlawworks.net.

Sincerely,



Greg T. Sueoka

Enclosures:

- Appendix A - CP Studios Patents
- Appendix B - Illustrative claims charts on Twitch Interactive products
- Appendix C - Illustrative claims charts on others products

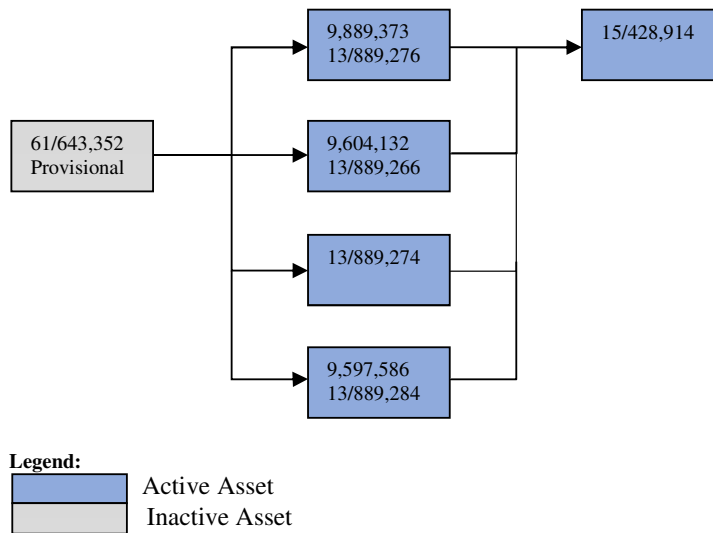
Appendix A

Patent Portfolio of CP Studios, LLC

The CP Studios LLC Patent Portfolio comprises three issued U.S. Patents and two pending U.S. applications:

US Application No.	US Patent No./ Publication No.	Title
13/889,276	9,889,373	Multilayer Framework and Architecture with Variable Video Gaming Capacities
13/889,266	9,604, 132	Video Gaming Platform and User Interface
13/889,274	<i>unpublished</i>	Providing Synchronized and Integrated Video Gaming
13/889,284	9,597,586	Providing Video Gaming Action Via Communications In a Social Network
15/428,914	<i>unpublished</i>	Multilayer Framework Architecture and User Interface for Video Gaming Applications

CP Studios LLC Family Tree



Copies of Granted Patents

(12) **United States Patent**
Wiklem et al.

(10) **Patent No.:** **US 9,889,373 B1**
(45) **Date of Patent:** **Feb. 13, 2018**

(54) **MULTILAYER FRAMEWORK AND ARCHITECTURE WITH VARIABLE VIDEO GAMING CAPABILITIES**

(71) Applicant: **CP Studios LLC**, Salt Lake City, UT (US)

(72) Inventors: **Brian Joseph Wiklem**, Salt Lake City, UT (US); **Carrie Ann Cowan**, Salt Lake City, UT (US)

(73) Assignee: **CP Studios LLC**, Salt Lake City, UT (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 343 days.

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(21) Appl. No.: **13/889,276**

(22) Filed: **May 7, 2013**

Related U.S. Application Data

(60) Provisional application No. 61/643,352, filed on May 7, 2012.

(51) **Int. Cl.**
A63F 13/00 (2014.01)
A63F 13/30 (2014.01)

(52) **U.S. Cl.**
CPC **A63F 13/12** (2013.01)

(58) **Field of Classification Search**
CPC A63F 13/12; A63F 13/23; A63F 13/822
See application file for complete search history.

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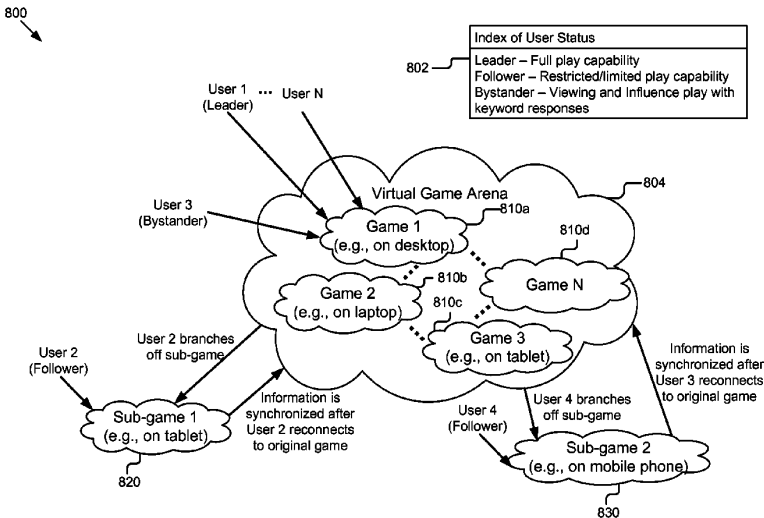
Primary Examiner — Omkar Deodhar
Assistant Examiner — Eric M Thomas

(74) *Attorney, Agent, or Firm* — Patent Law Works LLP

(57) **ABSTRACT**

A multilayer framework and architecture with variable video or digital gaming capabilities provides multiple levels of play, permitting players to engage in different ways. The different levels of play options include 1) a peer-to-peer competitive challenge level for “core” players, 2) a “follower” play option for players with restricted capabilities and access to portions of a game; and a 3) “bystander” play option that permits non-players in a network to either observe or play from a reactive perspective.

14 Claims, 11 Drawing Sheets



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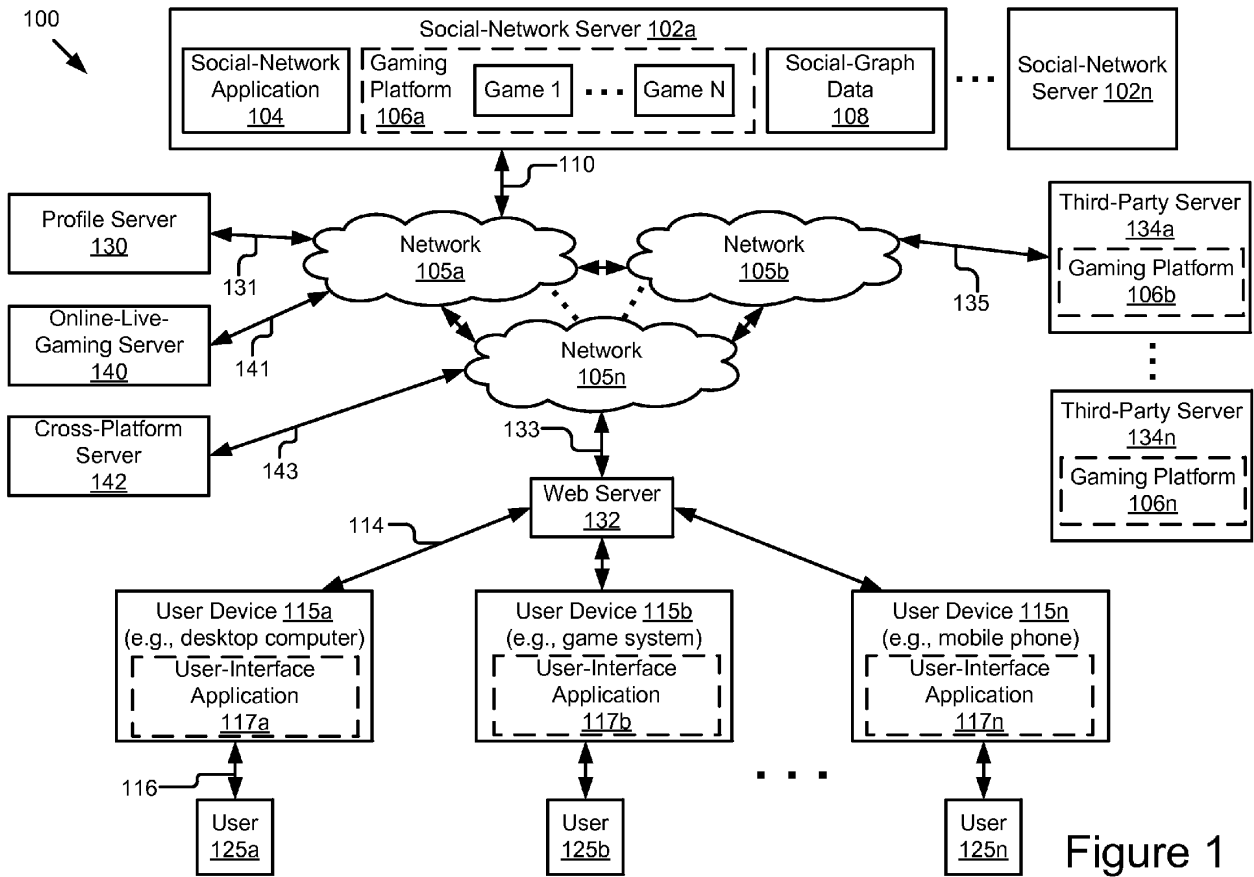


Figure 1

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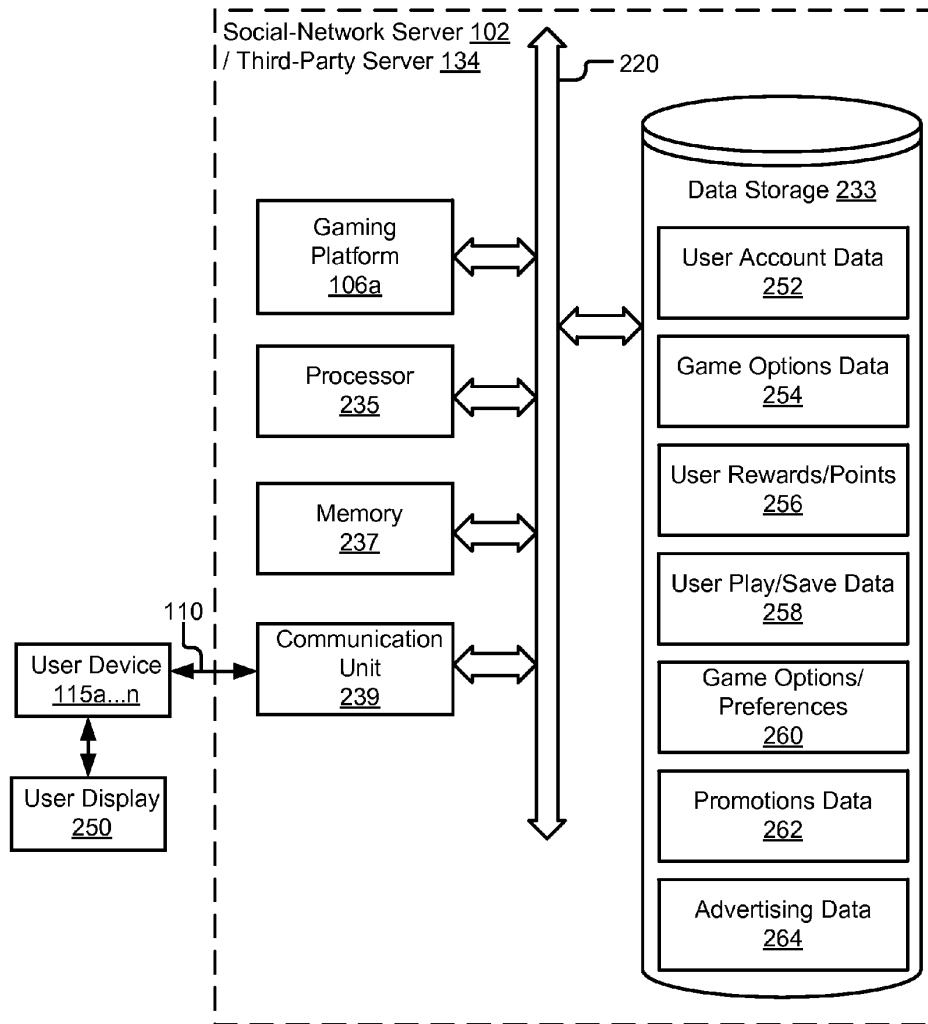


Figure 2

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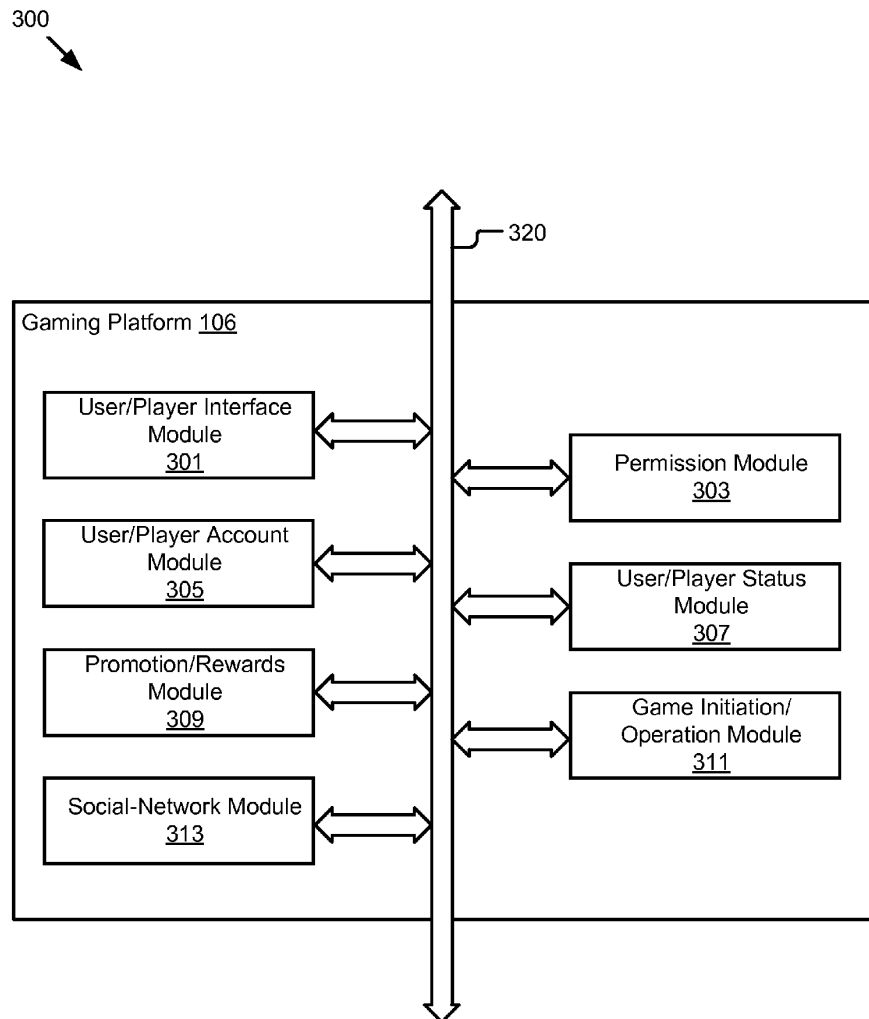


Figure 3

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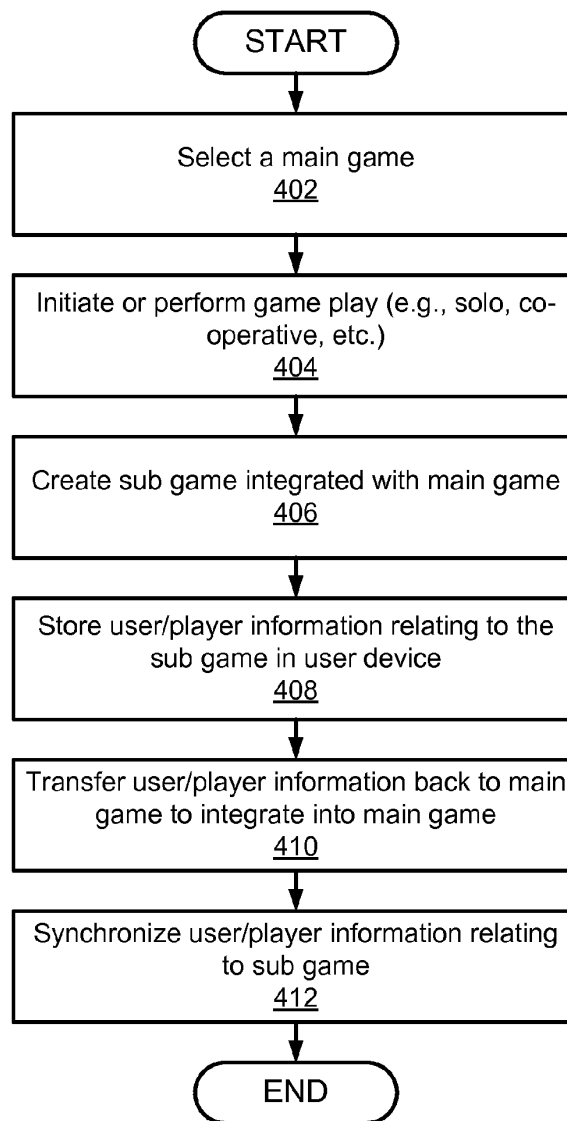


Figure 4

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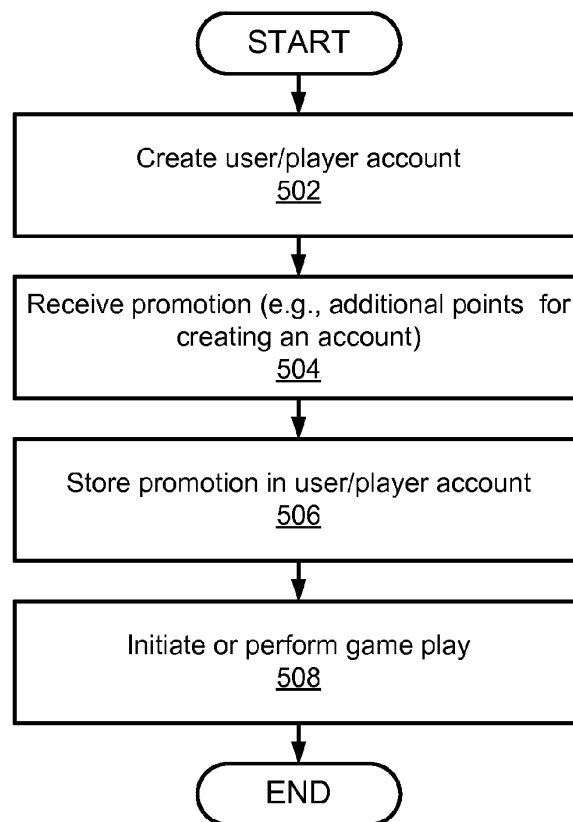


Figure 5

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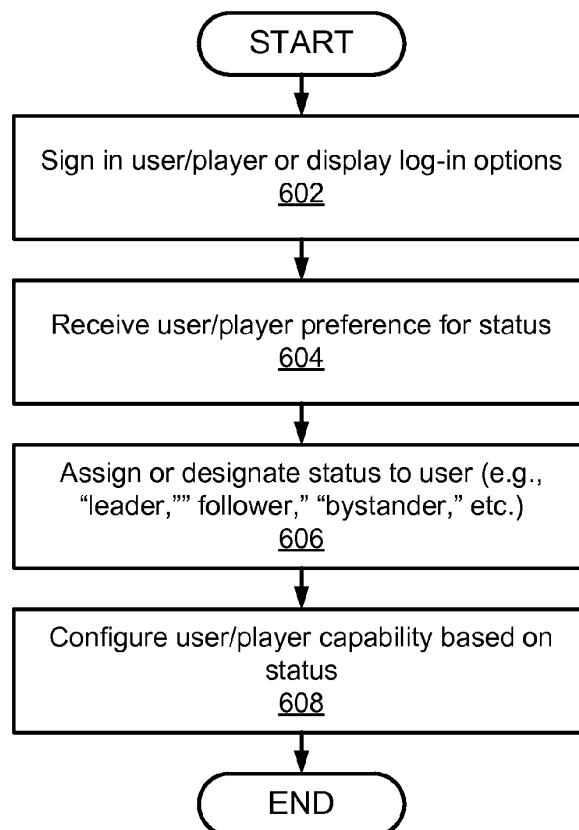


Figure 6

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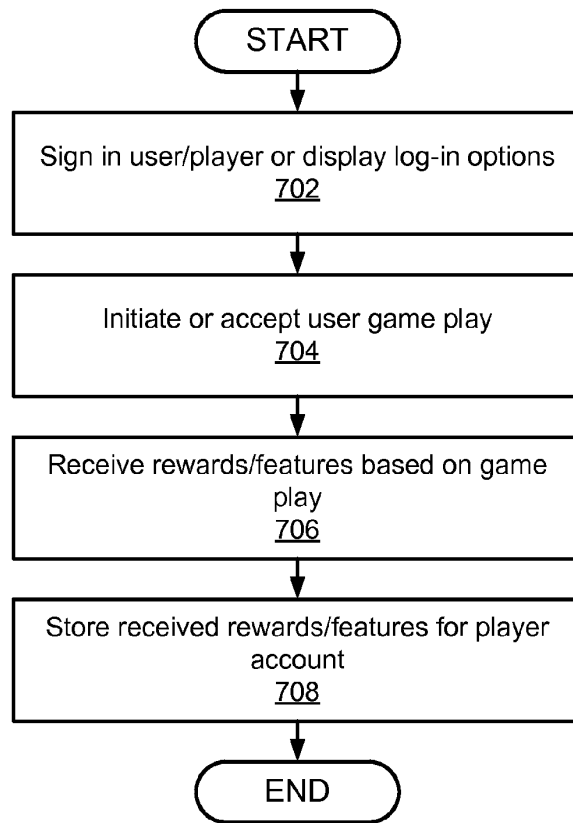


Figure 7

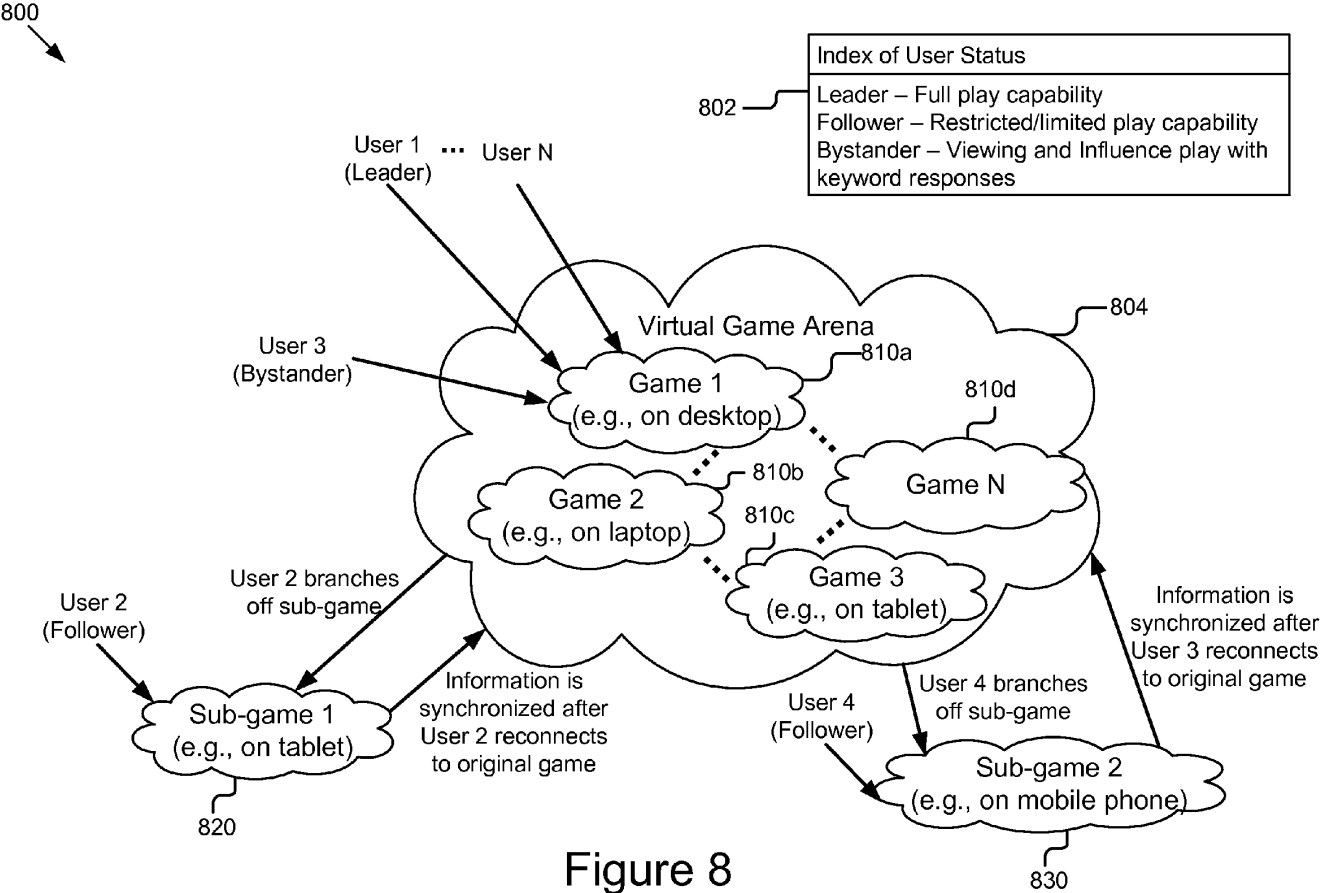


Figure 8

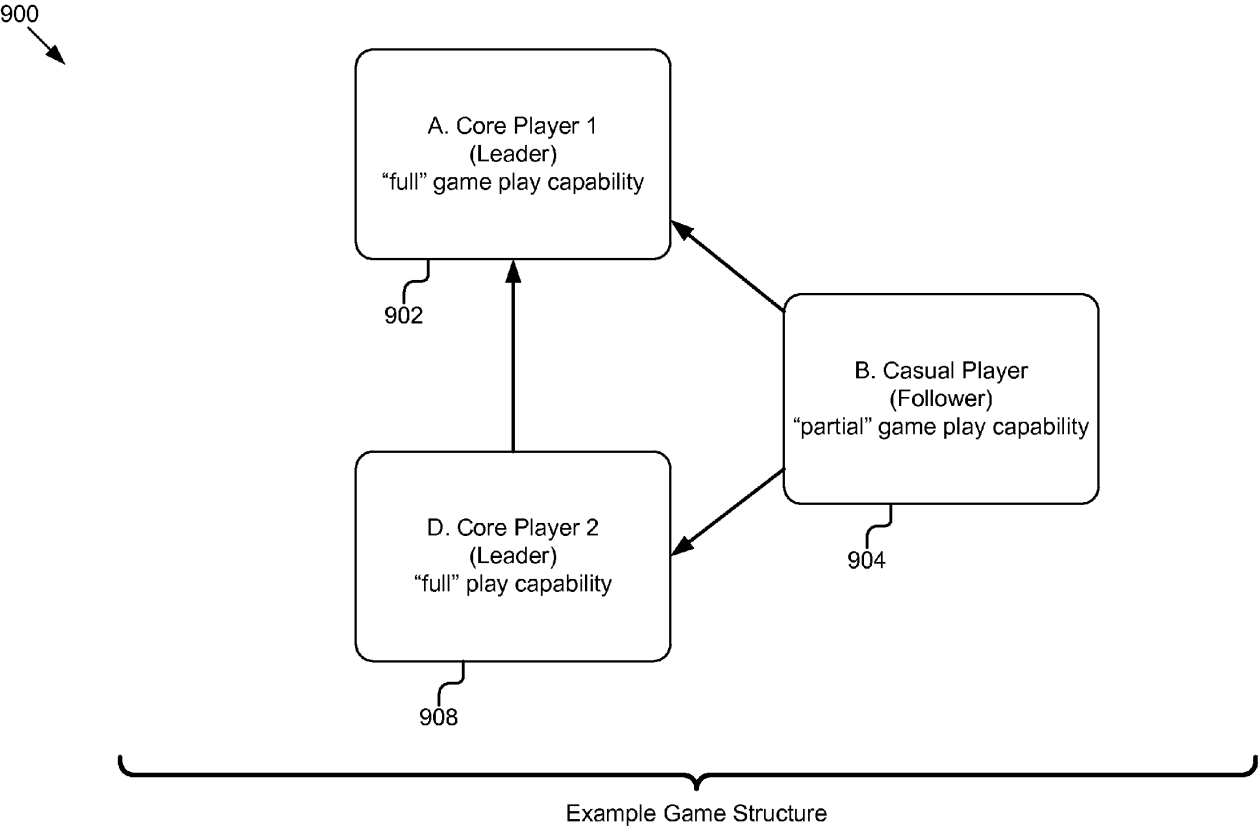


Figure 9

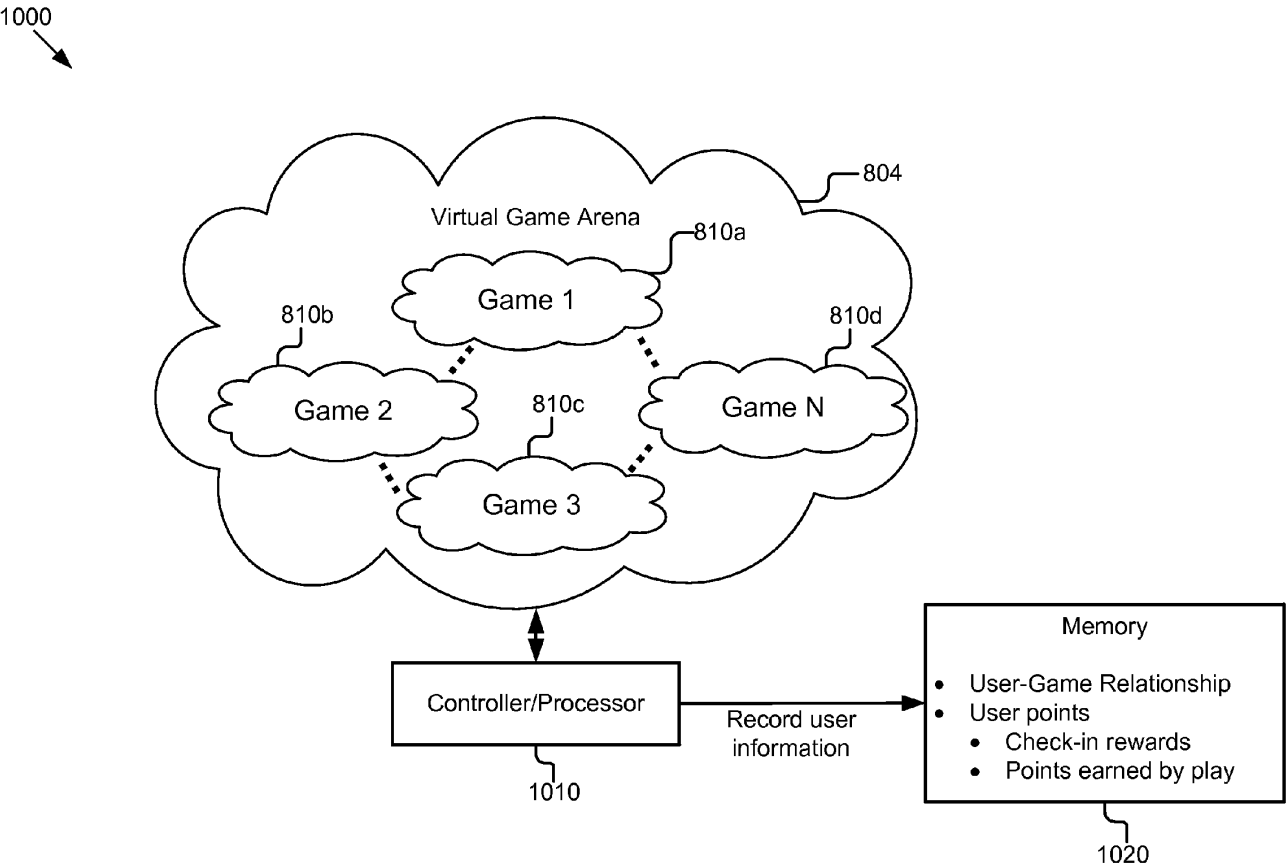


Figure 10

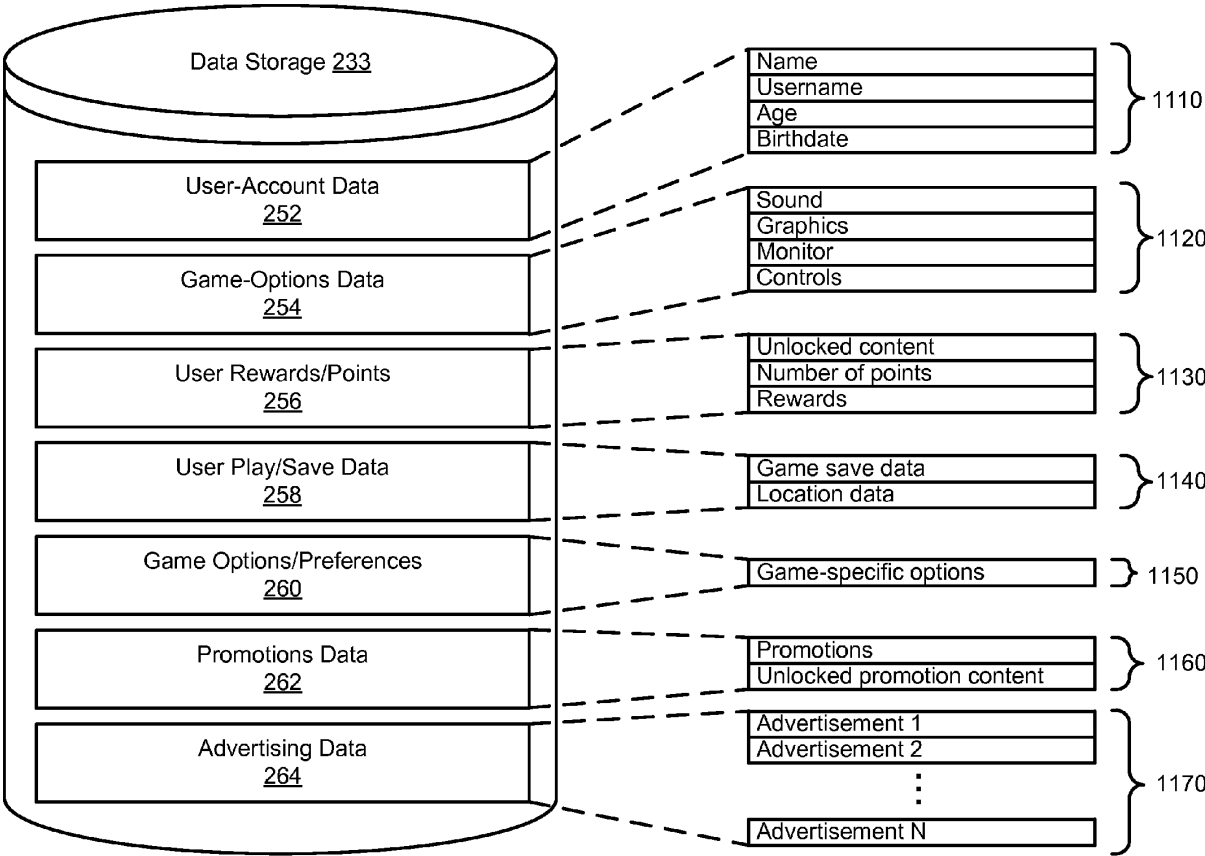


Figure 11

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**MULTILAYER FRAMEWORK AND
ARCHITECTURE WITH VARIABLE VIDEO
GAMING CAPABILITIES**

**CROSS REFERENCE TO RELATED
APPLICATIONS**

The present application claims the benefit of priority under 35 U.S.C. § 119(e) from U.S. Provisional Application No. 61/643,352 entitled “MULTILAYER FRAMEWORK ARCHITECTURE AND USER INTERFACES FOR VIDEO GAMING APPLICATIONS,” filed on May 7, 2012, by Brian Joseph Wiklem, Christopher Robert Masterton, and Carrie Ann Cowan. The entire contents of the provisional application are incorporated by reference herein. The present application also incorporates by reference the contents of utility applications entitled “PROVIDING SYNCHRONIZED AND INTEGRATED VIDEO GAMING,” “PROVIDING VIDEO GAMING ACTION VIA COMMUNICATIONS IN A SOCIAL NETWORK,” AND “VIDEO GAMING PLATFORM AND USER INTERFACE,” which are concurrently submitted, and also claim priority under 35 U.S.C. § 119(e) from U.S. Provisional Application No. 61/643,352.

BACKGROUND

The present disclosure relates to video gaming applications and platforms, including those accessed via online services or communities, for example, social networks, or directly via hosted websites, dedicated either wholly or partially to them. In particular, the present disclosure relates to multilayer system framework and architecture with variable video gaming capabilities.

In recent years, video games have become extremely popular. Video games are used not only for entertainment, but also for instructional purposes. Players typically interact with a gaming application through computer or console peripherals such as keyboard, mouse, joysticks, a wide variety of game pads, and funny controllers such as the NES Zapper®. More recently, nontraditional controller technologies such as dance pads, the Wii-mote® or the Kinect®, offering new types of gaming experiences are beginning to emerge. These technologies are capable of enhancing games to incorporate movement, creating a new experience and attracting new audiences.

With the popularity of social networks reaching epic proportions, social games have also become very popular.

With the ongoing trends and exponential growth in video gaming, it would certainly be beneficial to find better architectures for gaming applications that continue to enhance the user experience.

SUMMARY

The present disclosure overcomes the deficiencies and limitations of the prior art by providing a technology with a flexible architecture for video gaming applications. In some embodiments, the flexible architecture provides a continuous visual experience for players across different platforms (platform agnostic) and engages them at different levels. Each of the players may have a unique and different visual experience, depending upon the gaming platform a player uses. The architecture facilitates access to video gaming applications in various ways, including 1) via social networks or sites, for example, accessed via personal computers; 2) via wall posts or via an online social networking

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service that enables its users to send and read text-based posts; 3) via mobile devices (iOS®, Android™, or Windows-based smart phones); and 4) via game consoles (for example, PS3®, Xbox 360®, or Wii®).

5 Video gaming applications may be purchased via platform application stores. These applications are supported by Android (Android is a Linux-based operating system for mobile devices such as smartphones and tablet computers—it is developed by the Open Handset Alliance), iOS (a mobile operating system developed by Apple Inc.) platforms, and phones operating windows. The user interface of an iOS platform is based on the concept of direct manipulation, using multi-touch gestures. Interface control elements consist of sliders, switches, and buttons. The response to user input is immediate and provides a fluid interface.

10 Video gaming applications may be hosted or accessed via social networks, other third party services or on third party servers, stand-alone platforms, tablets, smartphones or the like. Multiple players (hundreds, thousands, if not millions) may access gaming application via any or all of these ways. In addition, the flexible architecture provides a scalable infrastructure with cross-platform pollination technology (achievements and rewards are transferred between platforms used by particular players) and secure collection of data. Video gaming applications may be based on universal themes that appeal to a broad range of demographics and provides a continuous flow of data analytics. They offer opportunities for configuring advertisements and promotions to accomplish strategic goals.

15 In some embodiments, the flexible architecture provides multiple levels of play, permitting players to engage in different ways. The different levels of play options include 1) a peer-to-peer competitive challenge level for core players, 2) a casual play option for play with friends with whom a player shares an affinity, for example, in a social network; and a 3) spectator mode that permits non-players in a network to assist friends. Feed-based triggers allow for greater rewards to players and ease of discovering games.

20 In yet other embodiments, which may include any or all of the aspects described above, the flexible architecture permits mobile play, extending the gaming arena or world to different platforms, so achievements in a particular game may be earned and shared more easily across platforms. In addition, a player may earn location-based rewards.

25 Moreover, the flexible architecture provides a system of rewards at check-in, to coax players by providing greater incentives. The flexible architecture permits concurrent “solo” play by a player or gamer, collaborative and competitive play by multiple players. The flexible architecture has user interfaces that are configured to provide different experiences for different players, including for example, a three-dimensional user experience. In some embodiments, the video gaming applications include story-driven quests and game play, giving players more than just tasks and chores. As one example, an aviation gaming application may utilize a collection of 250 or more aircrafts and include transactions relating to the aircrafts and their environment, creation of the environment in which the aircrafts operate etc. In this particular application, players may create and manage their experience (for example, build and manage an aviation empire), enjoy the thrill of history (aviation’s past), and travel the globe and fly through an open network of friendly and rival airports.

30 In yet other embodiments, the system provides a plurality of features for player control of the virtual arena including control of “play” times, “gifts” and “rewards,” “collect” and

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“decorate” features, monitor types of “play” (for example, acceleration progress), generate user content, etc.

In some embodiments, the video gaming applications may be free, when accessed via social-network platforms, in which instances revenue is generated via market place for products used during the game, direct advertising etc. The flexible architecture permits for easy access through a particular player’s social network, allowing other players to discover a particular game and permit conversion as necessary.

In yet other embodiments, linking or connecting platforms creates a more interesting gaming world.

BRIEF DESCRIPTION OF THE DRAWINGS

The present disclosure is illustrated by way of example, and not by way of limitation, in the figures of the accompanying drawings, in which like reference numerals are used to refer to similar elements.

FIG. 1 is a high-level block diagram illustrating some embodiments of a system architecture for providing video gaming platforms, accessed either via a social network (hosted on a social network server or a server associated with it) or a third party video gaming website (hosted by a third party on its server).

FIG. 2 is a block diagram illustrating some embodiments of a social network server or a third party server shown in FIG. 1, including its hardware components.

FIG. 3 is a block diagram illustrating some embodiments of a gaming platform shown in FIGS. 1 and 2, and its software components.

FIG. 4 is an example flow chart illustrating an example general method for creating or branching off a sub game.

FIG. 5 is an example flow chart illustrating an example method for obtaining a promotion.

FIG. 6 is an example flow chart illustrating an example method for assigning a status (“leader” or “core,” “follower” or “casual,” or “bystander” or “spectator”) to a player.

FIG. 7 is an example flow chart illustrating an example method for earning rewards or features within a game.

FIG. 8 is a graphical representation illustrating a virtual game arena accessed by various users with varying status and an index of user status.

FIG. 9 is a graphical representation illustrating one example of a game structure.

FIG. 10 is a graphical representation illustrating a virtual game arena with concurrent operation of multiple games.

FIG. 11 is a graphical representation of a data storage configuration with storage of game-related information.

DETAILED DESCRIPTION

The present technology is directed to a multilayer or multi-tier architecture or framework for video games or video gaming applications with variable video gaming capabilities accorded to players or gamers. The video games are for play by users (players or gamers), accessed either via social networks, or directly, on games hosted by third party servers. The specification describes examples of systems and methods for providing this multilayer architecture, video gaming platforms, and user interfaces to facilitate a unique user experience. These video gaming applications may either be hosted by an online community, for example, one or more social networks, or alternatively, by third party servers that are wholly or partially dedicated to gaming applications.

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In some embodiments, the flexible and multilayer architecture provides a continuous game and visual experience for players across different platforms (platform agnostic) and engages them at different levels of play and capability. Each of the players may have a unique and different gaming experience, depending upon the level of play and capability accorded to each player. This flexible architecture facilitates access to video gaming applications in various ways, including 1) via social networks or sites, for example, accessed via personal computers (desk tops or lap tops); 2) via wall posts or via an online social networking service that enables its users to send and read text-based posts; 3) via mobile devices (iOS, Android, or Windows-based smart phones); and 4) via game consoles (for example, PS3, Xbox 360, or Wii).

Video gaming applications may be purchased via platform application stores. These applications are supported by Android (Android is a Linux-based operating system for mobile devices such as smartphones and tablet computers—it is developed by the Open Handset Alliance), iOS (a mobile operating system developed by Apple Inc.) platforms, and phone operating windows. The user interface of iOS is based on the concept of direct manipulation, using multi-touch gestures. Interface control elements consist of sliders, switches, and buttons. The response to user input is immediate and provides a fluid interface.

Video gaming applications may be hosted or accessed via social networks, other third party services or on third party servers, stand-alone platforms, tablets, smartphones, or the like. Multiple players (hundreds, thousands, if not millions) may access gaming one or more applications via any or all of these ways. In addition, the flexible architecture provides a scalable infrastructure with cross-platform pollination technology (achievements and rewards are transferred between platforms for particular players depending on their status) and secure data collection. Video gaming applications may be based on universal themes that appeal to a broad range of demographics and provides a continuous flow of data analytics. They offer opportunities for configuring advertisements and promotions to accomplish strategic goals.

In some embodiments, the flexible architecture provides multiple levels of play, permitting players to engage in different ways and at different levels. The different levels of play options include 1) a peer-to-peer competitive challenge level for “core” players, 2) a “casual” play option for play with friends with whom a particular player shares an affinity, for example, in a social network; and 3) a “spectator” mode that permits non-players in a network to assist friends. Feed-based triggers allow for greater rewards to players and ease of discovering games.

In yet other embodiments, which may include any or all of the aspects described above, the architecture permits play via mobile devices, extending the gaming arena or world to different environments, so achievements in a particular game may be earned and shared more easily across environments, depending upon player status. In addition, a player may earn location-based rewards.

Moreover, the system provides rewards at check-in, to coax players by providing greater incentives. The architecture permits for concurrent “solo” play by a player or gamer and collaborative and competitive play between multiple players. User interfaces are configured to provide different experiences for different players, including a three-dimensional user experience in some environments. In some embodiments, the video gaming applications include story-driven quests and game play, giving players more than just

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tasks and chores. As one example, a “core” player in an aviation gaming application, may utilize a collection of 250 aircrafts and include transactions relating to the aircrafts and its environment, to create an environment in which the aircrafts operate etc. In this particular application, “core” players may create and manage their experience (for example, by creating an aviation empire), enjoy the thrill of history (aviation’s past), and travel the globe and fly through an open network of friendly and rival airports. Other players, for example, “followers” may be accorded more restricted play and capability.

The system provides variable features for player control (depending upon player status) of the virtual arena including control of “play” times, “gifts” and “rewards,” “collect” and “decorate,” monitor “play” (for example, acceleration progress), generate user content, etc.

In some implementations, the architecture accords variable status to players who can opt for different levels of play. A “core” game play status enables players to be “leaders” and play the entire game. A leader has control of all aspects of a particular gaming application. A “casual” or “follower” game play status enables players to play from a different perspective, providing access to only a portion of the entire game. A “spectator” or “bystander” game play enables players to play from a reactive perspective.

Players (with any status described above) may access game play via mobile devices, at any location, and receive location-based rewards. They may access a virtual game arena, their own or that of other players, via several platforms and take up play where they left off. They may link up friends for collaborative play. Players may also participate in standalone game play, via tablets, mobile devices, console-based gameplay, target-based game play or the like. In addition, the system permits cross-pollination game play, sending game objects from one game world or arena to another.

In the following description, for purposes of explanation, numerous specific details are indicated in order to provide a thorough understanding of the technology described. It should be apparent, however, to one skilled in the art, that this technology can be practiced without these specific details. In other instances, structures and devices are shown in block diagram form in order to avoid obscuring the technology. For example, the present technology is described with some embodiments below with reference to particular user interfaces or user platforms and particular hardware. However, the present technology applies to any type of computing device or platform that can receive data and commands, and any devices providing services. Moreover, the present technology is described below primarily in the context of video gaming applications configured to enhance and improve the quality of these gaming applications in order to facilitate synchronous play by hundreds, thousands, if not millions of players. The players may enjoy different user experiences based on their individual preferences and may enjoy seamless play across different gaming platforms or devices (desktop computer, mobile device or the like). However, those skilled in the art should understand that the present technology applies to any type of application and can be used for other applications beyond gaming applications.

Reference in the specification to “one embodiment,” “an embodiment,” or “some embodiments” means simply that one or more particular features, structures, or characteristics described in connection with the one or more embodiments is included in at least one or more embodiments that are described. The appearances of the phrase “in one embodi-

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ment” in various places in the specification are not necessarily all referring to the same embodiment.

Some portions of the detailed descriptions that follow may be presented in terms of algorithms and symbolic representations of operations on data bits within a computer memory of either one or more computing devices or gaming platforms. These algorithmic descriptions and representations are the means used by those skilled in the data processing arts to most effectively convey the substance of their work to others skilled in the art. An algorithm as indicated here, and generally, is conceived to be a self-consistent sequence of steps leading to a desired result. The steps are those requiring physical manipulations of physical quantities. Usually, though not necessarily, these quantities take the form of electrical or magnetic signals capable of being stored, transferred, combined, compared, and otherwise manipulated. It has proven convenient at times, principally for reasons of common usage, to refer to these signals as bits, values, elements, symbols, characters, terms, numbers, or the like.

It should be understood, however, that all of these and similar terms are to be associated with the appropriate physical quantities and are merely convenient labels applied to these quantities. Unless specifically stated otherwise, as apparent from the following discussion, it should be appreciated that throughout the description, discussions utilizing terms such as “processing,” “computing,” “calculating,” “determining,” or “displaying” or the like, refer to the action and processes of a computer system, or similar electronic computing device or platform, that manipulates and transforms data represented as physical (electronic) quantities within the computer system’s registers and memories into other data similarly represented as physical quantities within the computer system memories or registers or other such information storage, transmission, or display devices.

The present technology also relates to an apparatus or one or more systems for performing the operations described here. This apparatus or one or more systems may be specially constructed for the required purposes, or it may comprise a general-purpose computer selectively activated or reconfigured by a computer program stored in the computer. Such a computer program may be stored in a computer-readable storage medium, such as, but not limited to, any type of disk including floppy disks, optical disks, CD-ROMs, magnetic disks, read-only memories (ROMs), random access memories (RAMs), EPROMs, EEPROMs, magnetic or optical cards, flash memories including USB keys with non-volatile memory or any type of media suitable for storing electronic instructions, each coupled to a computer system bus.

This technology can take the form of an entirely hardware embodiment, an entirely software embodiment, or an embodiment containing both hardware and software components. In some embodiments, this technology is implemented in software, which includes but is not limited to firmware, resident software, microcode, etc.

Furthermore, this technology can take the form of a computer program product accessible from a computer-usable or computer-readable medium providing program code for use by or in connection with a computer or any instruction execution system. For the purposes of this description, a computer-usable or computer-readable medium may be any apparatus that can contain, store, communicate, propagate, or transport the program for use by or in connection with the instruction execution system, apparatus, or device.

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A data processing system suitable for storing and/or executing program code includes at least one processor coupled directly or indirectly to memory elements through a system bus. The memory elements may include local memory employed during actual execution of the program code, bulk storage, and cache memories, which provide temporary storage of at least some program code in order to reduce the number of times code must be retrieved from bulk storage during execution.

Input/output or I/O devices (including but not limited to keyboards, displays, pointing devices, etc.) can be coupled to the system either directly or through intervening I/O controllers.

Communication units including network adapters may also be coupled to the systems to enable them to couple to other data processing systems, remote printers, or storage devices, through either intervening private or public networks. Modems, cable modems, and Ethernet cards are just a few examples of the currently available types of network adapters.

Finally, the algorithms and displays presented in this application are not inherently related to any particular computer, gaming platform or other apparatus. Various general-purpose systems may be used with programs in accordance with the teachings here, or it may prove convenient to construct more specialized apparatus to perform the required method steps. The required structure for a variety of these systems is outlined in the description below. In addition, the present technology is not described with reference to any particular programming language. It should be understood that a variety of programming languages may be used to implement the technology as described here.

System Architecture Overview

FIG. 1 is a high-level block diagram illustrating some embodiments of systems for providing gaming applications, either via social networks or on third party servers. The system 100 illustrated in FIG. 1 provides gaming platforms 106a or 106b so that participants (players or gamers) may access one or more gaming applications, initiate a play on one device or gaming platform and continue play at another device or gaming platform, making transitions between devices or platforms essentially seamless and enabling a continuous playing experience.

The system 100 includes one or more social network servers 102a through 102n that may be accessed via user devices 115a, 115b through 115n, which are used by users 125a, 125b, through 125n, to connect to any one of the social network servers 102a through 102n. The user devices 115a through 115n may be a desktop computer, a game system or a mobile phone. These entities (user devices 115a-115n and social network servers 102a-102n) are communicatively coupled via one or more networks 105a, 105b, and 105n. Although only three user devices or platforms 115a, 115b through 115n are illustrated, any numbers of user devices or platforms 115n may be used by any number of users (players, gamers, or the like) 125n. Moreover, those skilled in the art should recognize that while the present disclosure is described below primarily in the context of providing gaming applications, the present disclosure may be applicable to other types of applications, for entertainment or otherwise. As one example, gaming applications may include operations for creating plays, participating in plays, etc.

The user devices 115a through 115n in FIG. 1 are illustrated by way of example. Although FIG. 1 illustrates only three devices, the present disclosure applies to any system architecture having one or more user devices 115a through

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115n, therefore, any number of user devices 115n (hundreds, thousands, even millions or more) may be used.

Furthermore, while only three networks 105a, 105b, and 105n are illustrated as coupled to the user devices 115a, 115b through 115n, the social network servers 102a-102n, the profile server 130, the web server 132, and one or more third party servers 134a through 134n, in practice, any number of networks 105n may be connected, either directly or indirectly, to these entities. In addition, although only two third party servers 134a through 134n are shown, the system architecture 100 may include one or more third party servers 134n, each with a gaming platform 106b through 106n, operating one or more gaming applications that are similar or different.

In some embodiments, the social network server 102a is coupled to the network 105a, via a signal line 110. The social network server 102a includes a social network application 104, which comprises the software routines and instructions to operate the social network server 102a and its functions and operations. Although only one social network server 102a is described here, persons of ordinary skill in the art should recognize that multiple servers may be present, as illustrated by social network servers 102n, each with functionality similar to social network server 102a or different.

The term "social network" as used here encompasses its plain and ordinary meaning including, but not limited to, any type of social structure where the users are connected by a common feature or link. The common feature includes relationships/connections, e.g., friendship, family, work, a similar interest, etc. The common features are provided by one or more social networking systems, such as those included in the system architecture 100, including explicitly-defined relationships and relationships implied by social connections with other online users, where the relationships form a social graph 108.

The term "social graph" as used here encompasses its plain and ordinary meaning including, but not limited to, a set of online relationships between users (players and non-players), such as provided by one or more social networking systems, operating on social network servers 102a through 102n, including explicitly-defined relationships and relationships implied by social connections with other online users, where the relationships form a social graph. In some examples, the social graph 108 may reflect a mapping of these users and how they are related.

It should be understood that social network server 102a and the social network software/application 104 are representative of a single social network. Each of the plurality of social networks 102a through 102n is coupled to any one of the networks 105a, 105b, and 105n, each having its own server, application, and social graph. For example, a first social network system operated or hosted on a social network server may be directed to business networking, a second directed to or centered on academics, a third directed to local business, a fourth directed to dating or gaming, and yet others directed to other general interests or perhaps a specific focus. Yet, each may provide access to a gaming platform 106a for operating or providing access to video gaming applications.

A profile server 130 is illustrated as a stand-alone server in FIG. 1. In other embodiments of the system architecture 100, all or part of the profile server 130 may be part of the social network server 102a. The profile server 130 is directly connected to the network 105a, via a line 131. The profile server 130 stores profiles for all the users that belong to a social network. A third party server 134a is connected to the network 105b, via a signal line 135. A web server 132 is

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connected, via a line 133, to the network 105n. The web server 132 delivers access to content, via the internet, for example, by hosted websites or the like. Users may use the web browsers on their electronic devices or gaming platforms to browse for gaming applications and access websites hosting gaming applications. An online-live-gaming server 140 is connected to the network 105a by line 141 and a cross-platform server 142 is connected to a network 105n by line 143. The cross-platform server 142 may serve as a gateway to different servers and accommodating access by different user platforms.

The user devices or player gaming platforms 115a through 115n can be a computing device, for example, a laptop computer, a desktop computer, a tablet computer, a mobile telephone (iOS, Android, or windows-based phone, a personal digital assistant (PDA), a mobile email device, a portable game player, a game console (PS3, Xbox 360, Wii or the like) a portable music player, a television with one or more processors embedded in the television or coupled to it, or any other electronic device capable of accessing a network and participating in a gaming application. The user devices 115a through 115n include user-interface applications indicated by reference numerals 117a, 117b, through 117n.

The network 105a, 105b, or 105n, is of conventional type, wired or wireless, and may have any number of configurations, such as a star configuration, token ring configuration, or other configurations known to those skilled in the art. Furthermore, the network 105 may comprise a local area network (LAN), a wide area network (WAN, e.g., the Internet), and/or any other interconnected data path across which one or more devices may communicate.

In another embodiment, the network 105a, 105b, or 105n may be a peer-to-peer network. The network 105a, 105b, or 105n may also be coupled to or include portions of one or more telecommunications networks for sending data in a variety of different communication protocols.

In yet another embodiment, the network 105a, 105b, or 105n, includes Bluetooth communication networks or a cellular communications network for sending and receiving data such as via short messaging service (SMS), multimedia messaging service (MMS), hypertext transfer protocol (HTTP), direct data connection, WAP, email, etc.

In some embodiments, the social network server 102a, the profile server 130, the web server 132, the online-live-gaming server 140, and cross-platform server 142, and the third party servers 134a through 134n are hardware servers including a processor, memory, and network communication capabilities. One or more of the users (players or gamers) 125a through 125n access any of the social network servers 102a through 102n, or the third party servers 134a through 134n, or any of the other servers, via browsers in their user devices or gaming platforms and via the web server 132. The user devices 115a through 115n have user interface applications 117a, 117b, through 117n, that manage access by particular players to select gaming applications or their choice.

FIG. 2 is a block diagram illustrating some embodiments of the social network server 102 (a through n) or third party server 134 (a through n) or any other server hosting a gaming environment. In FIG. 2, like reference numerals have been used to reference like components with the same or similar functionality that has been described above with reference to FIG. 1. Since those components have been described above that description is not repeated here. The social network server 102a generally comprises one or more processors, although only one processor 235 is illustrated in

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FIG. 2. The processor is coupled via a bus 220 to memory 237 and database storage 233, which stores user account data 252, game options data 254, user rewards/points 256, user play/save data 258, game options/preferences 260, promotion data 262 and advertising data 264.

In some embodiments, the database storage 233 is a database organized by the hosting server and the user or either one. For each user or player, the data storage 233 stores data on the user and user game plays etc. For example, this data may include related social network activity such as posts, shares, invitations, status changes etc., associated with each user engaged in a video gaming application.

A user or player 125a, via a user or gaming device 115a, communicates a request to initiate a gaming application or reacts to a keyword via communication unit 239. The “set up” for a video gaming application is managed by the gaming platform 106a. It should be recognized that the gaming platform 106a (illustrated in the social network server 102a) and 106b (illustrated in the third party server 134a) are shown separately, but include similar functionality, at least for purposes of operating the gaming applications. A user or player display 25 coupled to the user device 115a through n, is configured to provide the video source of the gaming application in one of many formats, high definition graphics, three dimensional formats etc.

Referring now to FIG. 3, like reference numerals have been used to reference like components with the same or similar functionality that has been described above with reference to FIG. 1. Since those components have been described above, that description is not repeated here. The gaming platform or environment 106 (a or b) includes various modules that are programmed to perform the functionalities described here. These modules may be variously distributed or may be in a single unit. The gaming platform 106 includes a user/player interface module 301, a permissions module 303, a user/player account module 305, a user/player status module 307, a promotion module 309, a game initiation module 311, and a social-network module 313. Each of these modules is coupled to a software communication mechanism 320 to communicate the other modules. Examples of a software communications mechanism 320 may be an object bus (such as COBRA), direct socket communication (such as TCP/IP sockets) among software modules, remote procedure calls, UDP broadcasts and receipts, HTTP connections, function or procedure calls etc. Further, any or all of the communication could be secure (SSH, HTTPS, etc.). The software communication can be implemented on any underlying hardware, such as a network, the Internet, a bus 220 of FIG. 2, or a combination thereof etc.

As one example, a particular user 125a communicates via a user device 115a, to either initiate or react to a game play. The user interface module 301 facilitates a connection of the user device 115a with the social network server 102a, in the event the player wishes to engage or participate in a gaming application via the social network server 102a. The permission module 303 ensures that the user device is compliant with protocols and any privacy concerns. Once a video gaming application has been set up, the user/player account module 305 makes a note of the user to determine if the user has an existing account or must create one. The user/player status module 307 considers the status of the various users (“leader,” “follower,” or “spectator”). A promotion module 309 operates the necessary promotions permitting players to earn rewards accorded by the promotions. The game initiation module 311 initiates play and the social network module

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313 tracks the applications engaged by a particular player and updates the player's social profile accordingly.

Example Methods

FIG. 4 is a flow chart illustrating one example method 400 for one or more users (players or gamers) to select a "main" game and branch off for playing a portion of the "main" game. The method 400 begins with selecting a "main" game at block 402, and initiating a game play, for either "solo" play or collaborative or cooperative play, illustrated by block 404. The method 400 proceeds to the next block 406, at which point, one or more players (with their user devices) create one or more sub games based on the "main" game or branching off from the "main" game. As explained above, players may pursue a particular aspect of the "main" game, separately, either via the same player device, or via another user device (for example, move from a desktop or dedicated game console, to a mobile device, for example, a smart-phone).

The method 400 proceeds to block 408, at which stage, user information relating to the sub game is stored on the user device. At block 410, the method 400 proceeds and transfers the user information to the "main" game. Finally, the method 400 proceeds to block 412, at which stage, the "main" game is synchronized with the user information obtained from the sub game.

Referring now to the flow chart illustrated in FIG. 5, an example method for obtaining a promotion is described. As described above, video gaming applications may be used in conjunction with promotions or advertising in order to coax players to purchase products or services that are either related to the gaming applications or otherwise. The user interface is configured to provide rewards to players upon receiving the promotions or advertising. The example method 500 illustrated here begins at block 502, where user or player accounts are created when a user or player decides to initiate play of a particular gaming application. The player then participates in the promotion, for example, by viewing the particulars of a promotion (advertising on a product or service), and receives additional points for creating an account, as indicated at block 504. The method 500 proceeds to block 506, where the promotion is stored into the particular player's account and at block 508 the player initiates game play.

Referring now to the flow chart illustrated in FIG. 6, some example operations for providing multiple levels of play are illustrated. In particular, FIG. 6 illustrates an example method 600 for assigning a status to a player. The method 600 begins and proceeds to block 602, at which point users are signed in. The user or player can indicate preferences for the level of play the user desires to participate at, which are received by the video gaming platform, as illustrated at block 604. The video gaming platform assigns a status to the user, at block 606, for example, designating the user as a "leader," a "follower," a "bystander" or any other designation used by the video gaming application. Each of these designations imposes limits on play associated with them. For example, as indicated above, a "leader" is permitted to play the entire game whereas a "follower" is permitted to play only a portion of the game. The video gaming platform modifies player capabilities based on user status, as illustrated at block 608. User "status" accords full play capabilities to a "leader," "restricted" or "limited" play capabilities to a "follower" and "viewing" and capability to "influence" play with keyword responses to a "bystander."

FIG. 7 illustrates an example method 700 for earning rewards/features within a game. The example method 700 begins and proceeds to block 702, at which stage, a user or

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player signs in or is displayed log-in options. The method 700 proceeds to block 704 including one or more operations for initiating or accepting user game play. The method 700 proceeds to block 706, at which stage, one or operations receive rewards and/or features for players based on game play. The method 700 proceeds to the next block 708, which includes one or more operations for storing received rewards and/or features for player accounts.

FIG. 8 illustrates that multiple users, for example, Users 1, 2, 3, through N, each with a different status, for example, either "leader," "bystander," or "follower," may initiate games, for example Game 1 (indicated by reference numeral 810a), Game 2 (indicated by reference numeral 810b), Game 3 (indicated by reference numeral 810c), through Game N (indicated by reference numeral 810d). Each of these games is played in a virtual game arena 804, either individual or shared, hosted on a dedicated server or in a cloud. User 2 is illustrated as branching off a sub game 1 (indicated by reference numeral 820), for separate play. Any information accumulated during the sub game is synchronized after User 2 reconnects to the original game. A user with "bystander" status may influence the game by responding to wall posts or responding with a key word. Reward or point allocation is based on the status of the player. For example, a player playing a game (for example, a follower), receives rewards or takes away from the main game player more than a bystander does. A bystander does not receive any rewards; its role is simply to assist a friend or influence game play by a "core" player.

FIG. 9 illustrates a video gaming scenario, with two core players 1 and 2 (at A and D), who have a "leader" status, illustrated at 902 and 908. A "casual" player or "follower" (at B) is illustrated by reference numeral 904 and has the capability to influence both the core players, as indicated by the arrows. Additionally, a "core" player, for example, Player 2, can participate as a "bystander" as well and influence another "core" player, Player 1. A non-player or "bystander" may also participate and provide keyword-based participation. All the various players interact with each other, some having larger impact (those that are "leader" or "core" players) on the play of another "core" player, whereas a "casual" player has a smaller or little impact on the play of others, and a "bystander" has even less impact.

As one example, a religious gaming application is described here. A "core" player may create his or her own church or organization. Another "core" player 2 may create his or her own church or organization as well. The "casual" player 3 may be a follower of both "core" Player 1 and Player 2, such that acts by the "follower" either enhance or detract a play by Player 1 or Player 2. For example, the "follower" Player 3 may give virtual money (\$10 per day out of a \$20) to each of the "core" players. Circumstances may change this flow of money, for example, "core" Player 2 upsets follower Player 3, who routes all of his virtual money to Player 1. Player 2 may retaliate against Player 3, by initiating an action against Player 1, creating a deficit in his or her account, thereby impacting the play by Player 1. Likewise, the bystander C may continue to influence plays by Player 1 or Player 2.

FIG. 10 illustrates a gaming scenario with the virtual game arena 804 with Game 1 (indicated by reference numeral 810a), Game 2 (indicated by reference numeral 810b), Game 3 (indicated by reference numeral 810c) through Games N (indicated by reference numeral 810d) engaged by users. A user creates an account to play any of these games and may receive display of a promotion or

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advertisement. The user may acknowledge the promotion and instantly earn points or rewards from the game. These operations are controlled by a controller or processor 1010. User information is recorded in memory 1020. The user information may be user-game relationship data, user points (check-in rewards and points earned by play).

FIG. 11 illustrates an example data storage configuration. The data storage 233 may include various types of data. In a first data cell 252, the data storage 233 includes user-account data 252, which may include a name, user name, age and birthdate, all of these items indicated generally by reference numeral 1110. The data storage 233 in a second cell may include a game-options data, including data on sound, graphics, monitor, and controls, indicated generally by reference numeral 1120. The data storage 233 may include in a third cell, user rewards/points including data on unlocked content, number of points, and rewards, all of these items indicated generally by reference numeral 1130. In a fourth cell, the data storage 233 includes a user play/save data indicated by reference numeral 258 including as examples "game save" data or "location" data, both examples indicated generally by reference numeral 1160. In a fifth cell, the data storage 233 includes game options/preferences, indicated by reference numeral 260, including as one example game-specific options, indicated by reference numeral 1150. In a sixth cell, the data storage 233 may include promotions data, indicated by reference numeral 262, including as examples data on promotions, and unlocked promotion content, indicated generally by reference numeral 1160. In a seventh cell, the data storage 233 includes advertising data, indicated by reference numeral 264, which may include data on advertisements 1, 2, through N, all of this data indicated generally by reference numeral 1170.

The foregoing description of the embodiments of the present technology has been presented for the purposes of illustration and description. It is not intended to be exhaustive or to limit the present technology to the precise form disclosed. Many modifications and variations are possible in light of the above teaching. It is intended that the scope of the present technology be limited not by this detailed description, but rather by the claims of this application. As should be understood by those familiar with the art, the present technology may be embodied in other specific forms, without departing from the spirit or essential characteristics thereof. Likewise, the particular naming and division of the modules, routines, features, attributes, methodologies, and other aspects are not mandatory or significant, and the mechanisms that implement the present invention or its features may have different names, divisions and/or formats. Furthermore, as should be apparent to one of ordinary skill in the relevant art, the modules, routines, features, attributes, methodologies and other aspects of the present technology can be implemented as software, hardware, firmware, or any combination of the three. Also, wherever a component, an example of which is a module, of the present technology is implemented as software, the component can be implemented as a standalone program, as part of a larger program, as a plurality of separate programs, as a statically or dynamically linked library, as a kernel loadable module, as a device driver, and/or in every and any other way known now or in the future to those of ordinary skill in the art of computer programming. Additionally, the present technology is in no way limited to implementation in any specific programming language, or for any specific operating system or environment. Accordingly, the disclosure of the present technology is intended to be illustrative,

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but not limiting, of the scope of the present invention, which is set forth in the following claims.

What is claimed is:

1. A computer-implemented method for implementing a multilayer architecture for video gaming, comprising:
 - providing a video gaming environment hosted on a server;
 - providing access, using the server, to the video gaming environment by a plurality of user devices associated with a plurality of users; and
 - designating, using the server, a status level from a plurality of status levels to each user of the plurality of users, wherein each status level of the plurality of status levels provides a different capability within the video gaming environment, the plurality of status levels including a first player status level that accords full access and play within the video gaming environment, a second player status level that accords restricted access and play within the video gaming environment; and a third player status level that accords reactive access and play within the video gaming environment, the reactive access specifying that a keyword response commented by a user having the third player status level on a social network post of a user having the first player status level or the second player status level affects elements of gameplay on the video gaming environment.
2. A computer-implemented method according to claim 1, wherein the plurality of users access the video gaming environment via the user devices including at least one of a group of a personal computer, a laptop, a mobile device, a gaming console, and a tablet.
3. A computer-implemented method according to claim 1, wherein the video gaming environment is hosted in association with a social network server.
4. A computer-implemented method according to claim 1, wherein the video gaming environment is hosted on a third party server.
5. A computer-implemented method according to claim 1, wherein the video gaming environment is hosted in a cloud of distributed servers.
6. A computer-implemented method according to claim 1, wherein the video gaming environment is hosted on a cross-platform server accommodating access by all the user devices.
7. A computer-implemented method according to claim 1, wherein the plurality of users access the video gaming environment for concurrent play.
8. A system for implementing a multilayer architecture for video gaming, comprising a processor and a memory, wherein the memory provides instructions that cause the processor to:
 - provide a video gaming environment hosted on a server;
 - provide access to the video gaming environment by a plurality of user devices associated with a plurality of users;
 - designate a status level from a plurality of status levels to each user of the plurality of users, wherein each status level of the plurality of status levels provides a different capability within the video gaming environment, the plurality of status levels including a first player status level that accords full access and play within the video gaming environment, a second player status level that accords restricted access and play within the video gaming environment; and a third player status level that accords reactive access and play within the video gaming environment, the reactive access specifying that a keyword response commented by a user having

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the third player status level on a social network post of a user having the first player status level or the second player status level affects elements of gameplay on the video gaming environment.

9. A system according to claim 8, wherein the plurality of users access the video gaming environment via the user devices including at least one of a group of a personal computer, a laptop, a mobile device, a gaming console, and a tablet.

10. A system according to claim 8, wherein the video gaming environment is hosted in association with a social network server.

11. A system according to claim 8, wherein the video gaming environment is hosted on a third party server.

12. A system according to claim 8, wherein the video gaming environment is hosted in a cloud of distributed servers.

13. A system according to claim 8, wherein the video gaming environment is hosted on a cross-platform server accommodating access by all of the user devices.

14. A system according to claim 8, wherein the plurality of users access the video gaming environment for concurrent play.

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(12) **United States Patent**
Wiklem et al.

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(54) **VIDEO GAMING PLATFORM AND USER INTERFACE**

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(52) **U.S. Cl.**
CPC **A63F 13/12** (2013.01)

(58) **Field of Classification Search**
CPC .. A63F 9/24; A63F 13/00; A63F 13/12; A63F 13/33
USPC 463/31
See application file for complete search history.

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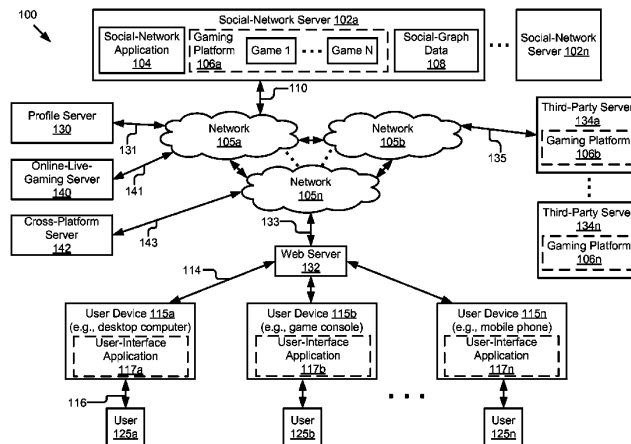
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(57) **ABSTRACT**

The present technology is directed to flexible platform architecture for either providing or facilitating video gaming applications. In some implementations, the flexible platform architecture provides a fluid and continuous visual experience for players across different platform types (platform agnostic) that are integrated and engage users at different levels. Each of the players experiences a unique and different visual experience, depending upon the particular gaming platform and/or user interface utilized by a player. The flexible platform architecture has user interfaces that are configured to provide different experiences for different players, including for example, a three-dimensional or a two-dimensional user experience. The platform architecture may facilitate access to video gaming applications via distinct user interfaces, including 1) via social networks or online social networking services, including via wall posts or by enabling users to send and read text-based posts, 3) via mobile devices, and 4) via game consoles.

18 Claims, 33 Drawing Sheets



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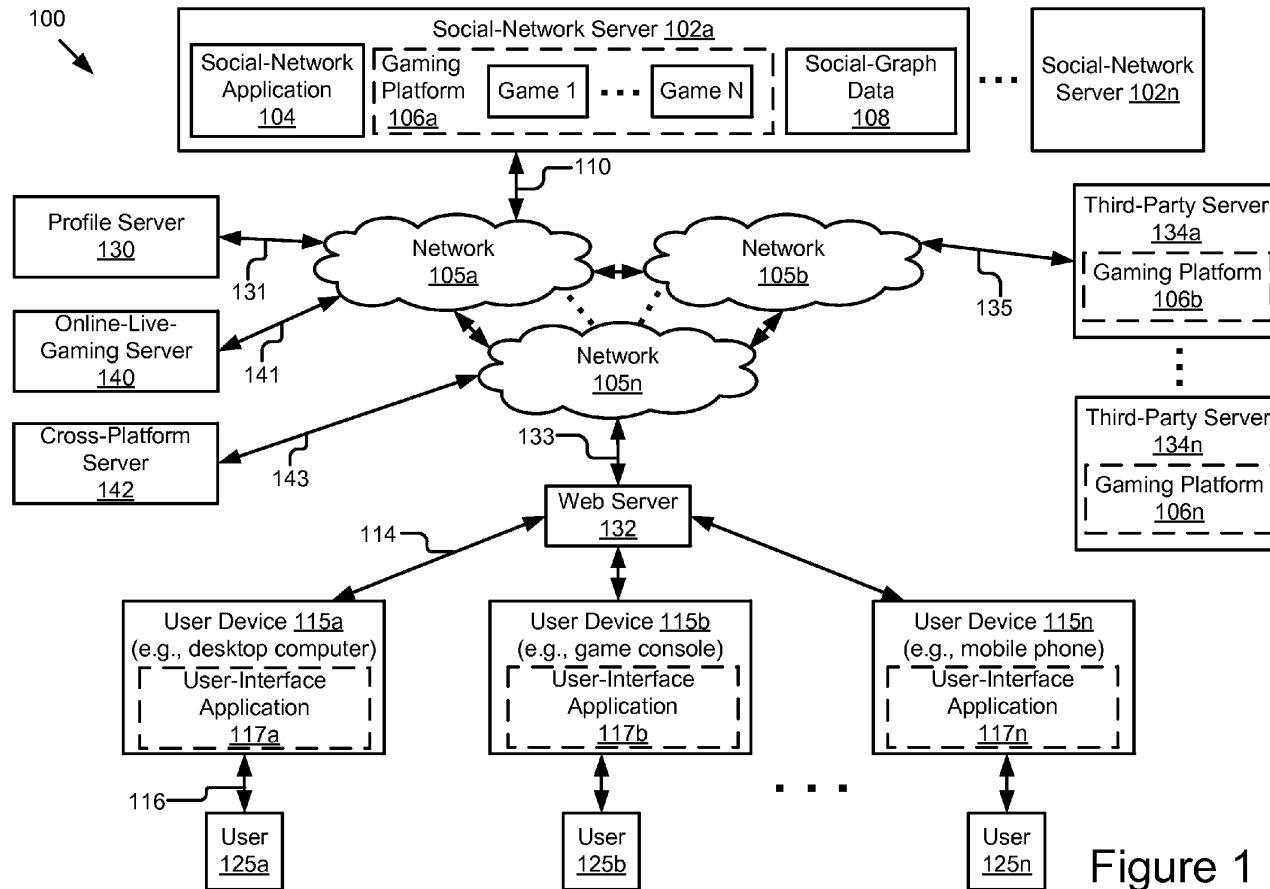


Figure 1

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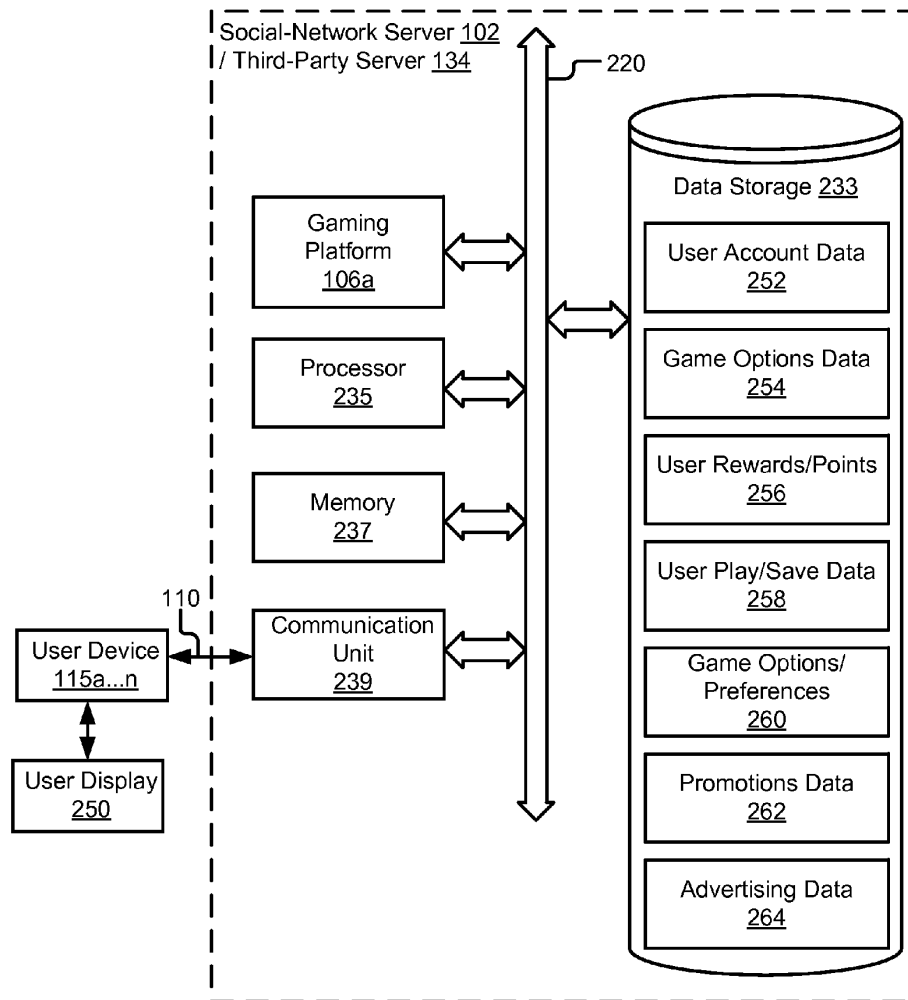


Figure 2

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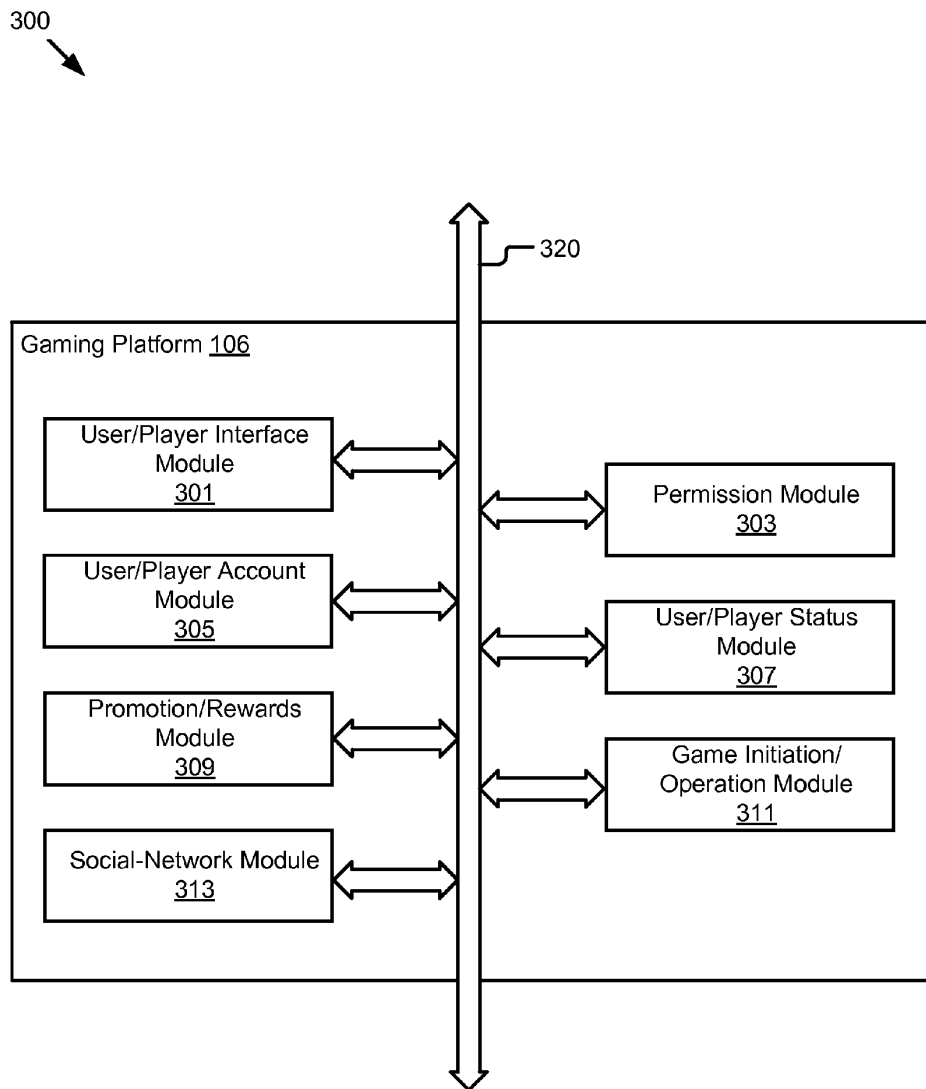


Figure 3

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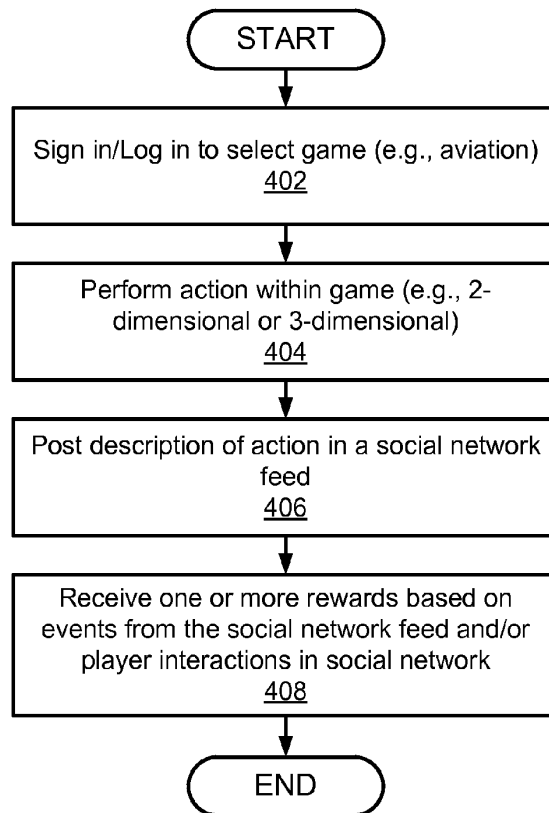


Figure 4

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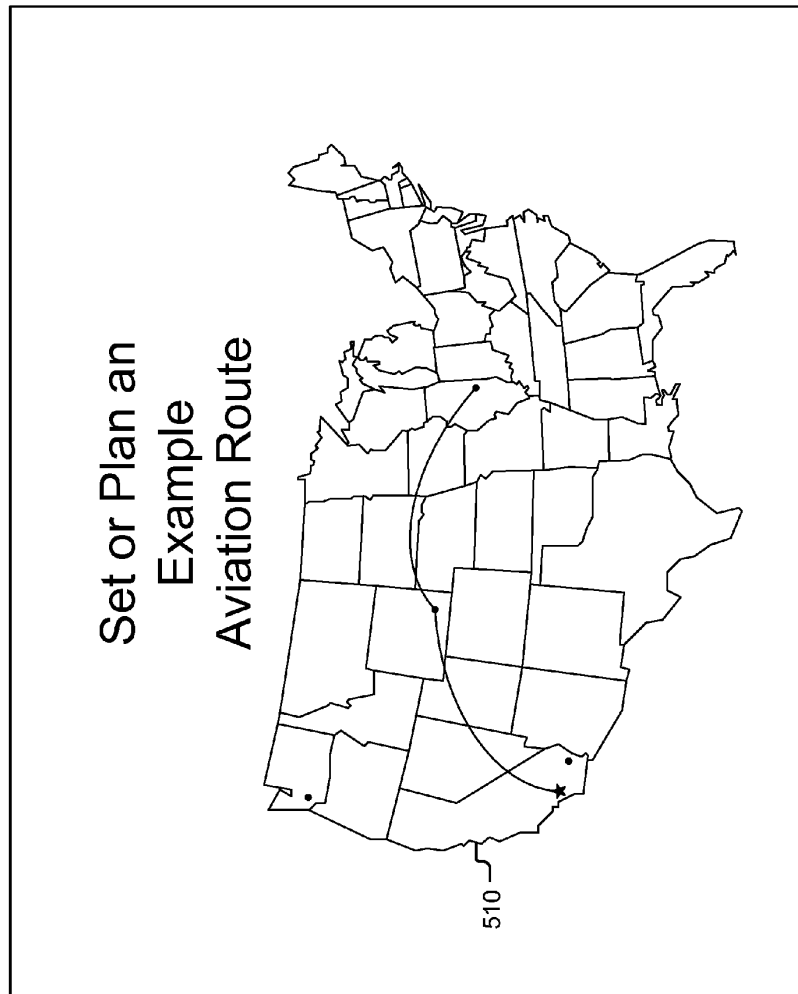


Figure 5

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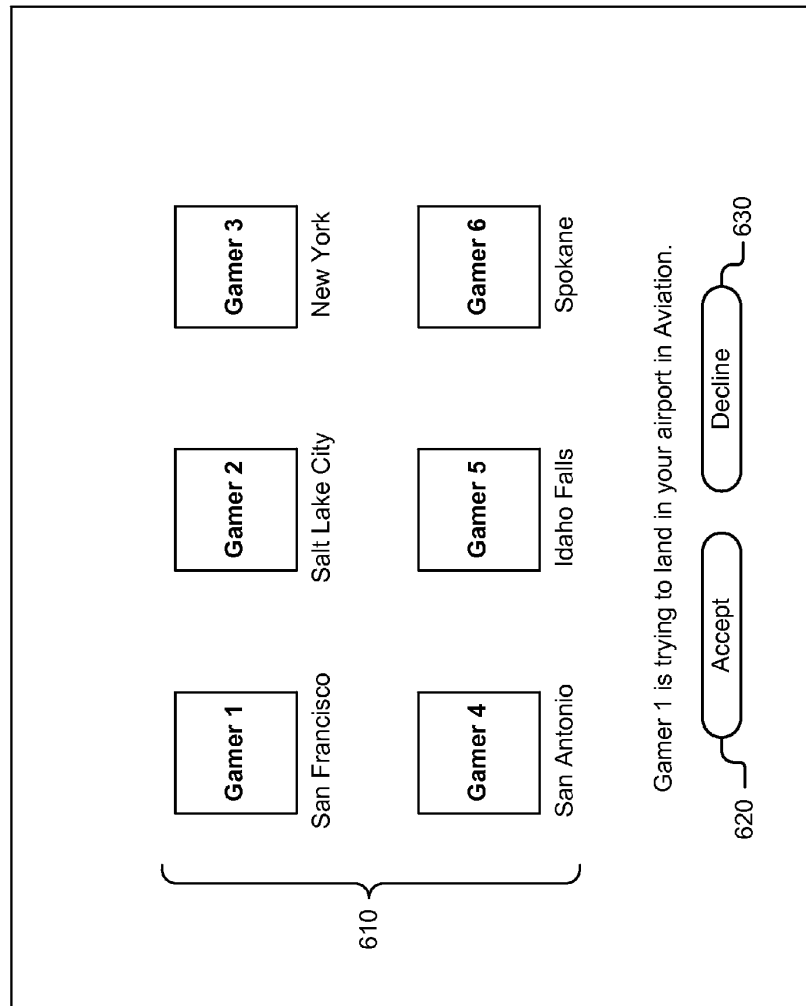
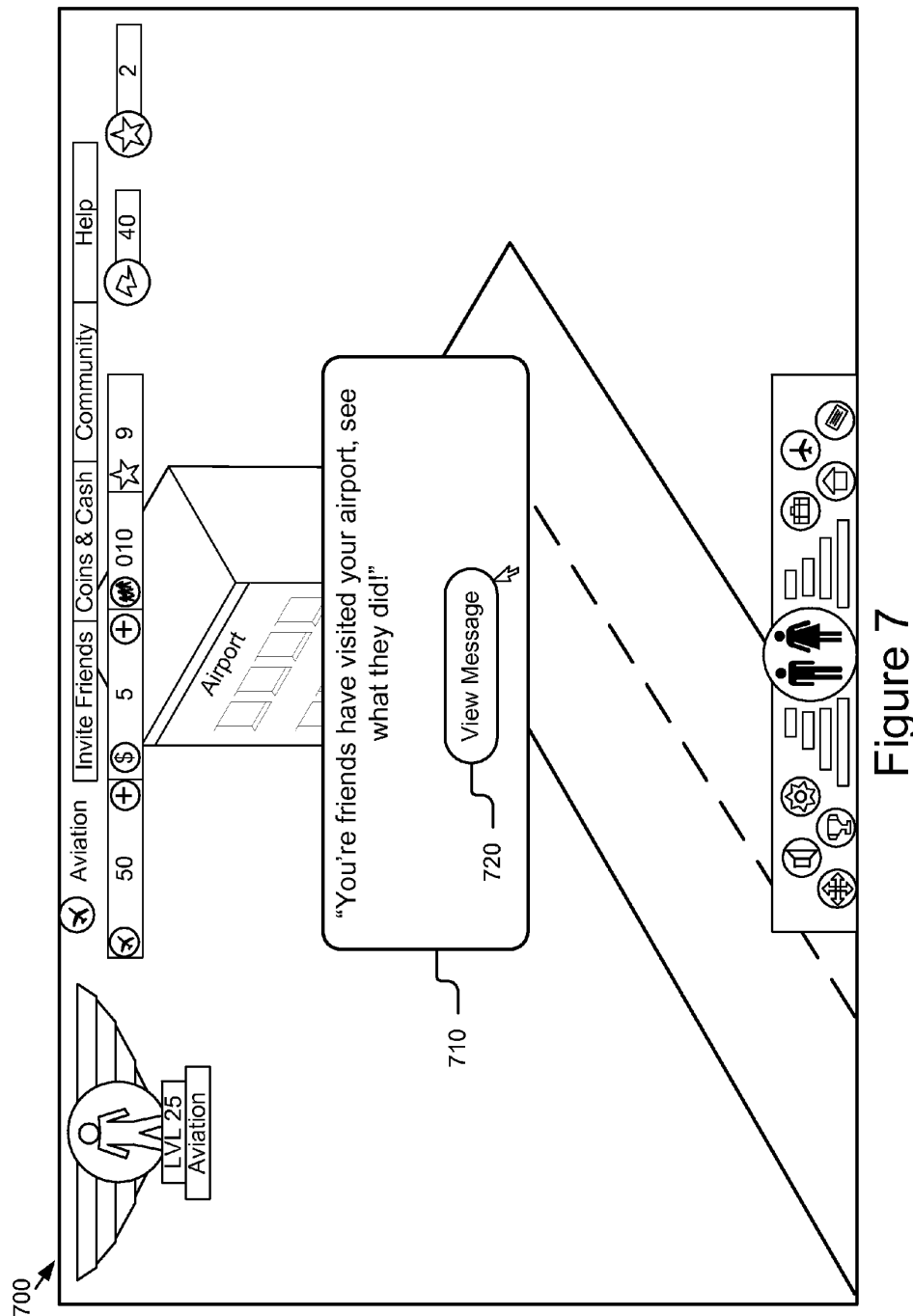


Figure 6



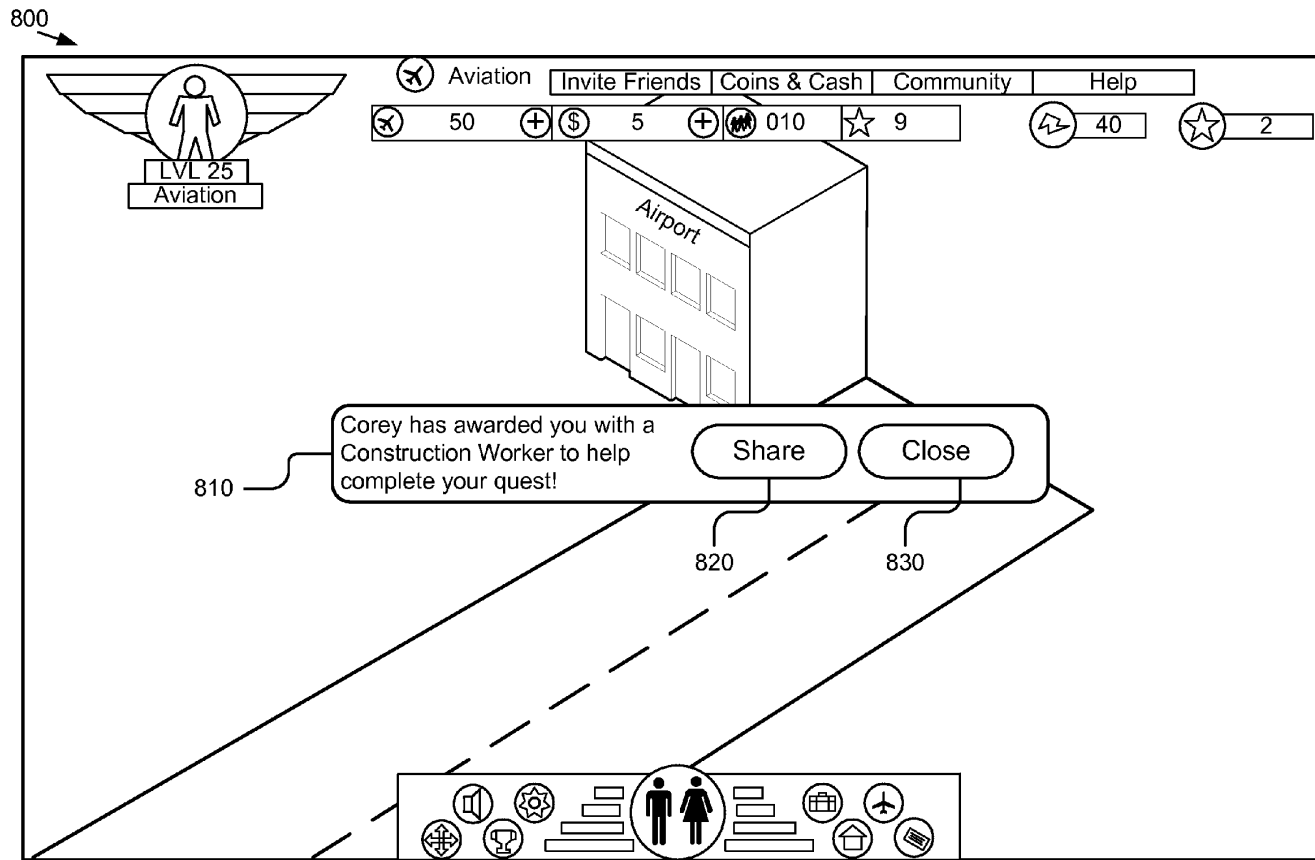


Figure 8

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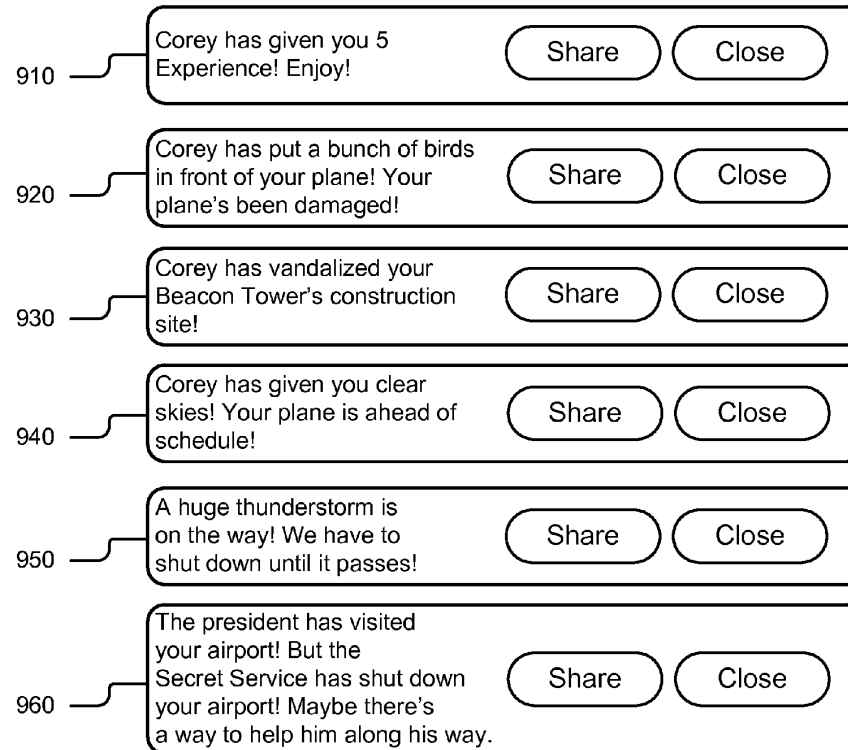


Figure 9

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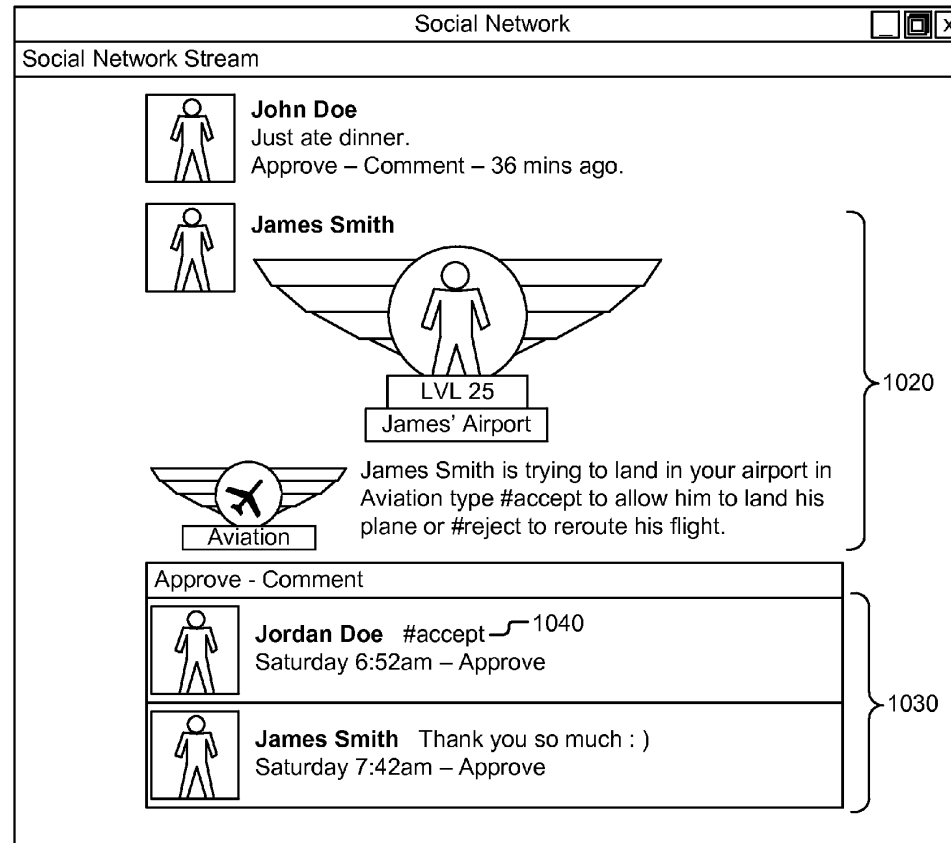


Figure 10

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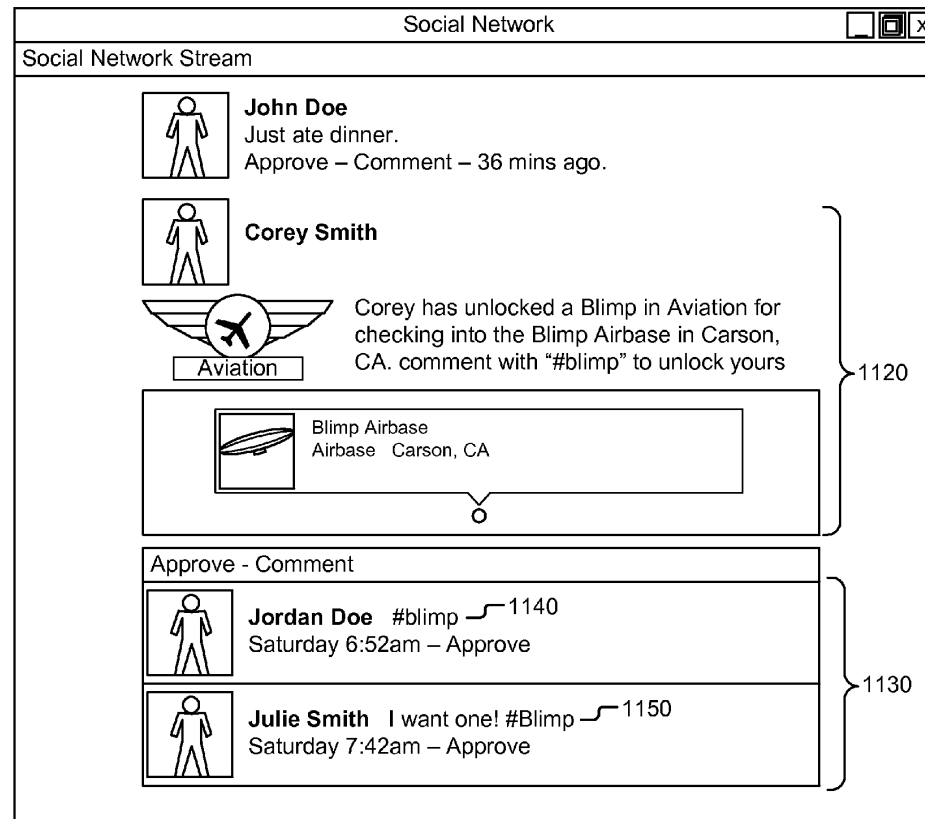


Figure 11

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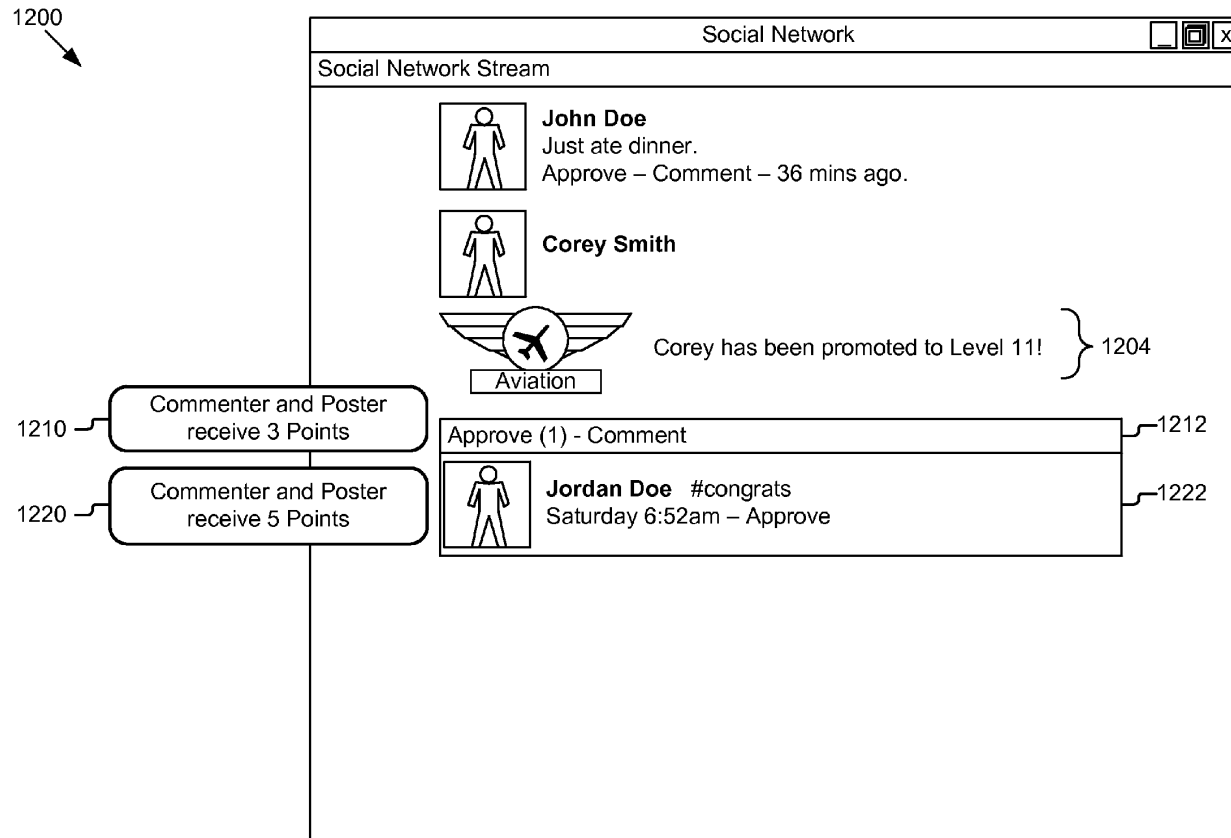


Figure 12A

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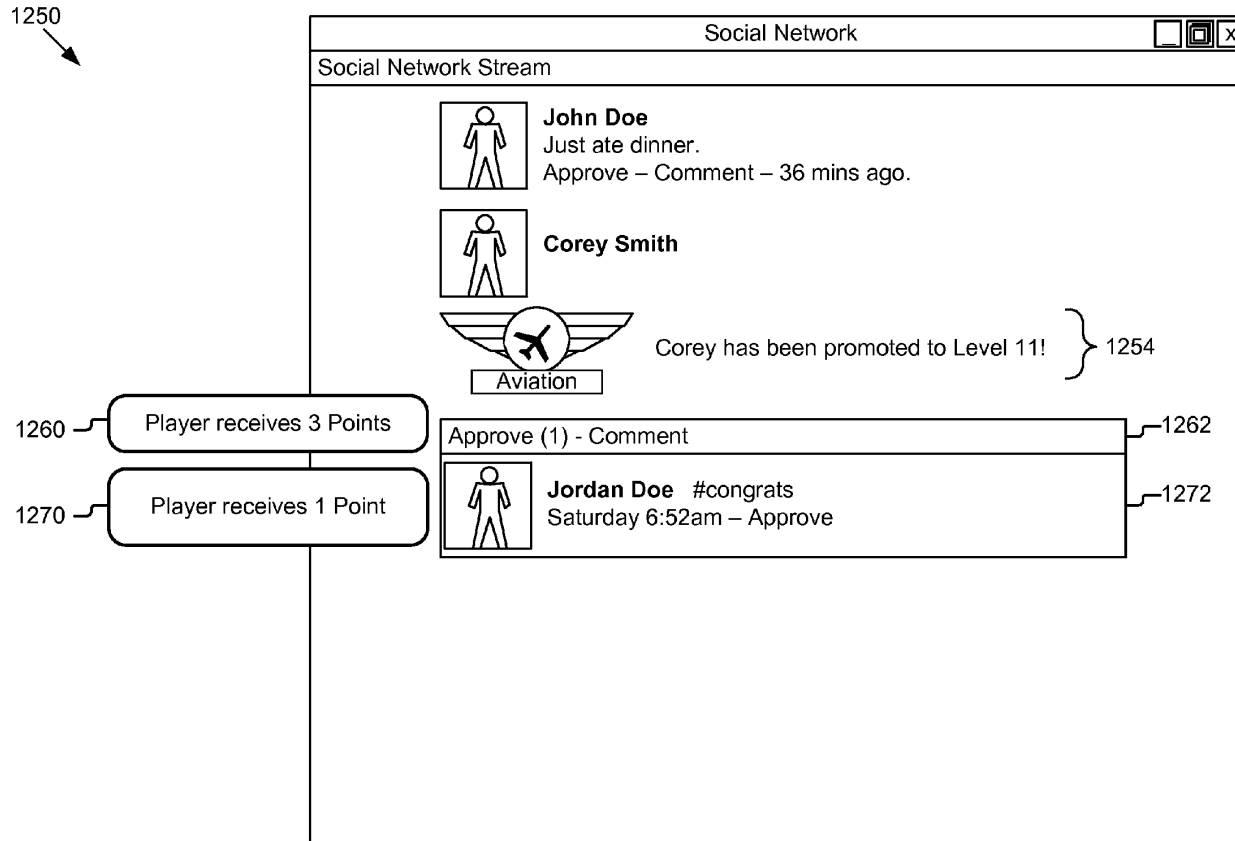


Figure 12B

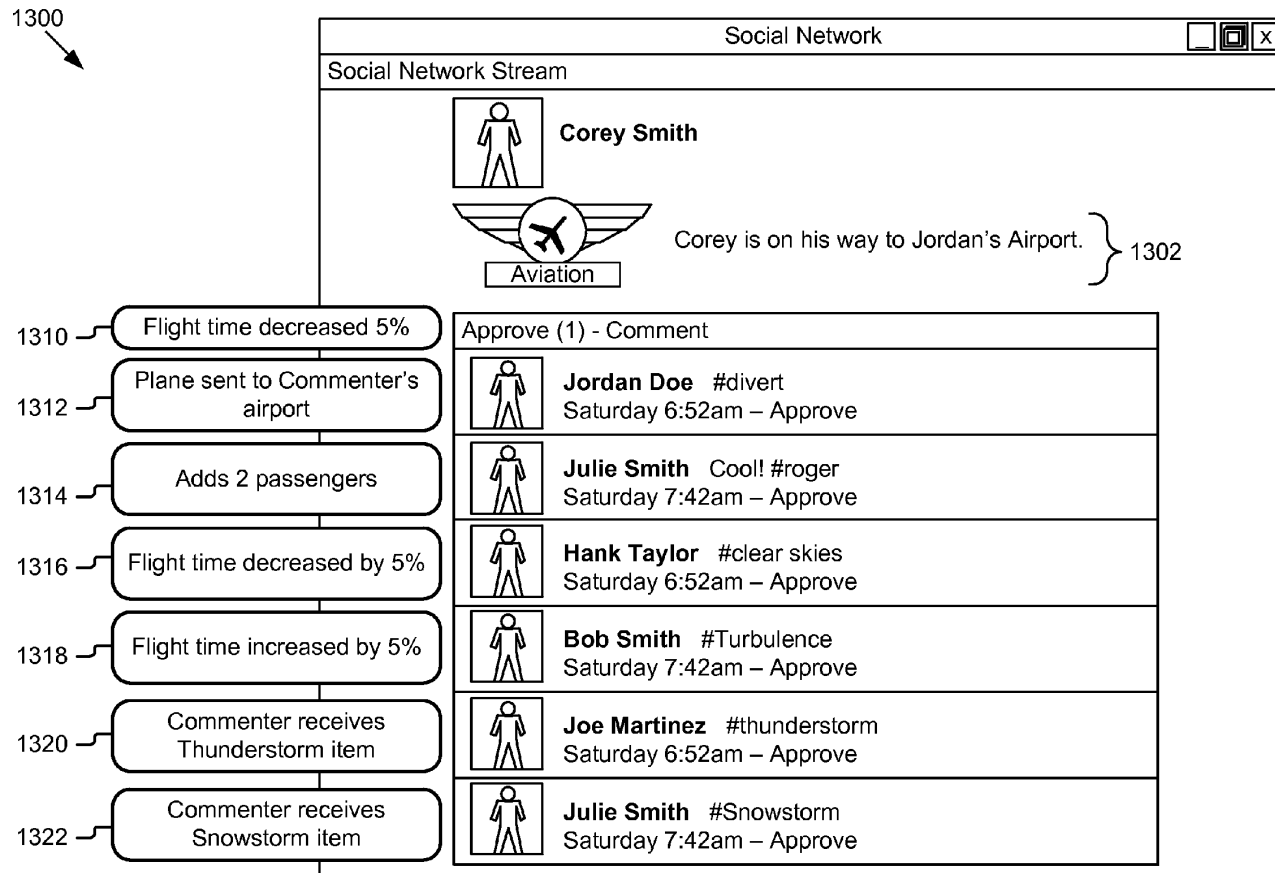


Figure 13A

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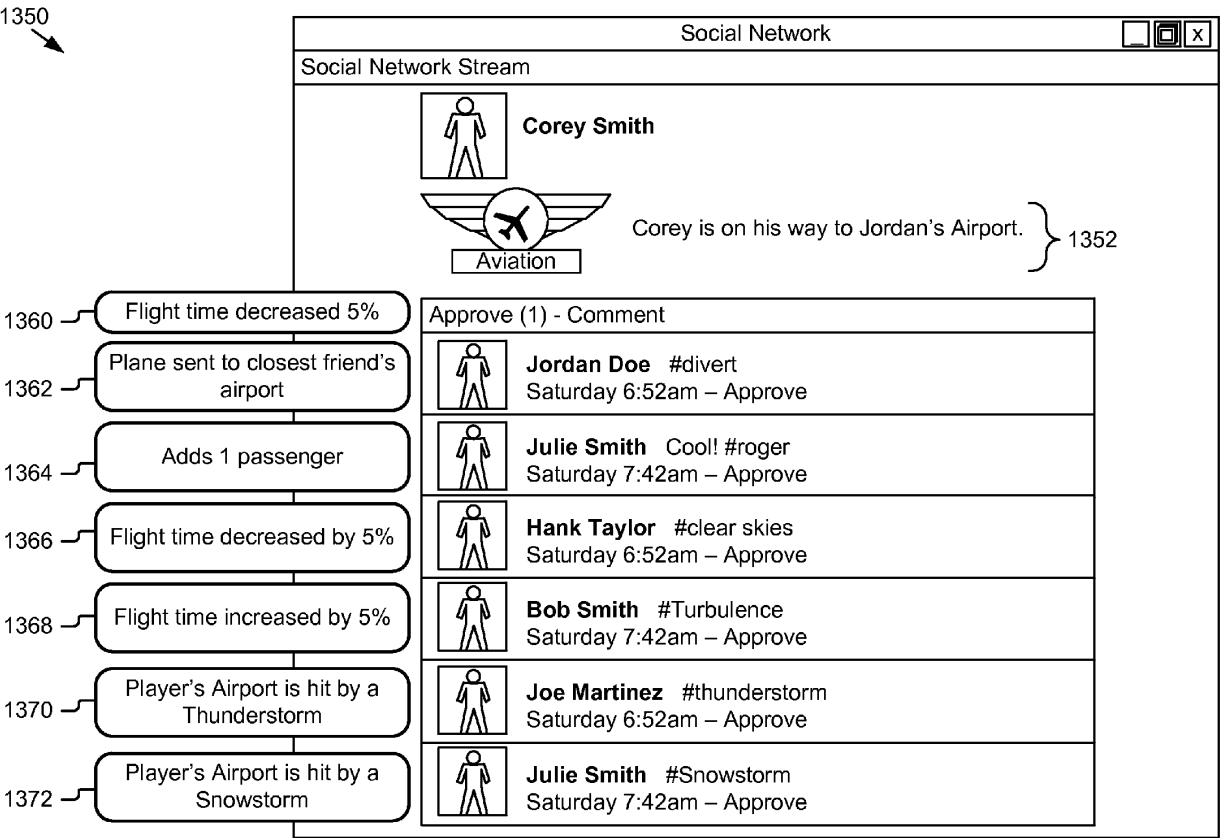


Figure 13B

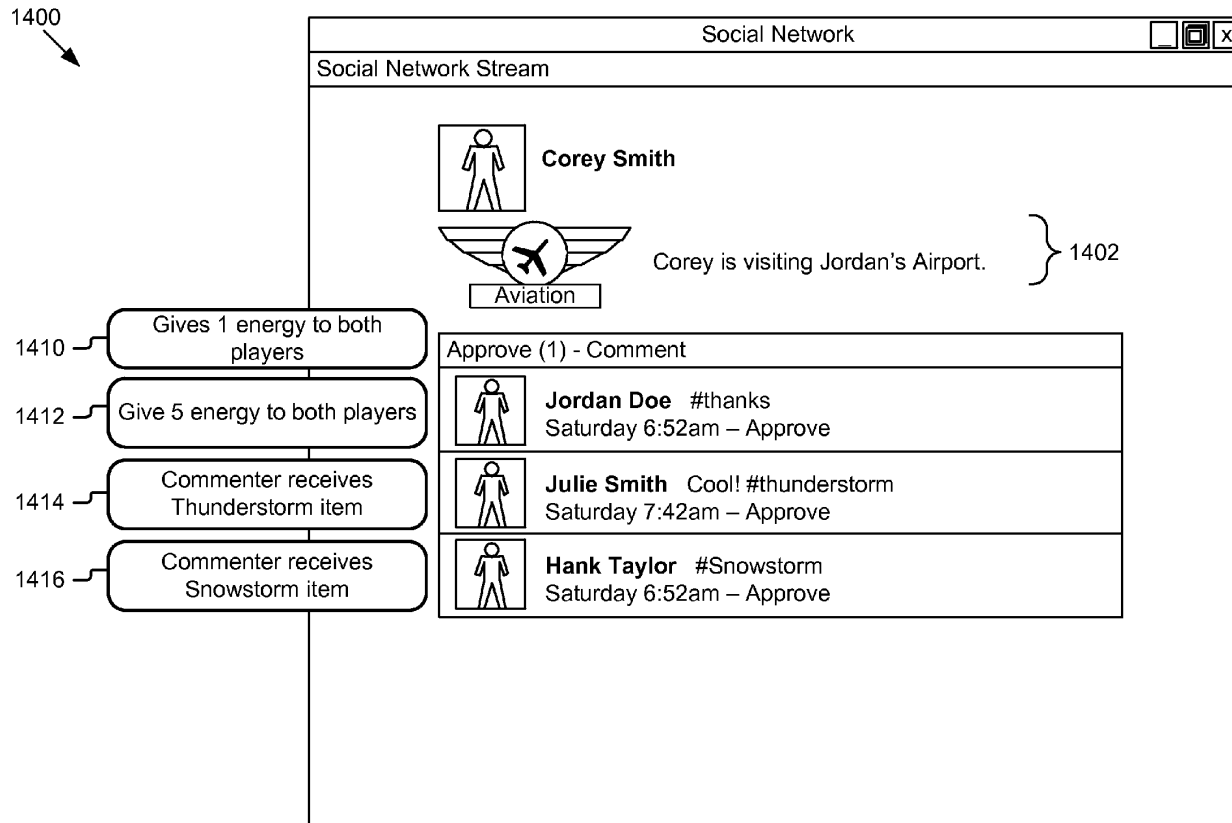


Figure 14A

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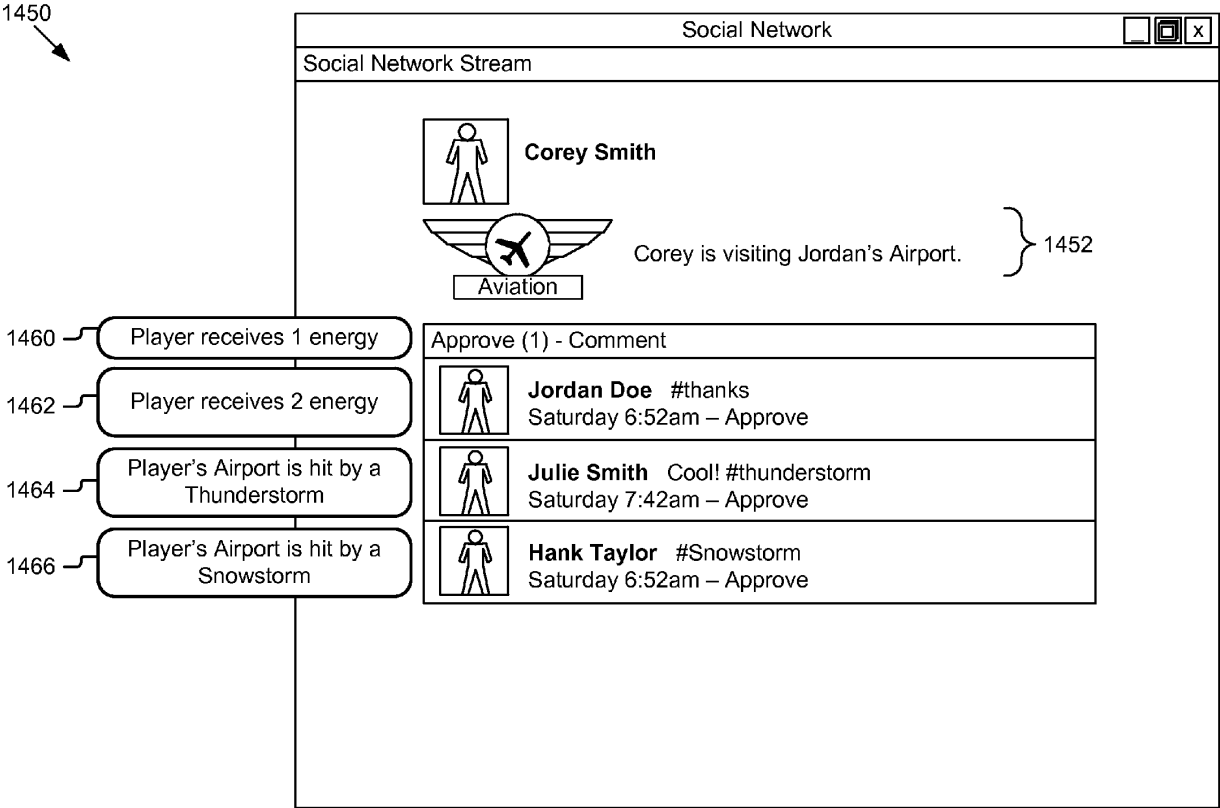


Figure 14B

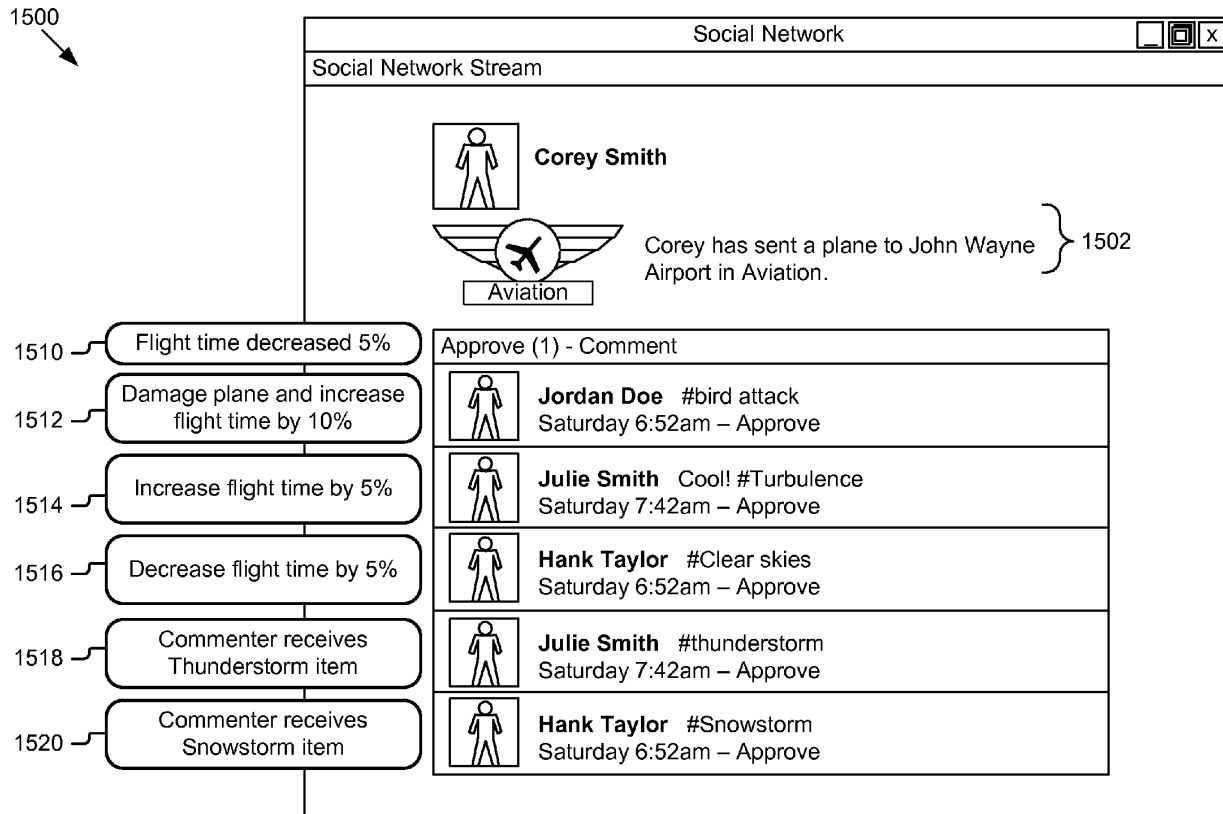


Figure 15A

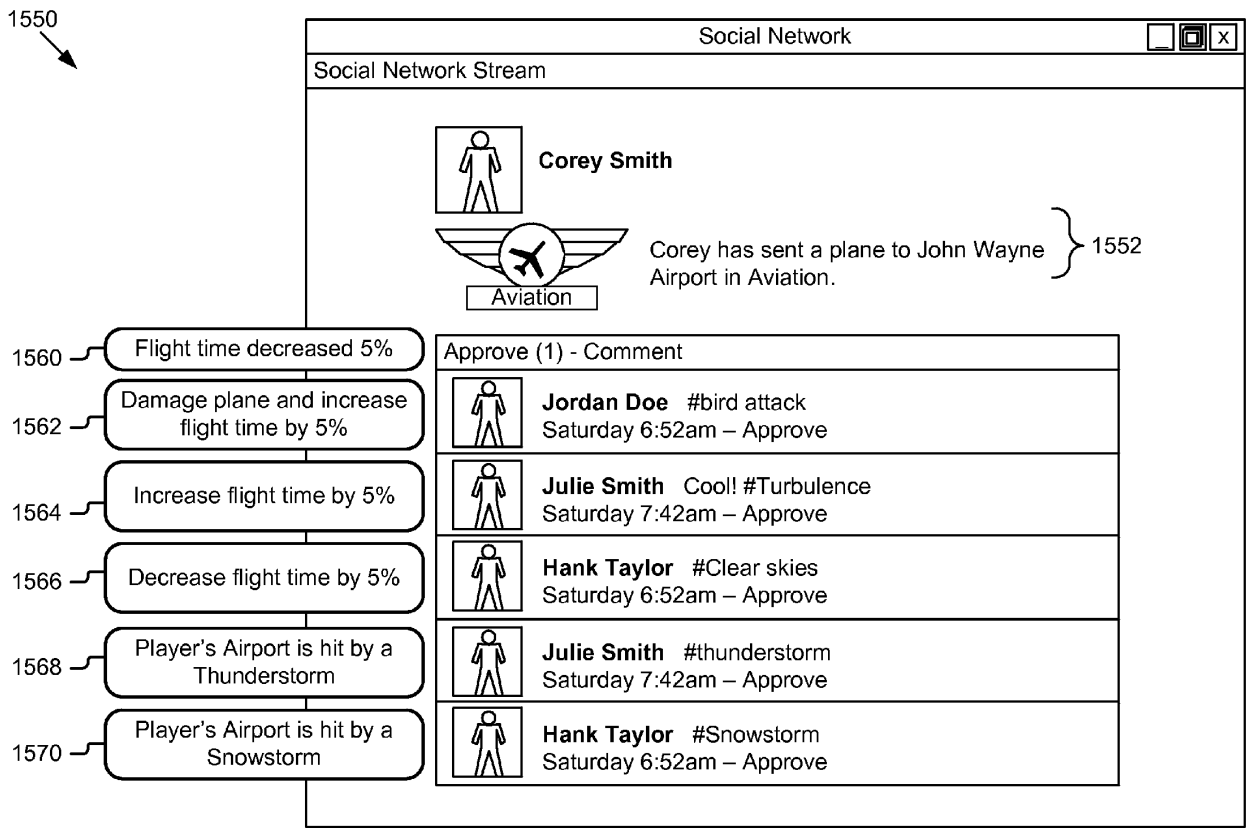


Figure 15B

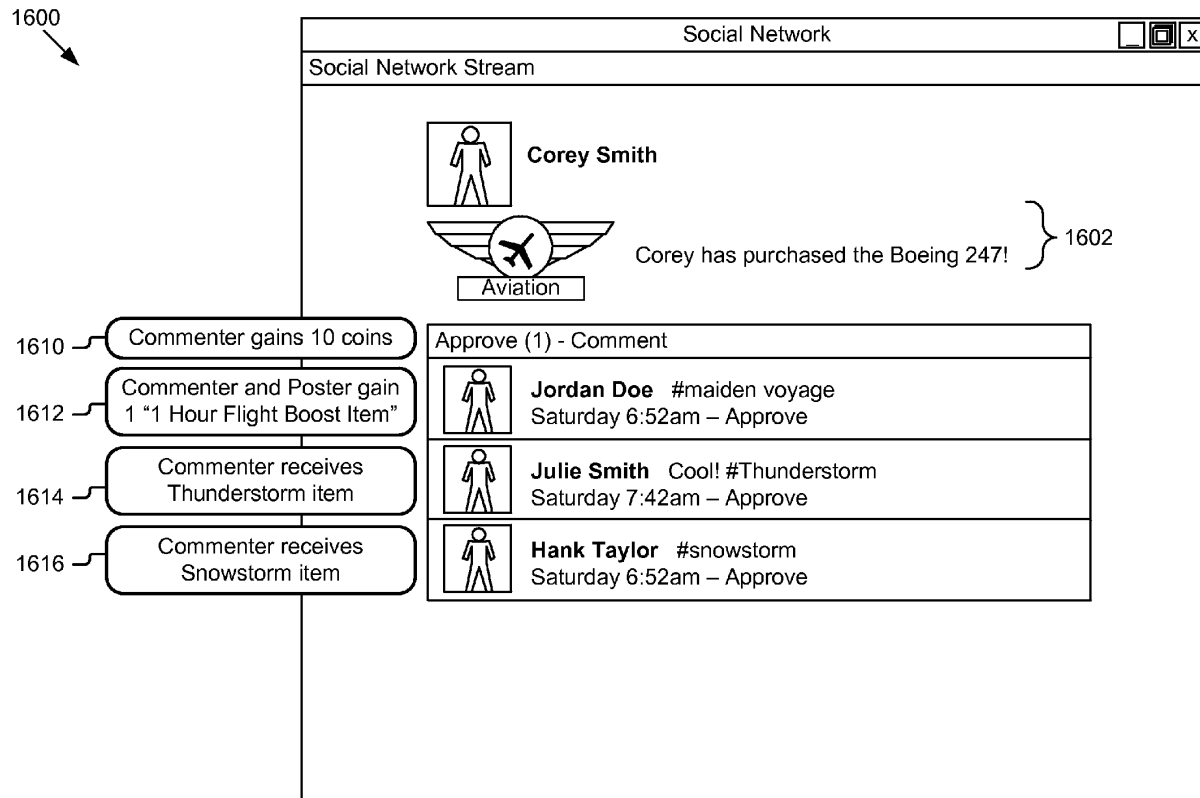


Figure 16A

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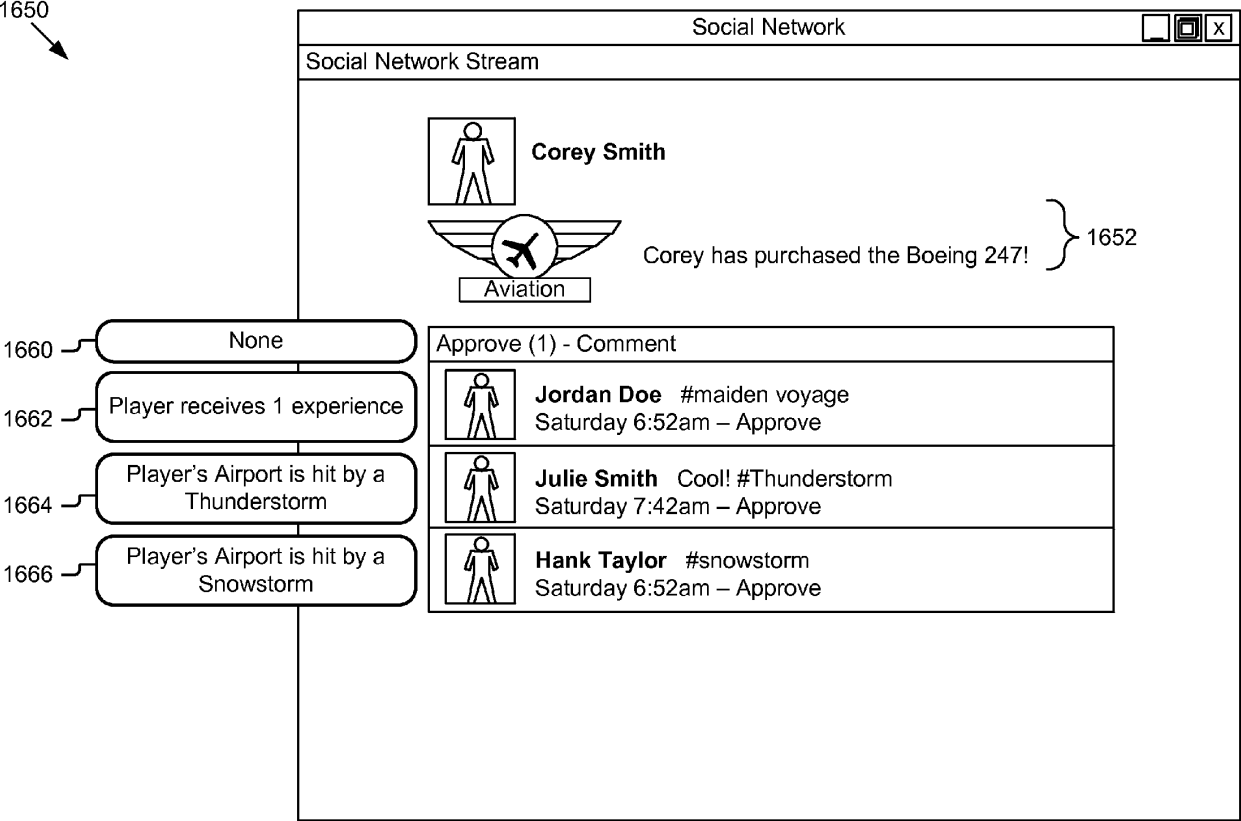


Figure 16B

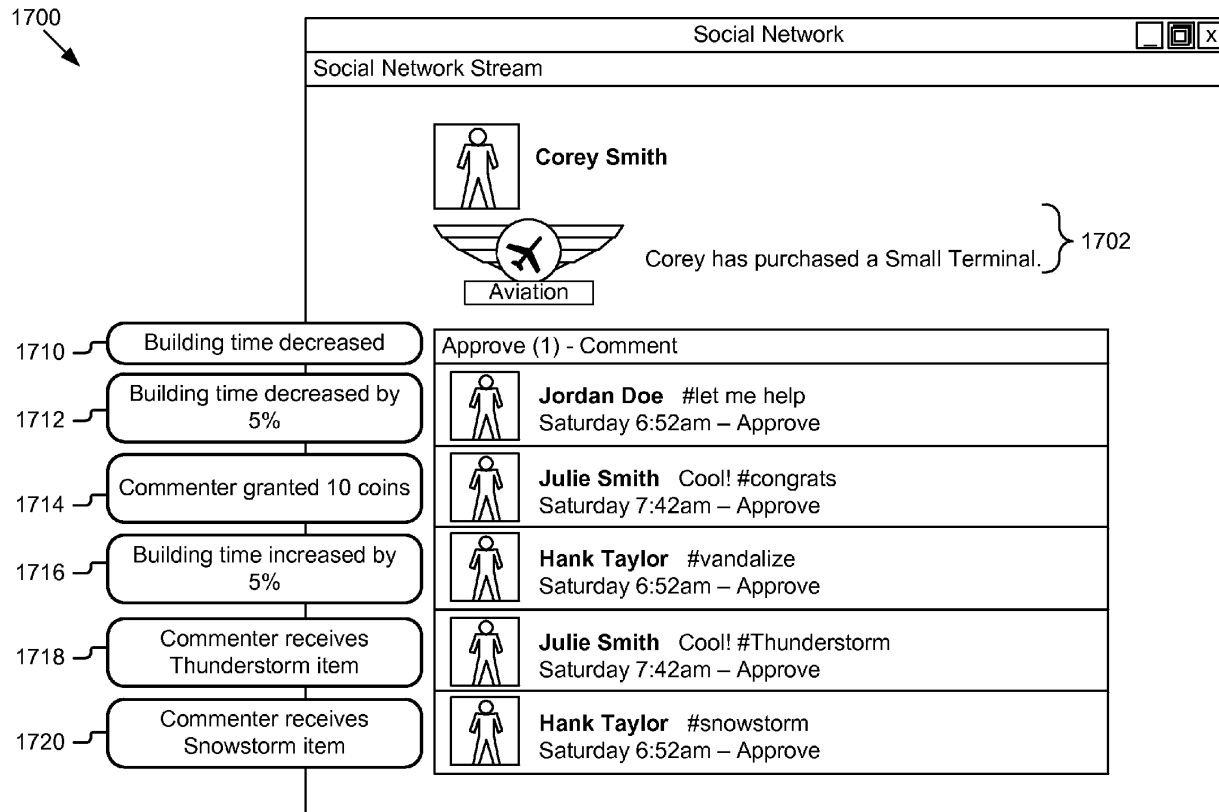


Figure 17A

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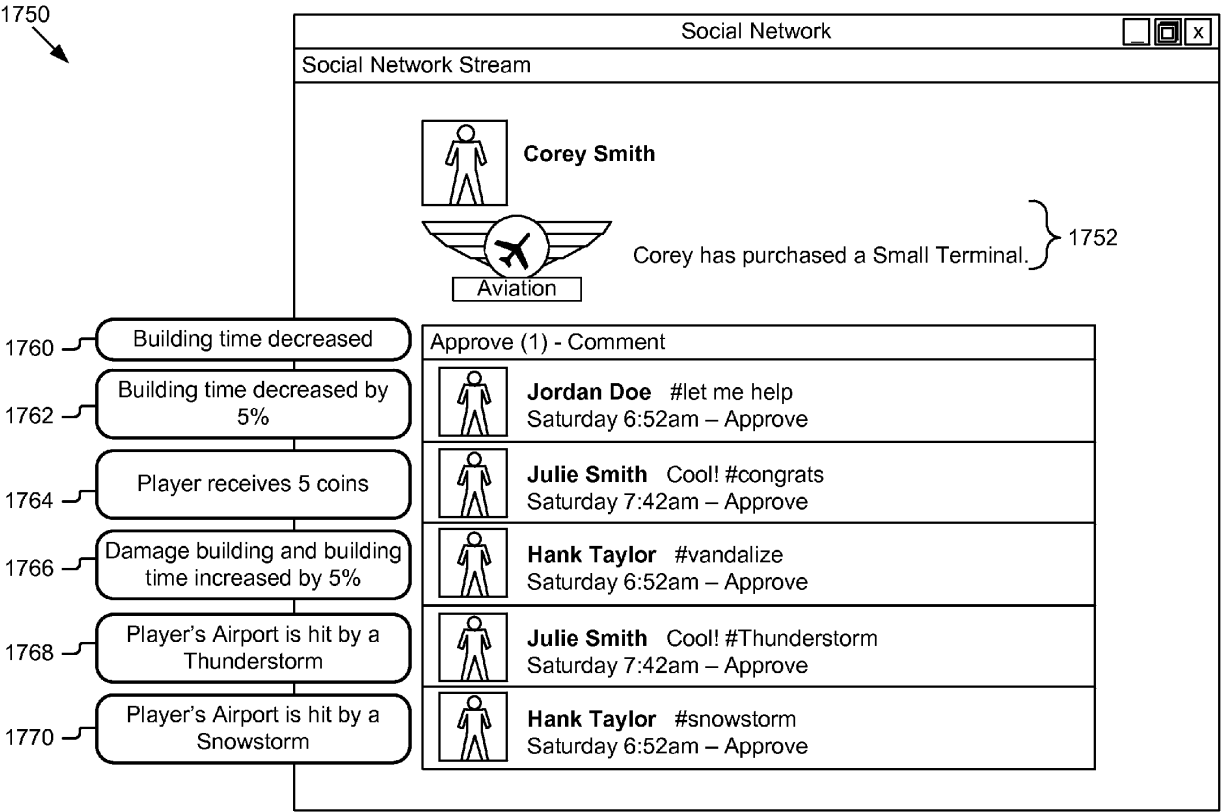


Figure 17B

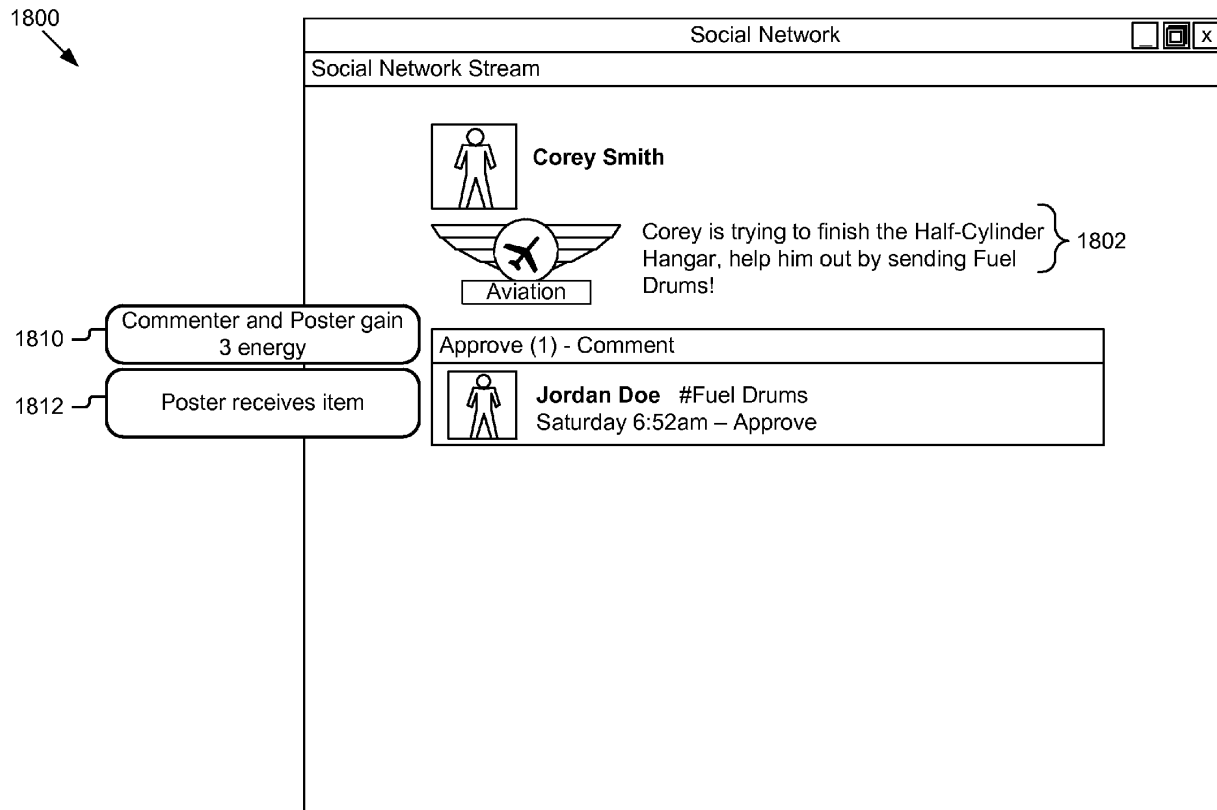


Figure 18A

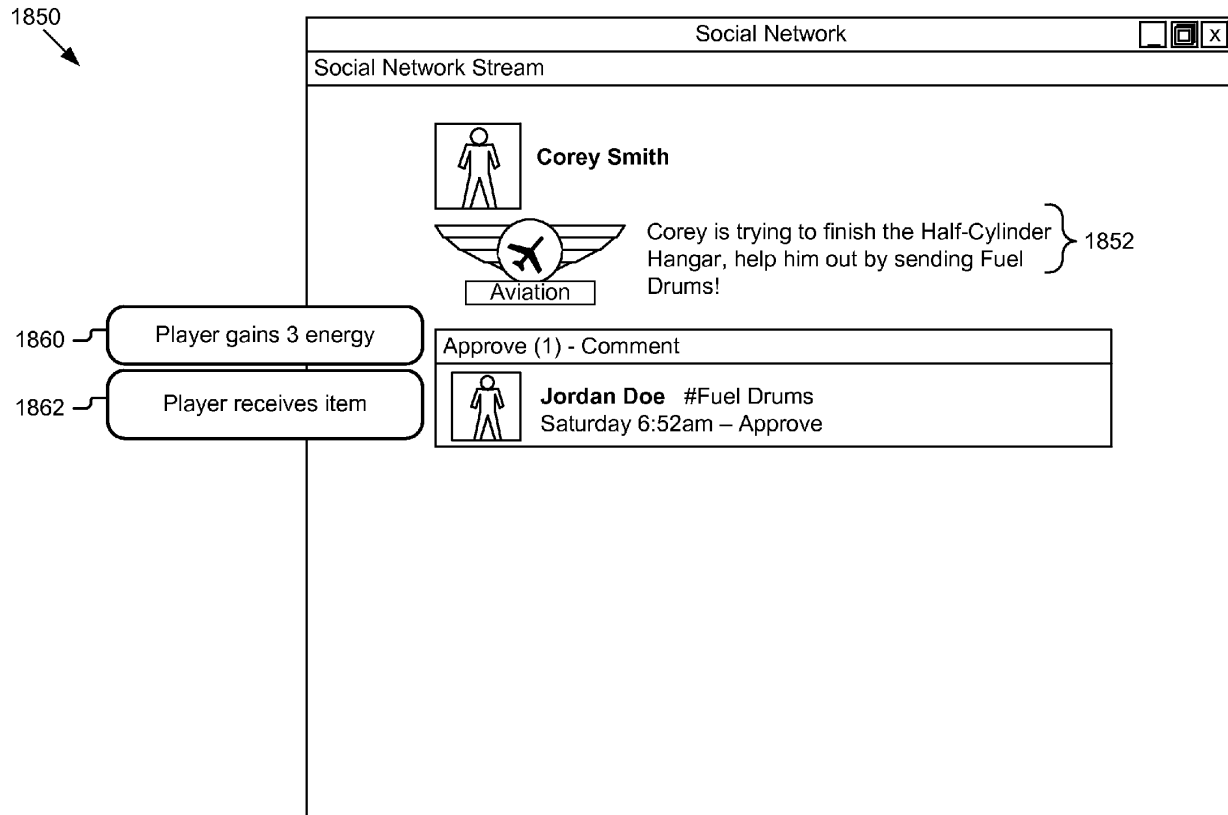


Figure 18B

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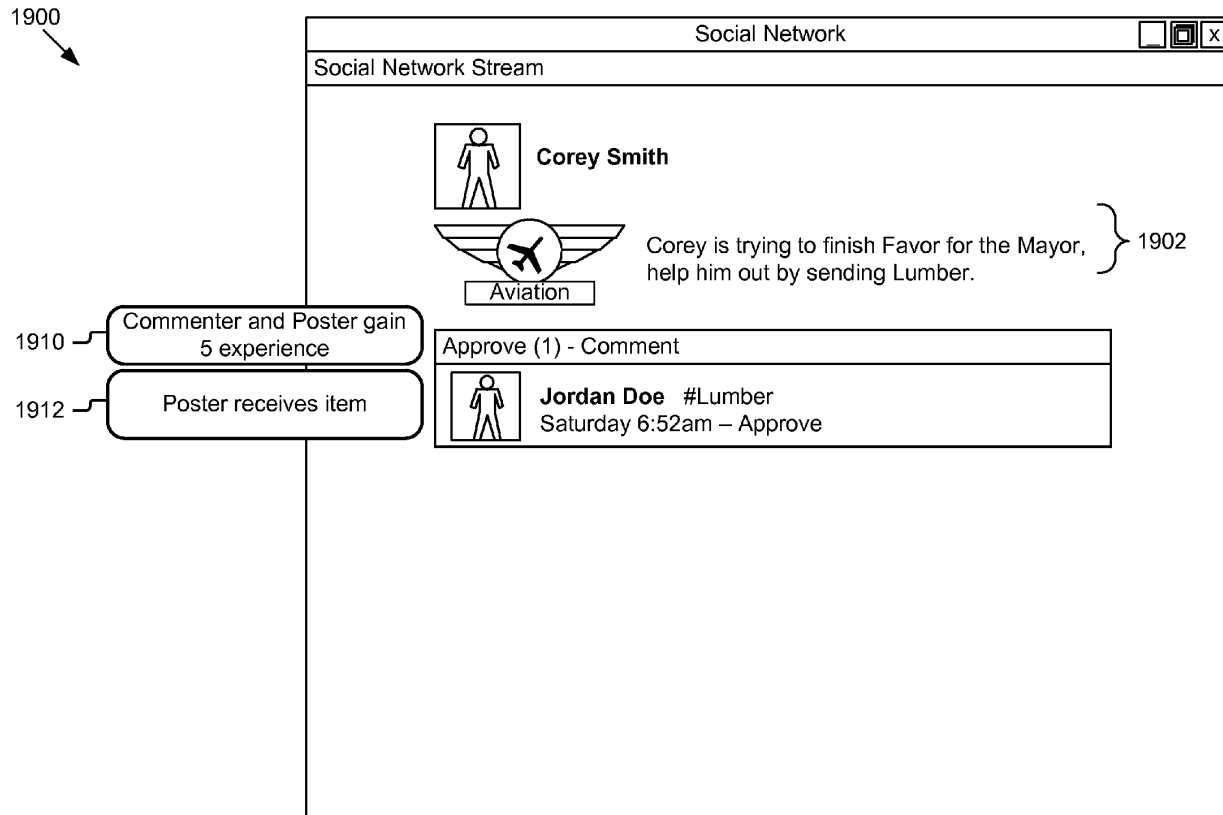


Figure 19A

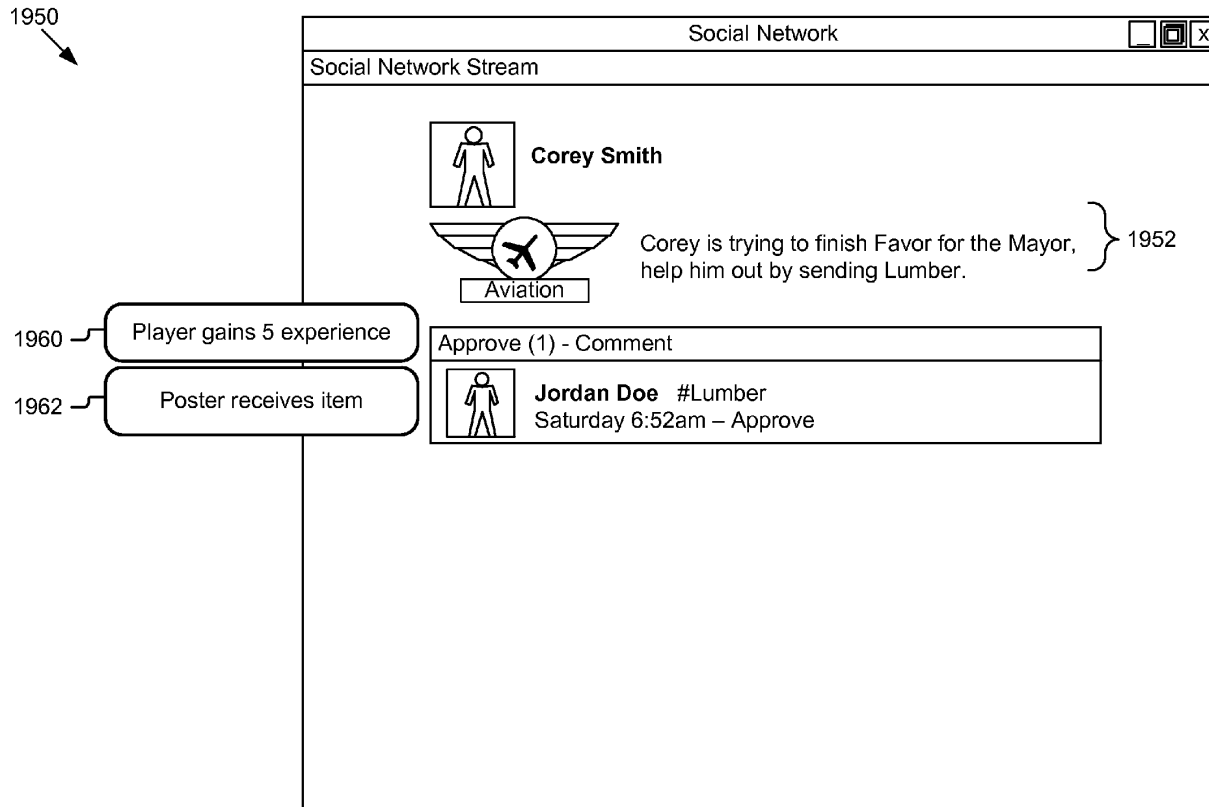


Figure 19B

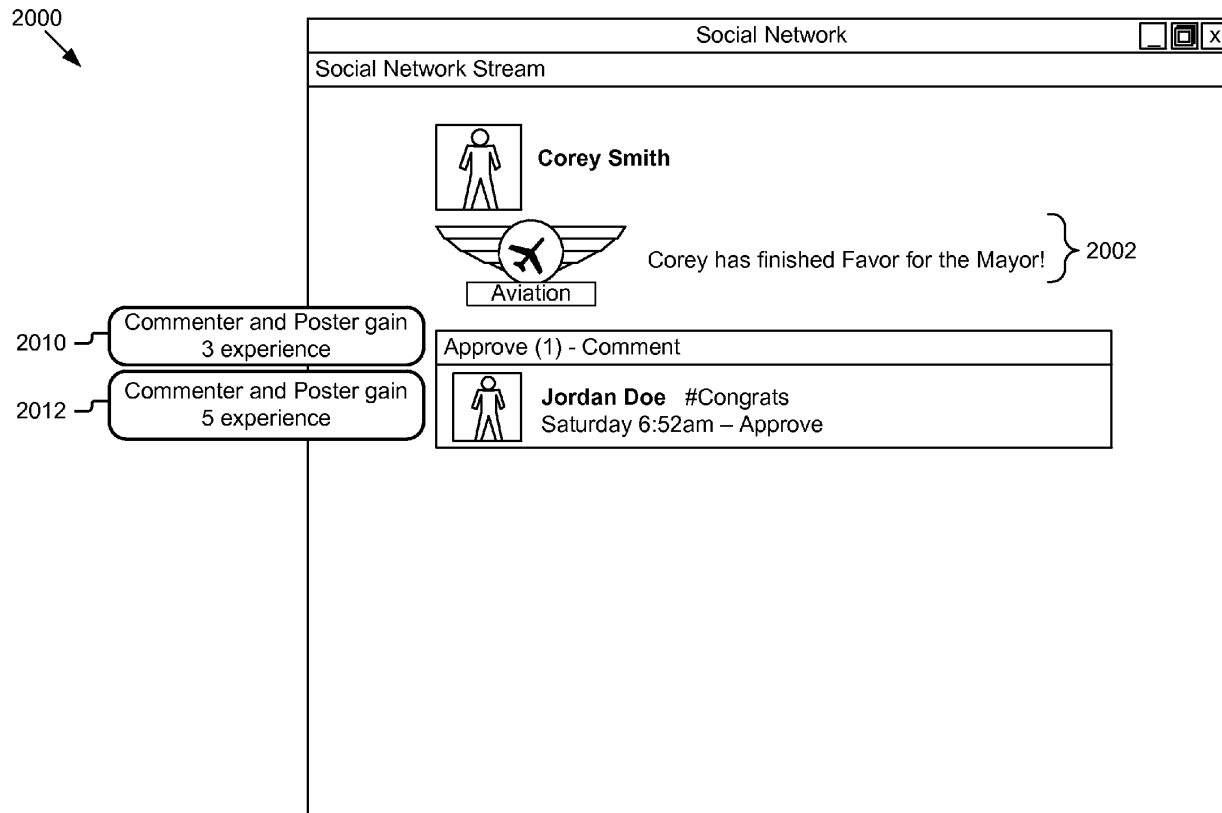


Figure 20A

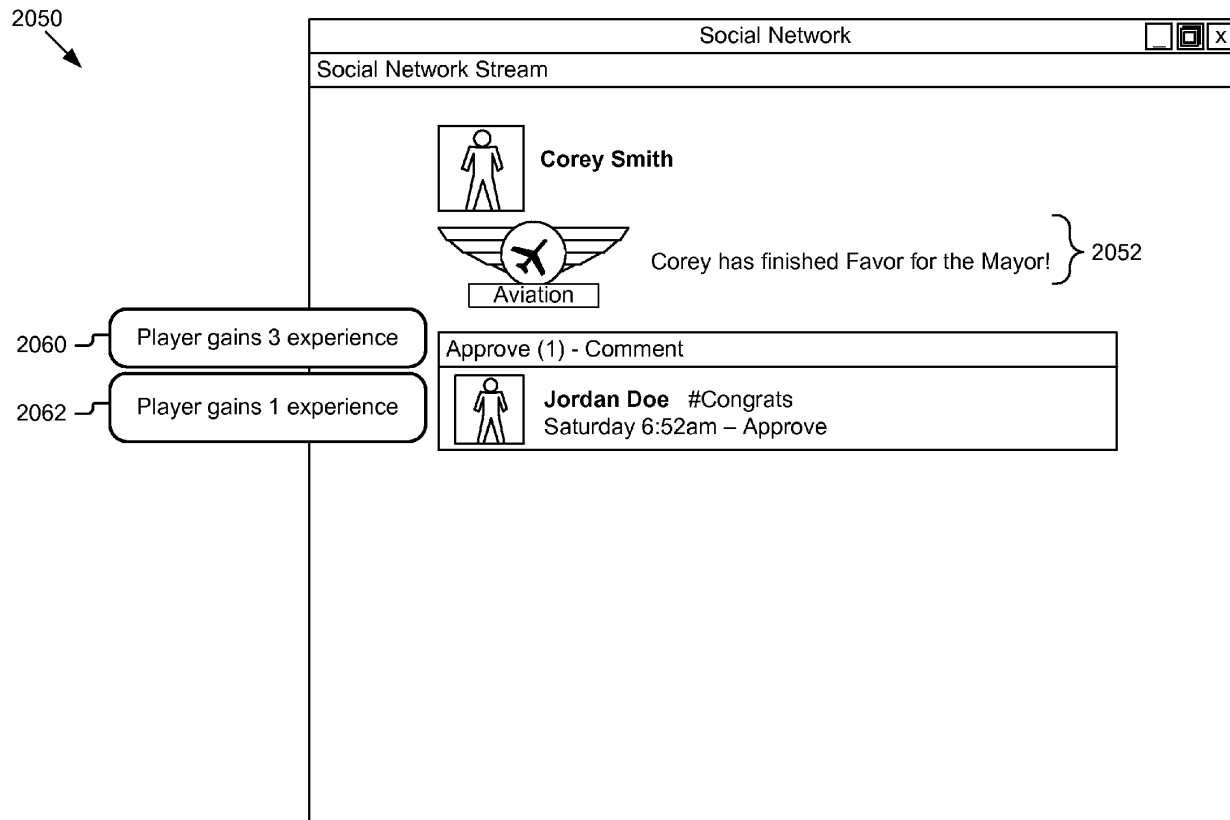


Figure 20B

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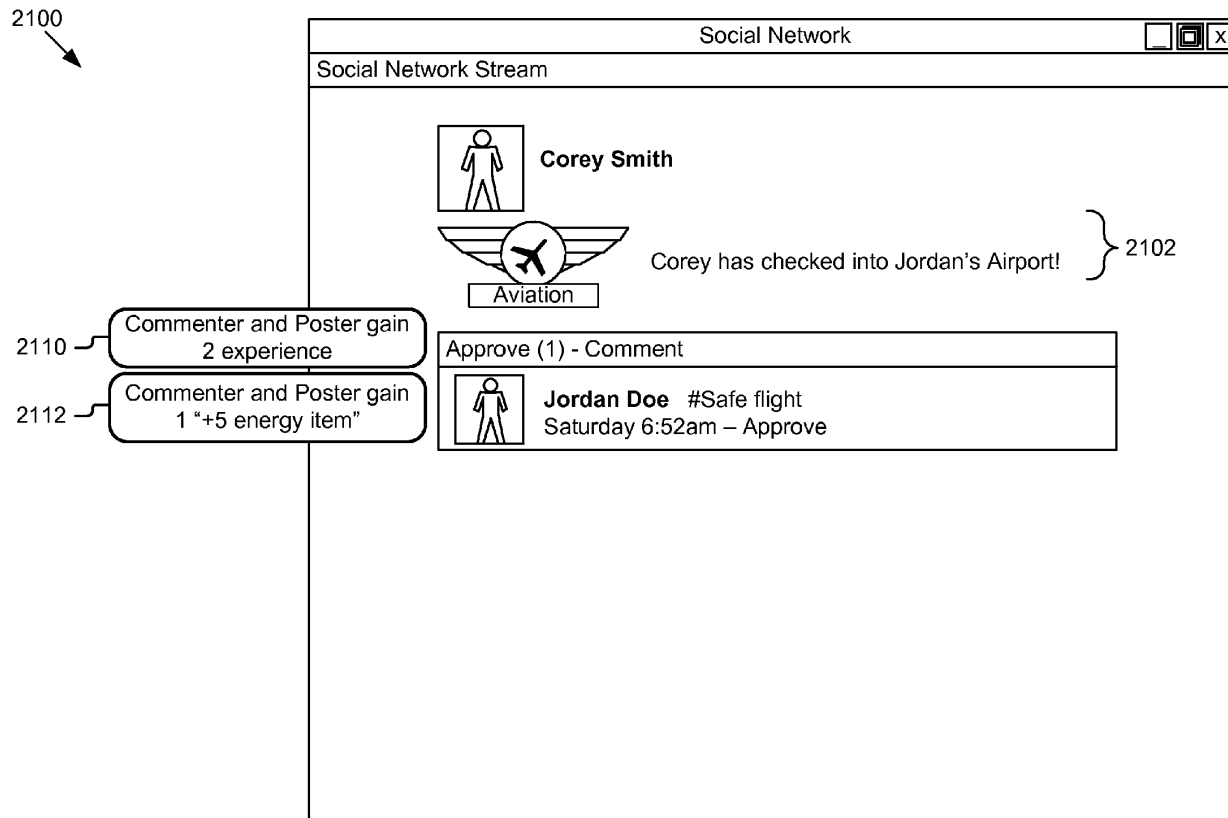


Figure 21A

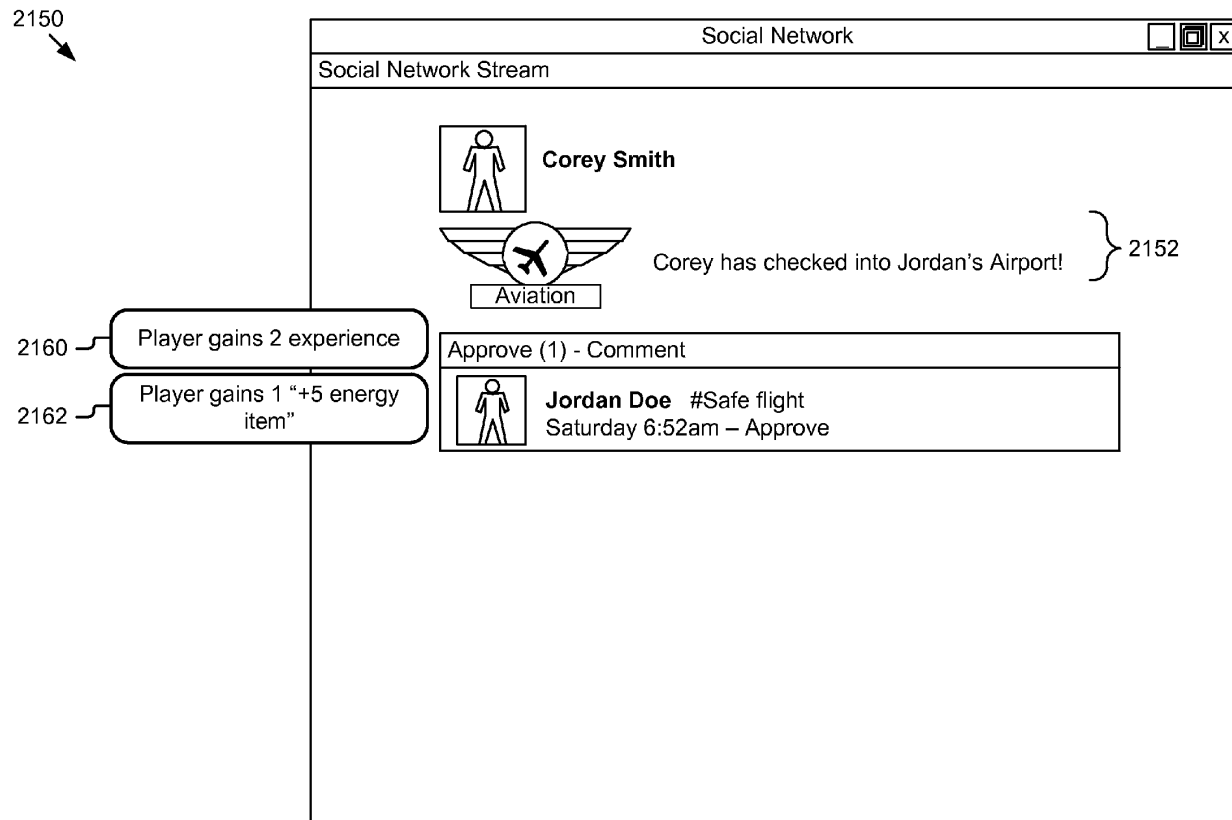


Figure 21B

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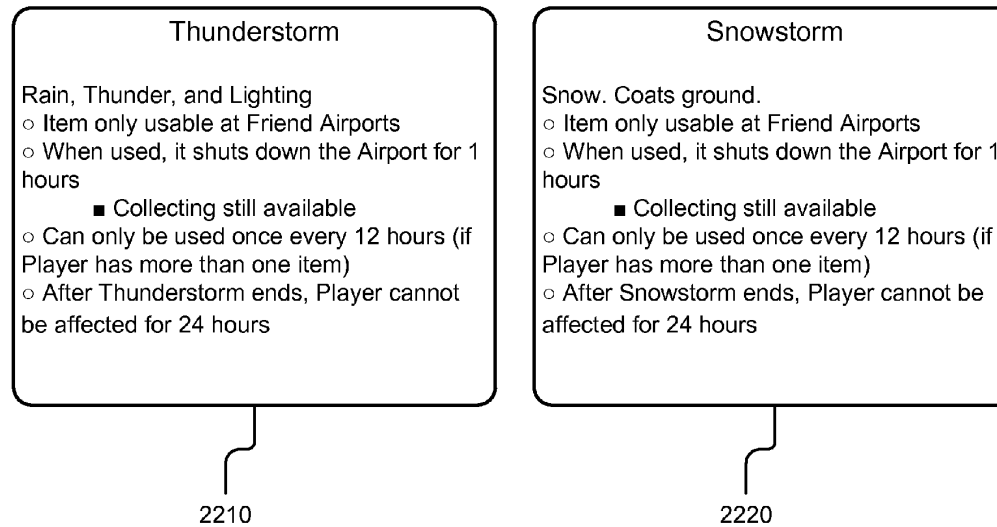


Figure 22

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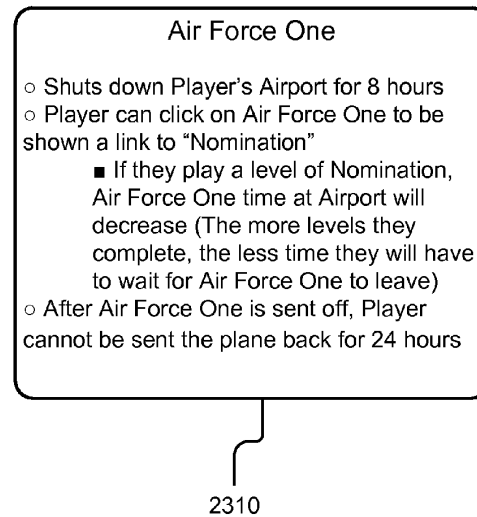


Figure 23

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VIDEO GAMING PLATFORM AND USER INTERFACE

CROSS REFERENCE TO RELATED APPLICATIONS

The present application claims the benefit of priority under 35 U.S.C. §119(e) from U.S. Provisional Application No. 61/643,352 entitled "MULTILAYER FRAMEWORK ARCHITECTURE AND USER INTERFACES FOR VIDEO GAMING APPLICATIONS," filed on May 7, 2012, by Brian Joseph Wiklem, Christopher Robert Masterton, and Carrie Ann Cowan. The entire contents of the provisional application are incorporated by reference herein. The present application also incorporates by reference the contents of utility applications entitled "MULTILAYER SYSTEM FRAMEWORK AND ARCHITECTURE WITH VARIABLE GAMING CAPABILITIES," "PROVIDING SYNCHRONIZED AND INTEGRATED VIDEO GAMING," AND "PROVIDING VIDEO GAMING ACTION VIA COMMUNICATIONS IN A SOCIAL NETWORK," which are concurrently submitted, and claim priority under 35 U.S.C. §119(e) from U.S. Provisional Application No. 61/643,352.

BACKGROUND

The present disclosure relates to video gaming platforms and applications, including those accessed via online or digital services or communities, for example, social networks, or directly via hosted websites, dedicated either wholly or partially for the purpose of implementing video gaming applications. In particular, the present disclosure relates to video gaming platforms and user interfaces associated with the video gaming platforms.

In recent years, video games have become extremely popular. Video games are used not only for entertainment, but also for instructional purposes. Players typically interact with a gaming application through computer or console peripherals such as keyboard, mouse, joysticks, a wide variety of game pads, and funny controllers such as the NES Zapper®. More recently, nontraditional controller technologies such as dance pads, the Wii-mote® or the Kinect®, offering new types of gaming experiences are beginning to emerge. These technologies are capable of enhancing games to incorporate movement, creating a new experience and attracting new audiences.

With the popularity of social networks reaching epic proportions, social games have also become very popular.

With the ongoing trends and growth in video gaming, it may be beneficial to find better platform architectures for gaming applications that continue to enhance the user experience.

SUMMARY

The present disclosure overcomes the deficiencies and limitations of the prior art by providing a technology with a flexible architecture for video gaming applications. In some embodiments, the flexible architecture provides a continuous visual experience for players across different platforms (platform agnostic) and engages them at different levels. Each of the players may have a unique and different visual experience, depending upon the gaming platform a player uses. The architecture facilitates access to video gaming applications in various ways, including 1) via social networks or sites, for example, accessed via personal computers

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or laptops; 2) via wall posts or via an online social networking service that enables its users to send and read text-based posts; 3) via mobile devices (iOS®, Android™, or Windows-based smart phones); and 4) via game consoles (for example, PS3®, Xbox 360®, or Wii®).

Video gaming applications may be purchased via platform application stores. These applications are supported by Android (Android is a Linux-based operating system for mobile devices such as smartphones and tablet computers—it is developed by the Open Handset Alliance), iOS (a mobile operating system developed by Apple Inc.) platforms, and phones operating windows. The user interface of an iOS platform is based on the concept of direct manipulation, using multi-touch gestures. Interface control elements consist of sliders, switches, and buttons. The response to user input is immediate and provides a fluid interface.

Video gaming applications may be hosted or accessed via social networks, other third-party services or on third-party servers, stand-alone platforms, tablets, smartphones or the like. Multiple players (hundreds, thousands, if not millions) may access gaming applications via any or all of these ways. In addition, the flexible architecture provides a scalable infrastructure with cross-platform pollination technology (achievements and rewards are transferred between platforms used by particular players) and secure collection of data. Video gaming applications may be based on universal themes that appeal to a broad range of demographics and provides a continuous flow of data analytics. They offer opportunities for configuring advertisements and promotions to accomplish strategic goals.

In some embodiments, the flexible architecture provides multiple levels of play, permitting players to engage in different ways. The different levels of play options include 1) a peer-to-peer competitive challenge level for core players, 2) a casual play option for play with friends with whom a player shares an affinity, for example, in a social network; and a 3) spectator mode that permits non-players in a network to assist friends. Feed-based triggers allow for greater rewards to players and ease of discovering games.

In yet other embodiments, which may include any or all of the aspects described above, the flexible architecture permits mobile play, extending the gaming arena or world to different platforms, so achievements in a particular game may be earned and shared more easily across platforms. In addition, a player may earn location-based rewards.

Moreover, the flexible architecture provides a system of rewards at check-in, to coax players by providing greater incentives. The flexible architecture permits concurrent "solo" play by a player or gamer, collaborative and competitive play by multiple players. The flexible architecture has user interfaces that are configured to provide different experiences for different players, including for example, a three-dimensional user experience. In some embodiments, the video gaming applications include story-driven quests and game play, giving players more than just tasks and chores. As one example, an aviation gaming application may utilize a collection of two hundred and fifty or more aircrafts and include transactions relating to the aircrafts and their environment, creation of the environment in which the aircrafts operate, etc. In this particular application, players may create and manage their experience (for example, build and manage an aviation empire), enjoy the thrill of history (aviation's past), and travel the globe and fly through an open network of friendly and rival airports.

In yet other embodiments, the system provides a plurality of features for player control of the virtual arena including control of "play" times, "gifts" and "rewards," "collect" and

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“decorate” features, monitor types of “play” (for example, acceleration progress), generate user content, etc.

In some embodiments, the video gaming applications may be free, when accessed via social-network platforms, in which instances revenue is generated via market place for products used during the game, direct advertising, etc. The flexible architecture permits for easy access through a particular player’s social network, allowing other players to discover a particular game and permit conversion as necessary.

In yet other embodiments, linking or connecting platforms creates a more interesting gaming world.

BRIEF DESCRIPTION OF THE DRAWINGS

The present disclosure is illustrated by way of example, and not by way of limitation, in the figures of the accompanying drawings, in which like reference numerals are used to refer to similar elements.

FIG. 1 is a high-level block diagram illustrating some embodiments of a system for providing a video gaming platform, accessed either via a social network (hosted on a social network server or a server associated with it), an online or digital live gaming server, or a third-party video gaming website (hosted by a third party on its server).

FIG. 2 is a block diagram illustrating some embodiments of a social network server or a third party server shown in FIG. 1, including its hardware components.

FIG. 3 is a block diagram illustrating some embodiments of a gaming platform shown in FIGS. 1 and 2, and its software components.

FIG. 4 is a flow chart illustrating an example method for game play, in this instance an aviation game.

FIG. 5 is a graphical representation of an example action via a user interface, by a user in a gaming application (e.g. aviation), for example, where a user creates or sets an aviation route.

FIG. 6 is a graphical representation illustrating a gaming applications operating on a third-party server, with concurrent play by users (gamers or players) from remote locations linked by an integrated user interface.

FIG. 7 is a graphical representation illustrating an example user interface display to one player with an in-game message related to another player’s activity.

FIG. 8 is a graphical representation illustrating an example user interface display to one player with an in-game message awarding items from another player.

FIG. 9 is a graphical representation illustrating several example in-game messages displayed to one player on another player’s activity.

FIG. 10 is a graphical representation illustrating an example user interface configured within a social network for accepting requests for user game play within a game.

FIG. 11 is a graphical representation illustrating an example user interface for interacting with a game via a social network including unlocking new content.

FIG. 12A is a graphical representation illustrating an example user interface display within a social network with a player’s notification about one player’s promotion within the game and other player comments on the player notification.

FIG. 12B is a graphical representation illustrating an example user interface display within a social network with a player notification about one player’s promotion within the game and other non-player comments on the player notification.

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FIG. 13A is a graphical representation illustrating an example use interface within a social network with a player notification on a particular player traveling to another player’s area within the game and posting of other player comments further to the player notification.

FIG. 13B is a graphical representation illustrating an example user interface for interacting with a game via a social network including non-players commenting on a player’s activity within the game.

FIG. 14A is a graphical representation illustrating an example user interface for interacting with a game via a social network including players commenting on a player visiting a player’s virtual area within the game.

FIG. 14B is a graphical representation illustrating an example user interface for interacting with a game via a social network including non-players commenting on a player visiting a player’s virtual area within the game.

FIG. 15A is a graphical representation illustrating an example user interface for interacting with a game via a social network including players commenting on a player sending items within the game.

FIG. 15B is a graphical representation illustrating an example user interface for interacting with a game via a social network including comments from non-players on a player sending items within the game.

FIG. 16A is a graphical representation illustrating an example user interface for interacting with a game via a social network including players commenting on an item purchase within the game.

FIG. 16B is a graphical representation illustrating an example user interface for interacting with a game via a social network including non-players commenting on an item purchase within the game.

FIG. 17A is a graphical representation illustrating an example user interface for interacting with a game via a social network including players commenting on an area purchase within the game.

FIG. 17B is a graphical representation illustrating an example user interface for interacting with a game via a social network including non-players commenting on an area purchase within the game.

FIG. 18A is a graphical representation illustrating an example user interface for interacting with a game via a social network including players commenting on building an item within the game.

FIG. 18B is a graphical representation illustrating an example user interface for interacting with a game via a social network including non-players commenting on building an item within the game.

FIG. 19A is a graphical representation illustrating an example user interface for interacting with a game via a social network including players commenting on a task within the game.

FIG. 19B is a graphical representation illustrating an example user interface for interacting with a game via a social network including non-players commenting on a task within the game.

FIG. 20A is a graphical representation illustrating an example user interface for interacting with a game via a social network including players commenting on completing a task within the game.

FIG. 20B is a graphical representation illustrating an example user interface for interacting with a game via a social network including non-players commenting on completing a task within the game.

FIG. 21A is a graphical representation illustrating an example user interface for interacting with a game via a

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social network including players commenting on arriving at another player's virtual area within the game.

FIG. 21B is a graphical representation illustrating an example user interface for interacting with a game via a social network including non-players commenting on arriving at another player's virtual area within the game.

FIG. 22 is a graphical representation illustrating an example user interface with displays of weather items and their descriptions.

FIG. 23 is a graphical representation illustrating an example user interface configured to provide a game state that affects game play.

DETAILED DESCRIPTION

The present technology is directed to a video gaming platform and user interface for video gaming applications with variable video gaming capabilities, for play by users (players or gamers), either via social networks, or on third party servers. The specification describes examples of the video gaming platform and user interfaces that facilitate a unique user experience and methods involved in the platform and user interface and for operating them to facilitate play by remotely located players or gamers. These video gaming applications referenced or described here may either be hosted by an online community, for example, one or more social networks, or alternatively, by third party servers that are wholly or partially dedicated to gaming applications.

In some embodiments, the flexible architecture provides a continuous visual experience for players across different platforms (platform agnostic) and engages them at different levels. Each of the players may have a unique and different visual experience, depending upon the gaming platform a player uses. This flexible architecture facilitates access to video gaming applications in various ways, including 1) via social networks or sites, for example, accessed via personal computers (desktops or laptops); 2) via wall posts or via an online social networking service that enables its users to send and read text-based posts; 3) via mobile devices (iOS, Android, or Windows-based smart phones); and 4) via game consoles (for example, PS3, Xbox 360, or Wii).

Video gaming applications may be purchased via platform application stores. These applications are supported by Android (Android is a Linux-based operating system for mobile devices such as smartphones and tablet computers—it is developed by the Open Handset Alliance), iOS (a mobile operating system developed by Apple Inc.) platforms, and phone operating windows. The user interface of iOS is based on the concept of direct manipulation, using multi-touch gestures. Interface control elements consist of sliders, switches, and buttons. The response to user input is immediate and provides a fluid interface.

Video gaming applications may be hosted or accessed via social networks, other third party services or on third party servers, stand-alone platforms, tablets, smartphones, or the like. Multiple players (hundreds, thousands, if not millions) may access gaming one or more applications via any or all of these ways. In addition, the flexible architecture provides a scalable infrastructure with cross-platform pollination technology (achievements and rewards are transferred between platforms for particular players) and secure data collection. Video gaming applications may be based on universal themes that appeal to a broad range of demographics and provides a continuous flow of data analytics. They offer opportunities for configuring advertisements and promotions to accomplish strategic goals.

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In yet other embodiments, which may include any or all of the aspects described above, the architecture permits mobile play, extending the gaming arena or world to different platforms, so achievements in a particular game may be earned and shared more easily across platforms. In addition, a player may earn location-based rewards.

Moreover, the system provides rewards at check-in, to coax players by providing greater incentives. The architecture permits for concurrent "solo" play by a player or gamer and collaborative and competitive play between multiple players. User interfaces are configured to provide different experiences for different players, including a three-dimensional user experience. In some embodiments, the video gaming applications include story-driven quests and game play, giving players more than just tasks and chores. By way of example, an aviation gaming application, may utilize a collection of 250 aircrafts and include transactions relating to the aircrafts and its environment, permitting players to create an environment in which the aircrafts operate, etc. In this particular application, players may create and manage their experience (for example, by creating an aviation empire), enjoy the thrill of history (aviation's past), and travel the globe and fly through an open network of friendly and rival airports.

The system provides features for player control of the virtual arena including control of "play" times, "gifts" and "rewards," "collect" and "decorate," monitor "play" (for example, acceleration progress), generate user content, etc.

The video gaming applications may be free, when accessed via social-network platforms, in which instances revenue is generated via market place for products used during the game, direct advertising, etc. The flexible architecture permits for easy access through a particular player's social network, allowing other players to discover a particular game and permit conversion as necessary. Linking or connecting platforms creates a more interesting and viable gaming world.

The architecture accords variable status to players who can opt for different levels of play. A "core" game play status enables players to be leaders and play the entire game. A leader has control of all aspects of a particular gaming application. A "casual" or "follower" game play status enables players to play from a different perspective, providing access to only a portion of the entire game. A "spectator" or "bystander" game play enables players to play from a reactive perspective. Players are accorded this status when they initiate play via a social network wall posting, a response to a social networking service facilitating exchange of text or via any other key word response, which has direct impact on game play. Players with this status can request permission to visit game play arenas of other players. This request may be in response to advertising or promotion displays.

Players (with any status described above) may access game play via mobile devices, at any location, and receive location-based rewards. They may access a virtual game arena, their own or that of other players, via several platforms and take up play where they left off. They may link up friends for collaborative play. Players may also participate in standalone game play, via tablets, mobile devices, console-based game play, target-based game play or the like. In addition, the system permits cross-pollination game play, sending game objects from one game world or arena to another.

In the following description, for purposes of explanation, numerous specific details are indicated in order to provide a thorough understanding of the technology described. This

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technology may be practiced without these specific details. In the instances illustrated, structures and devices are shown in block diagram form in order to avoid obscuring the technology. For example, the present technology is described with some implementations illustrated below with reference to user interfaces and particular hardware. However, the present technology applies to any type of computing device that can receive data and commands, and any devices providing services. Moreover, the present technology is described below primarily in the context of providing video game architecture; however, the present technology applies to any type of situation and may be used for other applications beyond video games. In particular, this technology may be used in other contexts besides video games.

Reference in the specification to “one embodiment,” “an embodiment,” or “some embodiments” means simply that one or more particular features, structures, or characteristics described in connection with the one or more embodiments is included in at least one or more embodiments that are described. The appearances of the phrase “in one embodiment or instance” in various places in the specification are not necessarily all referring to the same embodiment or instance.

Some portions of the detailed descriptions that follow are presented in terms of algorithms and symbolic representations of operations on data bits within a computer memory of either one or more computing devices. These algorithmic descriptions and representations are the means used to most effectively convey the substance of the technology. An algorithm as indicated here, and generally, is conceived to be a self-consistent sequence of steps leading to a desired result. The steps are those requiring physical manipulations of physical quantities. Usually, though not necessarily, these quantities take the form of electrical or magnetic signals capable of being stored, transferred, combined, compared, and otherwise manipulated. It has proven convenient at times, principally for reasons of common usage, to refer to these signals as bits, values, elements, symbols, characters, terms, numbers, or the like.

It should be understood, however, that all of these and similar terms are to be associated with the appropriate physical quantities and are merely convenient labels applied to these quantities. Unless specifically stated otherwise, as apparent from the following discussion, it should be appreciated that throughout the description, discussions utilizing terms, for example, “processing,” “computing,” “calculating,” “determining,” or “displaying” or the like, refer to the action and processes of a computer system, or similar electronic computing device, that manipulates and transforms data represented as physical (electronic) quantities within the computer system’s registers and memories into other data similarly represented as physical quantities within the computer system memories or registers or other such information storage, transmission, or display devices.

The present technology also relates to an apparatus for performing the operations described here. This apparatus may be specially constructed for the required purposes, or it may include a general-purpose computer selectively activated or reconfigured by a computer program stored in the computer. For example, a computer program may be stored in a computer-readable storage medium, for example, but not limited to, any type of disk including floppy disks, optical disks, CD-ROMs, magnetic disks, read-only memories (ROMs), random access memories (RAMs), EPROMs, EEPROMs, magnetic or optical cards, flash memories including USB keys with non-volatile memory or any type

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of media suitable for storing electronic instructions, each coupled to a computer system bus.

This technology may take the form of an entirely hardware implementation, an entirely software implementation, or an implementation including both hardware and software components. In some instances, this technology is implemented in software, which includes but is not limited to firmware, resident software, microcode, etc.

Furthermore, this technology may take the form of a computer program product accessible from a computer-usable or computer-readable medium providing program code for use by or in connection with a computer or any instruction execution system. For the purposes of this description, a computer-usable or computer-readable medium may be any apparatus that can include, store, communicate, propagate, or transport the program for use by or in connection with the instruction execution system, apparatus, or device.

A data processing system suitable for storing and/or executing program code includes at least one processor coupled directly or indirectly to memory elements through a system bus. The memory elements may include local memory employed during actual execution of the program code, bulk storage, and cache memories, which provide temporary storage of at least some program code in order to reduce the number of times code may be retrieved from bulk storage during execution.

Input/output or I/O devices (including but not limited to keyboards, displays, pointing devices, etc.) may be coupled to the system either directly or through intervening I/O controllers.

Communication units including network adapters may also be coupled to the systems to enable them to couple to other data processing systems, remote printers, or storage devices, through either intervening private or public networks. Modems, cable modems, and Ethernet cards are just a few examples of the currently available types of network adapters.

Finally, the algorithms and displays presented in this application are not inherently related to any particular computer or other apparatus. Various general-purpose systems may be used with programs in accordance with the teachings here, or it may prove convenient to construct more specialized apparatus to perform the required method steps. The required structure for a variety of these systems is outlined in the description below. In addition, the present technology is not described with reference to any particular programming language. It should be understood that a variety of programming languages may be used to implement the technology as described here.

Example Architecture Overview

FIG. 1 is a high-level block diagram illustrating some embodiments of systems for providing gaming applications, either via social networks, an online live gaming server, or on third party servers. The system 100 illustrated in FIG. 1 provides gaming platforms 106a or 106b so that participants (players or gamers) may access one or more gaming applications, initiate a play on one device or gaming platform and continue play at another device or gaming platform, making transitions between devices or platforms essentially seamless and enabling a continuous playing experience.

The system 100 includes one or more social network servers 102a through 102n that may be accessed via user devices 115a, 115b through 115n, which are used by users 125a, 125b, through 125n, to connect to any one of the social network servers 102a through 102n. The user devices 115a through 115n may be a desktop computer, a game system or

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a mobile phone. These entities (user devices **115a-115n** and social network servers **102a-102n**) are communicatively coupled via one or more networks **105a**, **105b**, and **105n**. Although only three user devices or platforms **115a**, **115b** through **115n** are illustrated, any numbers of user devices or platforms **115n** may be used by any number of users (players, gamers, or the like) **125n**. Moreover, those skilled in the art should recognize that while the present disclosure is described below primarily in the context of providing gaming applications, the present disclosure may be applicable to other types of applications, for entertainment or otherwise. As some examples, gaming applications may include operations for creating plays, participating in plays, etc.

The user devices **115a** through **115n** in FIG. 1 are illustrated by way of example. Although FIG. 1 illustrates only three devices, the present disclosure applies to any system architecture having one or more user devices **115a** through **115n** (with user-interface applications **117a** through **117n**), therefore, any number of user devices **115n** (hundreds, thousands, even millions or more) may be used.

Furthermore, while only three networks **105a**, **105b**, and **105n** are illustrated as coupled to the user devices **115a**, **115b** through **115n**, the social network servers **102a-102n**, the profile server **130**, the web server **132**, the online live gaming server **140**, the cross-platform server **142**, and one or more third party servers **134a** through **134n**, in practice, any number of networks **105n** may be connected, either directly or indirectly, to these entities. In addition, although only two third party servers **134a** through **134n** are shown, the system architecture **100** may include one or more third party servers **134n**, each with a gaming platform **106b** through **106n**, operating one or more gaming applications that are similar or different.

In some embodiments, the social network server **102a** is coupled to the network **105a**, via a signal line **110**. The social network server **102a** includes a social network application **104**, which comprises the software routines and instructions to operate the social network server **102a** and its functions and operations. Although only one social network server **102a** is described here, persons of ordinary skill in the art should recognize that multiple servers may be present, as illustrated by social network servers **102n**, each with functionality similar to social network server **102a** or different.

The term “social network” as used here encompasses its plain and ordinary meaning including, but not limited to, any type of social structure where the users are connected by a common feature or link. The common feature includes relationships/connections, e.g., friendship, family, work, a similar interest, etc. The common features are provided by one or more social networking systems, such as those included in the system architecture **100**, including explicitly-defined relationships and relationships implied by social connections with other online users, where the relationships form a social graph **108**.

The term “social graph” as used here encompasses its plain and ordinary meaning including, but not limited to, a set of online relationships between users (players and non-players), such as provided by one or more social networking systems, operating on social network servers **102a** through **102n**, including explicitly-defined relationships and relationships implied by social connections with other online users, where the relationships form a social graph. In some examples, the social graph **108** may reflect a mapping of these users and how they are related.

It should be understood that social network server **102a** and the social network software/application **104** are repre-

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sentative of a single social network. Each of the plurality of social networks **102a** through **102n** is coupled to any one of the networks **105a**, **105b**, and **105n**, each having its own server, application, and social graph. For example, a first social network system operated or hosted on a social network server may be directed to business networking, a second directed to or centered on academics, a third directed to local business, a fourth directed to dating or gaming, and yet others directed to other general interests or perhaps a specific focus. Yet, each may provide access to a gaming platform **106a** for operating or providing access to video gaming applications.

A profile server **130** is illustrated as a stand-alone server in FIG. 1. In other embodiments of the system architecture **100**, all or part of the profile server **130** may be part of the social network server **102a**. The profile server **130** is directly connected to the network **105a**, via a line **131**. The profile server **130** stores profiles for all the users that belong to a social network. A third party server **134a** is connected to the network **105b**, via a signal line **135**. A web server **132** is connected, via a line **133**, to the network **105n**. The web server **132** delivers access to content, via the internet, for example, by hosted websites or the like. Users may use the web browsers on their electronic devices or gaming platforms to browse for gaming applications and access websites hosting gaming applications.

An online live gaming server **140** is an online multiplayer gaming and digital media delivery service connected to the network **105a** through **105n** via signal line **141** for providing users (i.e., players) with online gaming capabilities. This allows users to interact (e.g., play games) with multiple players (hundreds, thousands, if not millions) via the online live gaming server **140** (e.g., Xbox Live, Playstation Network, etc.).

A cross-platform server **142** is an online server connected to the network **105a** through **105n** via signal line **143** that receives information from one or more clients (e.g., mobile device, social network, gaming server, etc.) and translates the data such that it becomes usable by the gaming platform **106a** through **106n**. The cross-platform server **142** also translates information from the gaming platform **106a** through **106n** such that it becomes usable by the one or more clients (e.g., mobile device, social network, gaming server, etc.).

The user devices or player gaming platforms **115a** through **115n** can be a computing device, for example, a laptop computer, a desktop computer, a tablet computer, a mobile telephone (iOS, Android, or windows-based phone, a personal digital assistant (PDA), a mobile email device, a portable game player, a game console (PS3, Xbox 360, Wii or the like) a portable music player, a television with one or more processors embedded in the television or coupled to it, or any other electronic device capable of accessing a network and participating in a gaming application.

The network **105a**, **105b**, or **105n**, is of conventional type, wired or wireless, and may have any number of configurations, such as a star configuration, token ring configuration, or other configurations known to those skilled in the art. Furthermore, the network **105** may comprise a local area network (LAN), a wide area network (WAN, e.g., the Internet), and/or any other interconnected data path across which one or more devices may communicate.

In another embodiment, the network **105a**, **105b**, or **105n** may be a peer-to-peer network. The network **105a**, **105b**, or **105n** may also be coupled to or include portions of one or more telecommunications networks for sending data in a variety of different communication protocols.

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In yet another embodiment, the network **105a**, **105b**, or **105n**, includes Bluetooth communication networks or a cellular communications network for sending and receiving data such as via short messaging service (SMS), multimedia messaging service (MMS), hypertext transfer protocol (HTTP), direct data connection, WAP, email, etc.

In some embodiments, the social network server **102a**, the profile server **130**, the web server **132**, online live gaming server **140**, cross-platform server **142**, and the third party servers **134a** through **134n** are hardware servers including a processor, memory, and network communication capabilities. One or more of the users (players or gamers) **125a** through **125n** access any of the social network servers **102a** through **102n**, or the third party servers **134a** through **134n**, via browsers in their user devices or gaming platforms and via the web server **132**. The user devices **115a** through **115n** have user interface applications **117a**, **117b**, through **117n**, that manage access by particular players to select gaming applications or their choice.

FIG. 2 is a block diagram illustrating some embodiments of the social network server **102** (a through n) or third party server **134** (a through n). In FIG. 2, like reference numerals have been used to reference like components with the same or similar functionality that has been described above with reference to FIG. 1. Since those components have been described above that description is not repeated here. The social network server **102a** generally comprises one or more processors, although only one processor **235** is illustrated in FIG. 2. The processor is coupled via a bus **220** to memory **237** and database storage **233**, which stores user account data **252**, game options data **254**, user rewards/points **256**, user play/save data **258**, game options/preferences **260**, promotion data **262** and advertising data **264**.

In some embodiments, the database storage **233** is a database organized by the hosting server and the user. For each user or player, the data storage **233** stores data on the user and user game plays, etc. For example, this data may include related social network activity such as posts, shares, invitations, status changes, etc., associated with each user engaged in a video gaming application.

A user or player **125a**, via a user or gaming device **115a**, communicates a request to initiate a gaming application or reacts to a keyword via communication unit **239**. The “set up” for a video gaming application is managed by the gaming platform **106a**. It should be recognized that the gaming platform **106a** (illustrated in the social network server **102a**) and **106b** (illustrated in the third party server **134a**) are shown separately, but include similar functionality, at least for purposes of operating the gaming applications. A user or player display **25** coupled to the user device **115a** through **n**, is configured to provide the video source of the gaming application in one of many formats, high definition graphics, three dimensional formats, etc.

Referring now to FIG. 3, like reference numerals have been used to reference like components with the same or similar functionality that has been described above with reference to FIG. 1. Since those components have been described above, that description is not repeated here. The gaming platform **106** (a orb) includes various modules that are programmed to perform the functionalities described here. These modules may be variously distributed or may be in a single unit. The gaming platform **106** includes a user interface module **301**, a permissions module **303**, a user/player account module **305**, a user/player status module **307**, a promotion/rewards module **309**, a game initiation/operation module **311**, and a social network module **313**. Each of these modules is coupled to a software communication

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mechanism **320** to communicate the other modules. Examples of a software communications mechanism **320** may be an object bus (such as COBRA), direct socket communication (such as TCP/IP sockets) among software modules, remote procedure calls, UDP broadcasts and receipts, HTTP connections, function or procedure calls, etc. Further, any or all of the communication could be secure (SSH, HTTPS, etc.). The software communication can be implemented on any underlying hardware, such as a network, the Internet, a bus **220** of FIG. 2, or a combination thereof, etc.

By way of example, a particular user **125a** communicates via a user device **115a**, to either initiate or react to a game play. The user interface module **301** facilitates a connection of the user device **115a** with the social network server **102a**, in the event the player wishes to engage or participate in a gaming application via the social network server **102a**. The permission module **303** ensures that the user device is compliant with protocols and any privacy concerns. Once a video gaming application has been set up, the user/player account module **305** makes a note of the user to determine if the user has an existing account or must create one. The user/player status module **307** considers the status of the various users (“leader,” “follower,” or “spectator”). A promotion/rewards module **309** operates the necessary promotions permitting players to earn rewards accorded by the promotions. The game initiation/operation module **311** initiates play and the social network module **313** tracks the applications engaged by a particular player and updates the player’s social profile accordingly.

Example Methods

FIG. 4 illustrates an example method for aviation game play. It should be understood that the order of the operations in FIG. 4 is merely by way of example and may be performed in different orders than those that are illustrated and some operations may be excluded, and different combinations of the operations may be performed. In the example method illustrated, one or more operations may include signing in/logging in to a select game (for example, an aviation game), as illustrated by block **402**. The method **400** then proceeds to the next block **404** and may include one or more operations to perform an action within the game (for example, displayed as a two-dimensional or three-dimensional display). The method **400** then proceeds to the next block **406** and may include one or more operations to post a description of the action in a social network feed. The method **400** then proceeds to the next block **408** and may include one or more operations to receive one or more rewards based on events from the social network feed and/or player interactions.

FIG. 5 illustrates an example of a graphical representation of a flight route that may be created in this gaming application (aviation game). Multiple players (Gamers **1** through **6**) may engage in this game, as illustrated by reference numeral **1610** in FIG. 6. Each of these gamers may be at remote locations and may access this game operated on a third party server. An action by gamer **1** impacting another gamer is indicated to any of the other gamers impacted, requiring acceptance or denial by the gamer impacted. The impacted gamer may “accept” the action, indicated by reference numeral **620** or may “decline” the action, indicated by reference numeral **630**.

As one example of a select game, an aviation video gaming application is described here in FIG. 7 through FIG. 23. FIG. 7 illustrates some embodiments of a user interface **700** for displaying an in-game message related to another player’s activity. A player may receive an in-game notifica-

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tion (indicated by reference numeral 710) describing certain activities relating to the player. For example the in-game notification (indicated by reference numeral 710) states that friends have visited the player's airport and allows the player to view the description (by pressing the button 720) of what the friends' did while at the player's airport.

FIG. 8 illustrates some embodiments of a user interface 800 for displaying an in-game message related to awarding items. A player may receive an in-game notification (indicated by reference numeral 810) describing an in-game item that was given to the player by a friend to assist the player in completing a quest (i.e., challenge). The in-game notification (indicated by reference numeral 810) may also allow the user (via the share button 820) to share this information and/or the in-game item with one or more additional players. The in-game notification (indicated by reference numeral 810) may also allow the user (via the close button 820) to hide the in-game notification.

FIG. 9 illustrates some embodiments 900 of example in-game messages related to another player's activity. For example, a player may give experience points to another player, as indicated by the in game notification 910. A player may sabotage another player's flight by damaging the airplane, as indicated by the in game notification 920. A player may sabotage another player's airport by damaging a construction site, as indicated by the in game notification 930. A player may improve another player's travel time by giving them clear skies, as indicated by the in game notification 940. A player may have their airport shut down due to in-game weather conditions, as indicated by the in game notification 950. A player may have their airport shut down due to a particular event, for example, the president visiting a player's airport, as indicated by the in game notification 960.

FIG. 10 illustrates an example of the user interface display 1000 to a user in the event a video gaming application is hosted or accessed by a social network. A user may accept a request via posting a comment (#accept in this example) to the social network post. User posts are indicated by 1010, user activities or operations during play are indicated by 1020, and user acceptances (indicated by reference numeral 1040) and approvals are indicated by reference numeral 1030.

FIG. 11 illustrates an example of a user interface 1100 for unlocking game play content within the game. A user may unlock in-game content by posting a comment on a player's social network post. A friend's activities and status during a game are indicated by 1120, and promotion approvals are indicated by 1130. Approvals may be by the user's friends 1140 and 1150.

FIG. 12A illustrates an example of a user interface 1200 within a social network with a player notification about one player's promotion within the game and other player comments on the player notification. For example, the post 1204 indicates that the player has been promoted within the game. The notification 1210 indicates that for the approval 1212 from a player, the commenter and the poster receive three points within the game. The notification 1220 indicates that for the comment 1222, the commenter and the poster receive five points within the game.

FIG. 12B illustrates an example of a user interface 1250 within a social network with a player notification about one player's promotion within the game and other non-player comments on the player notification. For example, the post 1254 indicates that the player has been promoted within the game. The notification 1260 indicates that for the approval 1262, the player (i.e., poster) receives three points within the

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game. The notification 1270 indicates that for the comment 1272 from a non-player, the player (i.e., poster) receives one point within the game.

FIG. 13A illustrates an example of a user interface 1300 within a social network with a player notification about one player traveling to another player's area within the game and other player comments on the player notification. For example, the post 1302 indicates that the player is traveling to another player's airport. The notification 1310 indicates that for the approval, the flight time is decreased by 5%. The notification 1312 indicates that for the comment "#divert" from a player, the airplane is sent to the commenter's airport. The notification 1314 indicates that for the comment "#roger" from a player, the airplane receives two passengers. The notification 1316 indicates that for the comment "#clear skies" from a player, the flight time is decreased by 5%. The notification 1318 indicates that for the comment "#turbulence" from a player, the flight time is increased by 5%. The notification 1320 indicates that for the comment "#thunderstorm" from a player, the commenter receives a thunderstorm item (in-game item). The notification 1322 indicates that for the comment "#snowstorm" from a player, the commenter receives a snowstorm item (in-game item).

FIG. 13B illustrates an example of a user interface 1350 within a social network with a player notification about one player traveling to another player's area within the game and other non-player comments on the player notification. For example, the post 1352 indicates that the player is traveling to another player's airport. The notification 1360 indicates that for the approval, the flight time is decreased by 5%. The notification 1362 indicates that for the comment "#divert" from a non-player, the airplane is sent to the closest friend's airport. The notification 1364 indicates that for the comment "#roger" from a non-player, the airplane receives one passenger. The notification 1366 indicates that for the comment "#clear skies" from a non-player, the flight time is decreased by 5%. The notification 1368 indicates that for the comment "#turbulence" from a non-player, the flight time is increased by 5%. The notification 1370 indicates that for the comment "#thunderstorm" from a non-player, the player's airport is hit by a thunderstorm. The notification 1372 indicates that for the comment "#snowstorm" from a non-player, the player's airport is hit by a snowstorm.

FIG. 14A illustrates an example of a user interface 1400 within a social network with a player notification about one player visiting another player's area within the game and other player comments on the player notification. For example, the post 1402 indicates that the player is visiting another player's airport. The notification 1410 indicates that for the approval, one energy point is given to both players. The notification 1412 indicates that for the comment "#thanks" from a player, five energy points are given to both players. The notification 1414 indicates that for the comment "#thunderstorm" from a player, the commenter receives a thunderstorm item (in-game item). The notification 1416 indicates that for the comment "#snowstorm" from a player, the commenter receives a snowstorm item (in-game item).

FIG. 14B illustrates an example of a user interface 1450 within a social network with a player notification about one player visiting another player's area within the game and other non-player comments on the player notification. For example, the post 1452 indicates that the player is visiting another player's airport. The notification 1460 indicates that for the approval, one energy point is given to the player (i.e., poster). The notification 1462 indicates that for the comment "#thanks" from a non-player, two energy points are given to the player (i.e., poster). The notification 1464 indicates that

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for the comment “#thunderstorm” from a non-player, the player’s (i.e., poster) airport is hit by a thunderstorm. The notification 1466 indicates that for the comment “#snowstorm” from a non-player, the player’s (i.e., poster) airport is hit by a snowstorm.

FIG. 15A illustrates an example of a user interface 1500 within a social network with a player notification about one player sending a game-play item within the game and other player comments on the player notification. For example, the post 1502 indicates that the player has sent an airplane to an in-game airport (in this example John Wayne Airport). The notification 1510 indicates that for the approval, the flight time is decreased by 5%. The notification 1512 indicates that for the comment “#bird attack” from a player, the airplane is damaged and the flight time is increased by 5%. The notification 1514 indicates that for the comment “#turbulence” from a player, the flight time is increased by 5%. The notification 1516 indicates that for the comment “#clear skies” from a player, the flight time is decreased by 5%. The notification 1518 indicates that for the comment “#thunderstorm” from a player, the commenter receives a thunderstorm item (in-game item). The notification 1520 indicates that for the comment “#snowstorm” from a player, the commenter receives a snowstorm item (in-game item).

FIG. 15B illustrates an example of a user interface 1550 within a social network with a player notification about one player sending a game-play item within the game and other non-player comments on the player notification. For example, the post 1552 indicates that the player has sent an airplane to an in-game airport (in this example John Wayne Airport). The notification 1560 indicates that for the approval, the flight time is decreased by 5%. The notification 1562 indicates that for the comment “#bird attack” from a non-player, the airplane is damaged and the flight time is increased by 5%. The notification 1564 indicates that for the comment “#turbulence” from a non-player, the flight time is increased by 5%. The notification 1566 indicates that for the comment “#clear skies” from a non-player, the flight time is decreased by 5%. The notification 1568 indicates that for the comment “#thunderstorm” from a non-player, the player’s (i.e., poster) airport is hit by a thunderstorm. The notification 1570 indicates that for the comment “#snowstorm” from a non-player, the player’s (i.e., poster) airport is hit by a snowstorm.

FIG. 16A illustrates an example of a user interface 1600 within a social network with a player notification about one player purchasing a game-play item within the game and other player comments on the player notification. For example, the post 1602 indicates that the player has purchased an in-game airplane. The notification 1610 indicates that for the approval, the commenter gains 10 coins. The notification 1612 indicates that for the comment “#maiden voyage” from a player, the commenter and the poster gain one “1 hour boost item”. The notification 1614 indicates that for the comment “#thunderstorm” from a player, the commenter receives a thunderstorm item (in-game item). The notification 1616 indicates that for the comment “#snowstorm” from a player, the commenter receives a snowstorm item (in-game item).

FIG. 16B illustrates an example of a user interface 1650 within a social network with a player notification about one player purchasing a game-play item within the game and other non-player comments on the player notification. For example, the post 1652 indicates that the player has purchased an in-game airplane. The notification 1660 indicates that for the approval, no award is given. The notification 1662 indicates that for the comment “#maiden voyage” from

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a non-player, the player (i.e., poster) receives one experience point. The notification 1664 indicates that for the comment “#thunderstorm” from a non-player, the player’s (i.e., poster) airport is hit by a thunderstorm. The notification 1666 indicates that for the comment “#snowstorm” from a non-player, the player’s (i.e., poster) airport is hit by a snowstorm.

FIG. 17A illustrates an example of a user interface 1700 within a social network with a player notification about one player purchasing a game-play area within the game and other player comments on the player notification. For example, the post 1702 indicates that the player has purchased a small terminal. The notification 1710 indicates that for the approval, the building time is decreased. The notification 1712 indicates that for the comment “#let me help” from a player, the building time is decreased by 5%. The notification 1714 indicates that for the comment “#congrats” from a player, the commenter is given 10 coins. The notification 1716 indicates that for the comment “#vandalize” from a player, the building time is increased by 5%. The notification 1718 indicates that for the comment “#thunderstorm” from a player, the commenter receives a thunderstorm item (in-game item). The notification 1720 indicates that for the comment “#snowstorm” from a player, the commenter receives a snowstorm item (in-game item).

FIG. 17B illustrates an example of a user interface 1750 within a social network with a player notification about one player purchasing a game-play area within the game and other non-player comments on the player notification. For example, the post 1752 indicates that the player has purchased a small terminal. The notification 1760 indicates that for the approval, the building time is decreased. The notification 1762 indicates that for the comment “#let me help” from a non-player, the building time is decreased by 5%. The notification 1764 indicates that for the comment “#congrats” from a non-player, the player (i.e., poster) is given 5 coins. The notification 1766 indicates that for the comment “#vandalize” from a non-player, the building is damaged and the building time is increased by 5%. The notification 1768 indicates that for the comment “#thunderstorm” from a non-player, the player’s (i.e., poster) airport is hit by a thunderstorm. The notification 1770 indicates that for the comment “#snowstorm” from a non-player, the player’s (i.e., poster) airport is hit by a snowstorm.

FIG. 18A illustrates an example of a user interface 1800 within a social network with a player notification about one player building a game-play item within the game and other player comments on the player notification. For example, the post 1802 indicates that the player is trying to finish building a hangar. The notification 1810 indicates that for the approval, the poster and commenter receive three energy points. The notification 1812 indicates that for the comment “#fuel drums” from a player, the poster receives an in-game item.

FIG. 18B illustrates an example of a user interface 1850 within a social network with a player notification about one player building a game-play item within the game and other non-player comments on the player notification. The notification 1860 indicates that for the approval, the player (i.e., poster) receives three energy points. The notification 1862 indicates that for the comment “#fuel drums” from a non-player, the player (i.e., poster) receives an in-game item.

FIG. 19A illustrates an example of a user interface 1900 within a social network with a player notification about one player performing a task within the game and other player comments on the player notification. For example, the post 1902 indicates that the player is trying to finish a task, in this

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example, “favor for the mayor.” The notification 1910 indicates that for the approval, the poster and commenter receive five experience points. The notification 1912 indicates that for the comment “#lumber” from a player, the poster receives an in-game item.

FIG. 19B illustrates an example of a user interface 1950 within a social network with a player notification about one player performing a task within the game and other non-player comments on the player notification. For example, the post 1952 indicates that the player is trying to finish a task, in this example, “favor for the mayor.” The notification 1960 indicates that for the approval, the player (i.e., poster) receives five experience points. The notification 1962 indicates that for the comment “#lumber” from a non-player, the player (i.e., poster) receives an in-game item.

FIG. 20A illustrates an example of a user interface 2000 within a social network with a player notification about one player finishing a task within the game and other player comments on the player notification. For example, the post 2002 indicates that the player has finished a task, in this example, “favor for the mayor.” The notification 2010 indicates that for the approval, the poster and commenter receive three experience points. The notification 2012 indicates that for the comment “#congrats” from a player, the poster and commenter receive five experience points.

FIG. 20B illustrates an example of a user interface 2050 within a social network with a player notification about one player finishing a task within the game and other non-player comments on the player notification. For example, the post 2052 indicates that the player has finished a task, in this example, “favor for the mayor.” The notification 2060 indicates that for the approval, the player (i.e., poster) receives three experience points. The notification 2062 indicates that for the comment “#congrats” from a non-player, the player (i.e., poster) receives one experience point.

FIG. 21A illustrates an example of a user interface 2100 within a social network with a player notification about one player arriving at another player’s area within the game and other player comments on the player notification. For example, the post 2102 indicates that the player has checked into a friend’s airport. The notification 2110 indicates that for the approval, the poster and commenter receive two experience points. The notification 2112 indicates that for the comment “#safe flight” from a player, the poster and commenter receive one “+5 energy item.”

FIG. 21B illustrates an example of a user interface 2150 within a social network with a player notification about one player arriving at another player’s area within the game and other non-player comments on the player notification. For example, the post 2152 indicates that the player has checked into a friend’s airport. The notification 2160 indicates that for the approval, the player (i.e., poster) receives two experience points. The notification 2162 indicates that for the comment “#safe flight” from a non-player, the player (i.e., poster) receives one “+5 energy item.”

FIG. 22 illustrates an example of a user interface 2200 including two examples of game states that affect game play. The first example 2210 is a thunderstorm game item that may be used at friend’s airports to add rain, thunder, lightning to the airport, and to shut down the airport for an hour. For example, this item can only be used once every 12 hours and after the thunderstorm ends the player cannot be affected for 24 hours. The second example 2220 is a snowstorm game item that may be used at friend’s airports to add snow to the airport, and to shut down the airport for an hour.

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For example, this item can only be used once every 12 hours and after the thunderstorm ends the player cannot be affected for 24 hours.

FIG. 23 illustrates an example of a user interface 2300 including one example of a game state that affects game play. The example 2310 is of Air Force One (i.e., the president) visiting the player’s airport. For example, this shuts down the player’s airport for 8 hours, the player can interact with Air Force One via a nomination link for decreasing the time Air Force One is at the airport, and after Air Force One is sent off, the player cannot be sent the airplane again for 24 hours.

The comments and game actions they invoke which are described in FIGS. 5-23 are used by way of example, one skilled in the art will recognize that other examples and configurations are possible.

The foregoing description of the implementations of the present technology has been presented for the purposes of illustration and description. It is not intended to be exhaustive or to limit the present technology to the precise form disclosed. Many modifications and variations are possible in light of the above teaching. It is intended that the scope of the present technology be limited not by this detailed description, but rather by the claims of this application. As should be understood by those familiar with the art, the present technology may be implemented in other specific forms, without departing from the spirit or essential characteristics thereof. Likewise, the particular naming and division of the modules, routines, features, attributes, methodologies, and other aspects are not mandatory or significant, and the mechanisms that implement the present disclosure or its features may have different names, divisions and/or formats. Furthermore, as should be apparent to one of ordinary skill in the relevant art, the modules, routines, features, attributes, methodologies and other aspects of the present technology can be implemented as software, hardware, firmware, or any combination of the three. Also, wherever a component, an example of which is a module, of the present technology is implemented as software, the component can be implemented as a standalone program, as part of a larger program, as a plurality of separate programs, as a statically or dynamically linked library, as a kernel loadable module, as a device driver, and/or in every and any other way known now or in the future to those of ordinary skill in the art of computer programming. Additionally, the present technology is in no way limited to implementation in any specific programming language, or for any specific operating system or environment. Accordingly, the disclosure of the present technology is intended to be illustrative, but not limiting, of the scope of the present disclosure, which is set forth in the following claims.

What is claimed is:

1. A computer-implemented method using one or more computing devices for implementing a video gaming application, comprising:
 - providing access by one or more user devices of one or more players to the video gaming application operated on at least one of a social network server, a third party server, and an application provided on electronic devices used by the one or more players;
 - providing an interface to the video gaming application via at least one of a social network interface, a mobile device interface, a gaming console interface, and a browser interface;
 - facilitating variable and distinct user experiences based on the one or more user devices that the one or more players use to access the video gaming application, the

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variable and distinct user experiences including at least one of a three-dimensional user interface and a two-dimensional user interface;

receiving, via the social network server, one or more social network interactions from one or more non-players, the one or more non-players being users with whom the one or more players share an affinity in a social network, the one or more social network interactions including a comment posted to the social network server by the one or more non-players, the comment being a comment on one or more events posted to the social network server; and

modifying play of the video gaming application based on the one or more social network interactions from the one or more non-players.

2. The computer-implemented method of claim 1, further comprising:

posting the one or more events from the video gaming application to the social network server.

3. The method of claim 2, wherein the one or more social network interactions include an indication of approval by the one or more non-players of the one or more events posted to the social network server.

4. The method of claim 2, wherein posting one or more events to the social network server includes posting an indication of effects certain comments have on the play of the video gaming application.

5. The computer-implemented method of claim 1, further comprising:

modifying play of the video gaming application based on social network interactions from the one or more players.

6. The method of claim 1, further comprising receiving a selection from the one or more players indicating a different level of play, and wherein modifying play of the video gaming application includes modifying play of the video gaming application based on the selection.

7. A computer program product comprising a computer useable medium including a computer readable program, wherein the computer readable program when executed on a computer causes the computer to:

provide access by one or more user devices of one or more players to the video gaming application operated on at least one of a social network server, a third party server, and an application provided on electronic devices used by the one or more players;

provide an interface to the video gaming application via at least one of a social network interface, a mobile device interface, a gaming console interface, and a browser interface;

facilitate variable and distinct user experiences based on the one or more user devices that the one or more players use to access the video gaming application, the variable and distinct user experiences including at least one of a three-dimensional user interface and a two-dimensional user interface;

receive, via the social network server, one or more social network interactions from one or more non-players, the one or more non-players being users with whom the one or more players share an affinity in a social network, the one or more social network interactions including a comment posted to the social network server by the one or more non-players, the comment being a comment on one or more events posted to the social network server; and

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modify play of the video gaming application based on social network interactions from the one or more non-players.

8. The computer program product of claim 7, wherein the computer readable program when executed on a computer further causes the computer to:

post the one or more events from the video gaming application to the social network server.

9. The computer program product of claim 8, wherein posting one or more events to the social network server includes posting an indication of effects certain comments have on the play of the video gaming application.

10. The computer program product of claim 7, wherein the computer readable program when executed on a computer further causes the computer to:

modify play of the video gaming application based on social network interactions from the one or more players.

11. The computer program product of claim 7, further comprising receiving a selection from the one or more players indicating a different level of play, and wherein modifying play of the video gaming application includes modifying play of the video gaming application based on the selection.

12. A system comprising:

a processor; and

a memory storing instructions that, when executed, cause the system to:

provide access by one or more user devices of one or more players to a video gaming application operated on at least one of a social network server, a third party server, and an application provided on electronic devices used by the one or more players;

provide an interface to the video gaming application via at least one of a social network interface, a mobile device interface, a gaming console interface, and a browser interface;

facilitate variable and distinct user experiences based on the one or more user devices that the one or more players use to access the video gaming application, the variable and distinct user experiences including at least one of a three-dimensional user interface and a two-dimensional user interface, wherein both the three-dimensional and two-dimensional user interface are configured to operate concurrently;

receive, via the social network server, one or more social network interactions from one or more non-players, the one or more non-players being users with whom the one or more players share an affinity in a social network, the one or more social network interactions including a comment posted to the social network server by the one or more non-players, the comment being a comment on one or more events posted to the social network server; and

modify play of the video gaming application based on social network interactions from the one or more non-players.

13. A system as claimed in claim 12, wherein the video gaming application posts the one or more events to the social network server.

14. The system of claim 13, wherein the one or more social network interactions include a comment on the one or more events posted to the social network server.

15. The system of claim 13, wherein the one or more social network interactions include an indication of approval by the one or more non-players of the one or more events posted to the social network server.

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16. The system of claim 13, wherein posting one or more events to the social network server includes posting an indication of effects certain comments have on the play of the video gaming application.

17. A system as claimed in claim 12, wherein the video gaming application modifies play based on social network interactions from the one or more players.

18. The system of claim 12, further comprising receiving a selection from the one or more players indicating a different level of play, and wherein modifying play of the video gaming application includes modifying play of the video gaming application based on the selection.

* * * * *

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US009597586B1

(12) **United States Patent**
Wiklem et al.

(10) **Patent No.:** **US 9,597,586 B1**
(45) **Date of Patent:** **Mar. 21, 2017**

(54) **PROVIDING VIDEO GAMING ACTION VIA COMMUNICATIONS IN A SOCIAL NETWORK**

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(72) Inventors: **Brian Joseph Wiklem**, Salt Lake City, UT (US); **Carrie Ann Cowan**, Salt Lake City, UT (US)

(73) Assignee: **CP Studios Inc.**, Salt Lake City

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 385 days.

(21) Appl. No.: **13/889,284**

(22) Filed: **May 7, 2013**

Related U.S. Application Data

(60) Provisional application No. 61/643,352, filed on May 7, 2012.

(51) **Int. Cl.**
A63F 13/00 (2014.01)
A63F 13/30 (2014.01)

(52) **U.S. Cl.**
CPC **A63F 13/12** (2013.01)

(58) **Field of Classification Search**
CPC **A63F 13/12; G07F 17/3225**
USPC **705/7, 14; 463/42**
See application file for complete search history.

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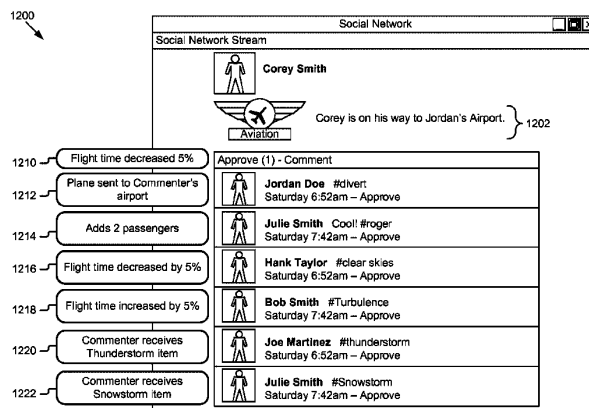
Assistant Examiner — Eric M Thomas

(74) *Attorney, Agent, or Firm* — Patent Law Works LLP

(57) **ABSTRACT**

The present technology is directed to a flexible gaming architecture associated or linked with social networks. In some implementations, the flexible architecture facilitates play in a virtual gaming environment associated or linked with a social network, based on actions by users within the social network. The architecture facilitates access to video gaming applications either associated with or linked with social networks in various ways, including 1) directly via social networks or sites, for example, accessed via personal computers; 2) via wall posts or via an online social networking service that enables its users to send and read text-based posts; 3) via mobile devices used to access gaming sites associated with or linked to social networks; and 4) via game consoles configured to access gaming sites either associates with or linked to social networks.

18 Claims, 30 Drawing Sheets



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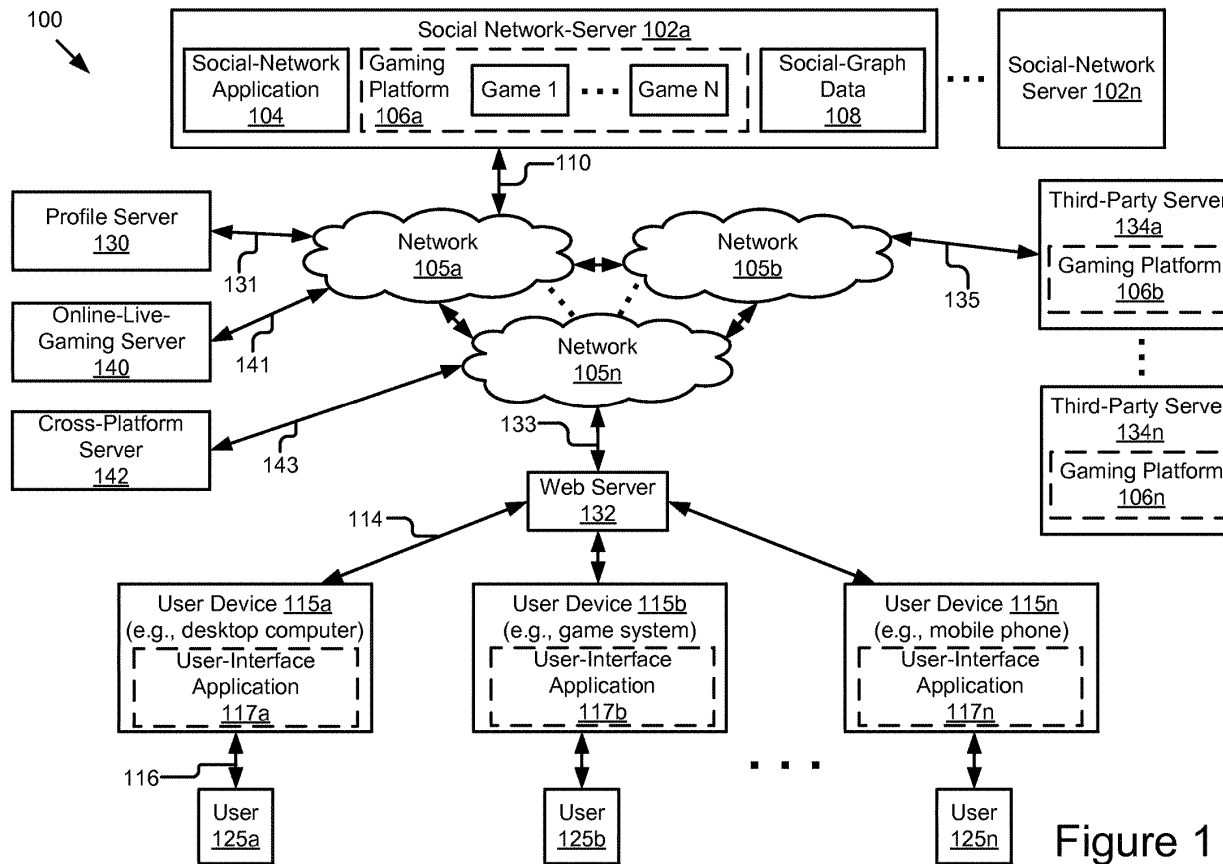


Figure 1

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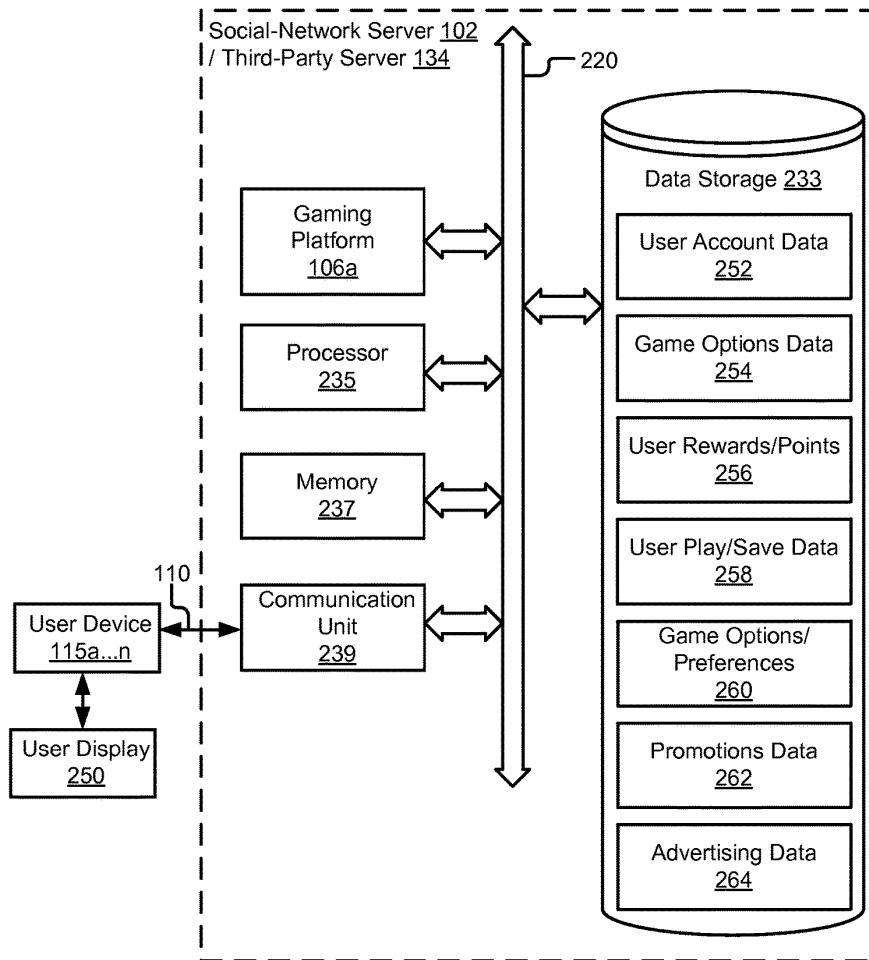


Figure 2

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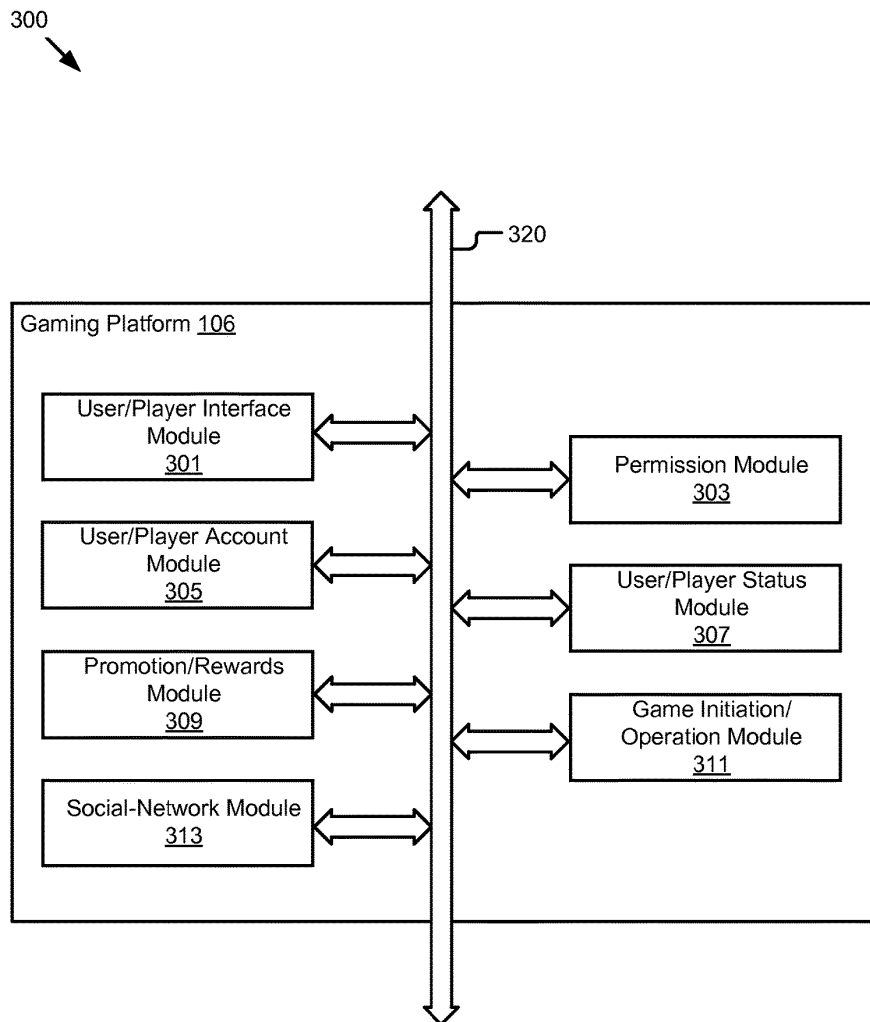


Figure 3

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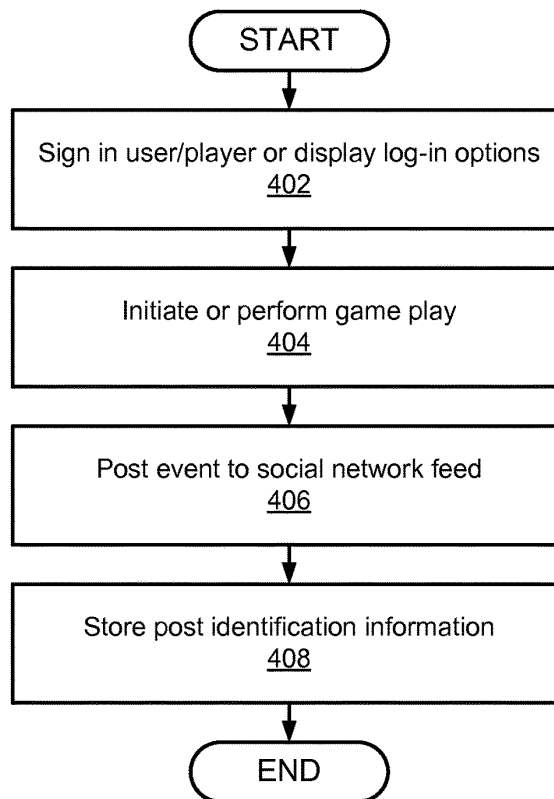


Figure 4

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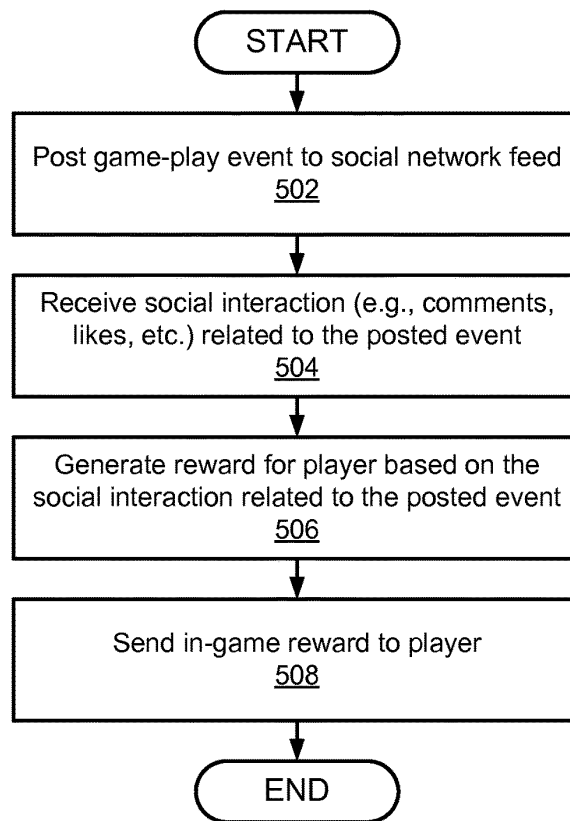


Figure 5

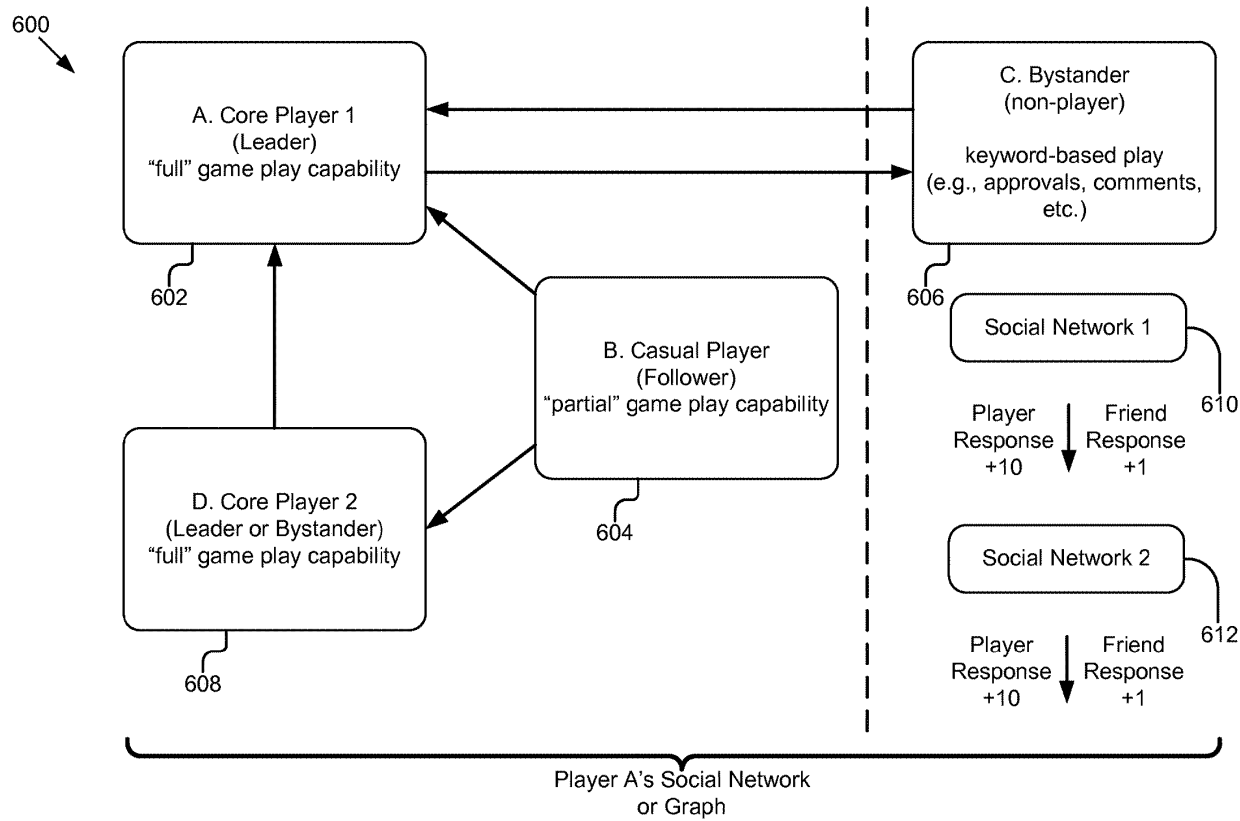


Figure 6

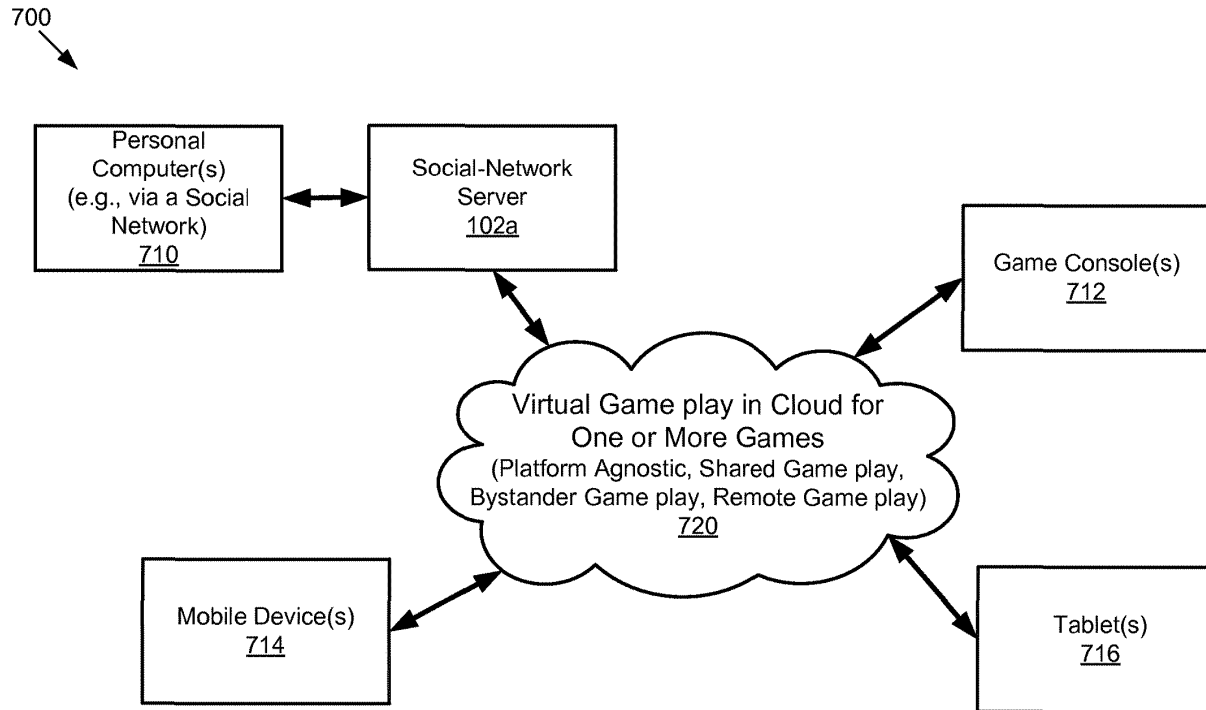


Figure 7

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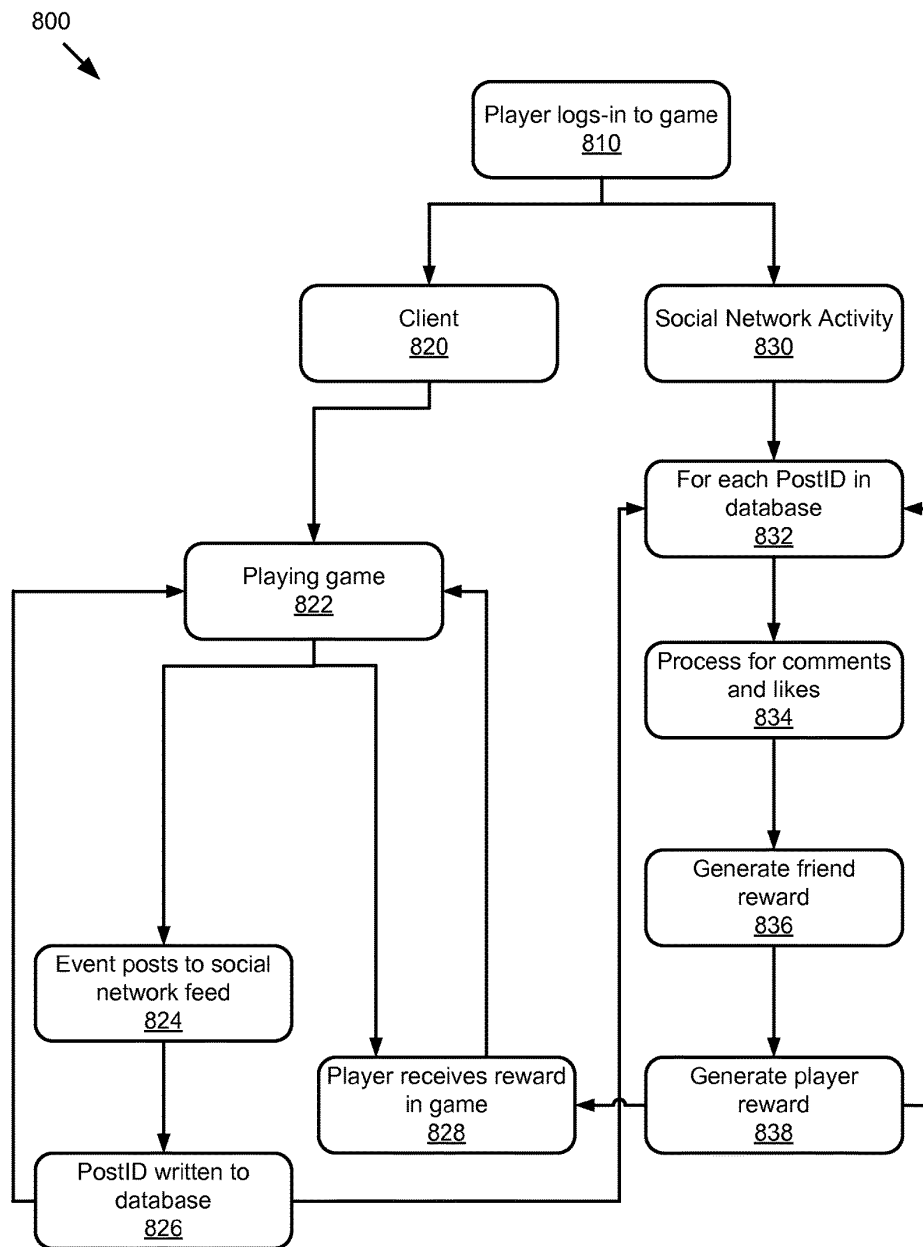


Figure 8

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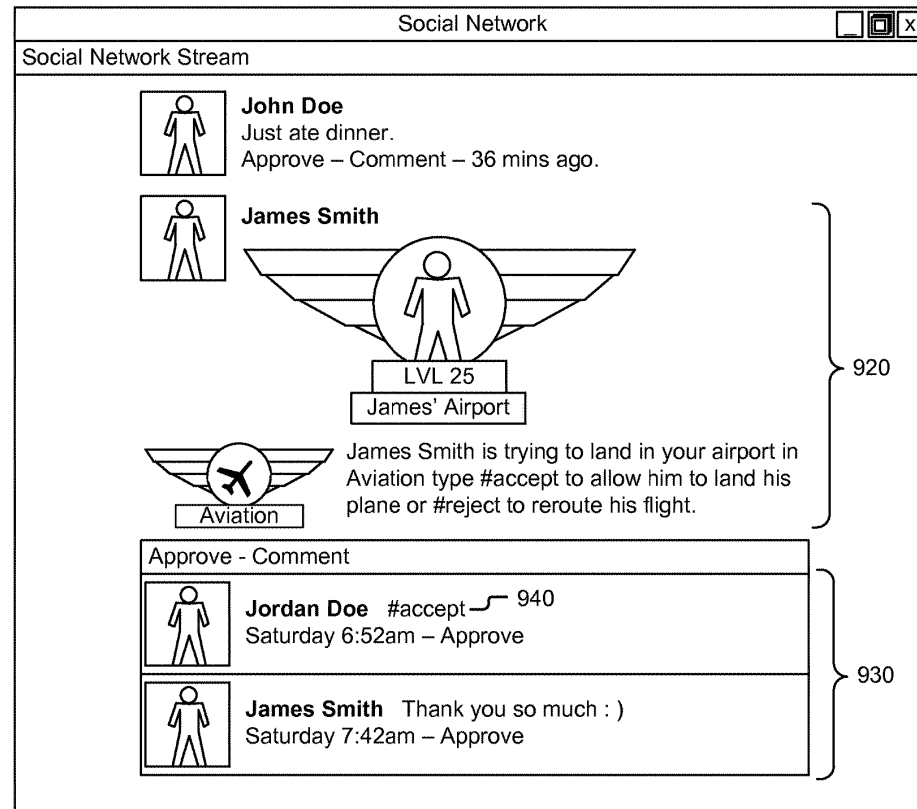


Figure 9

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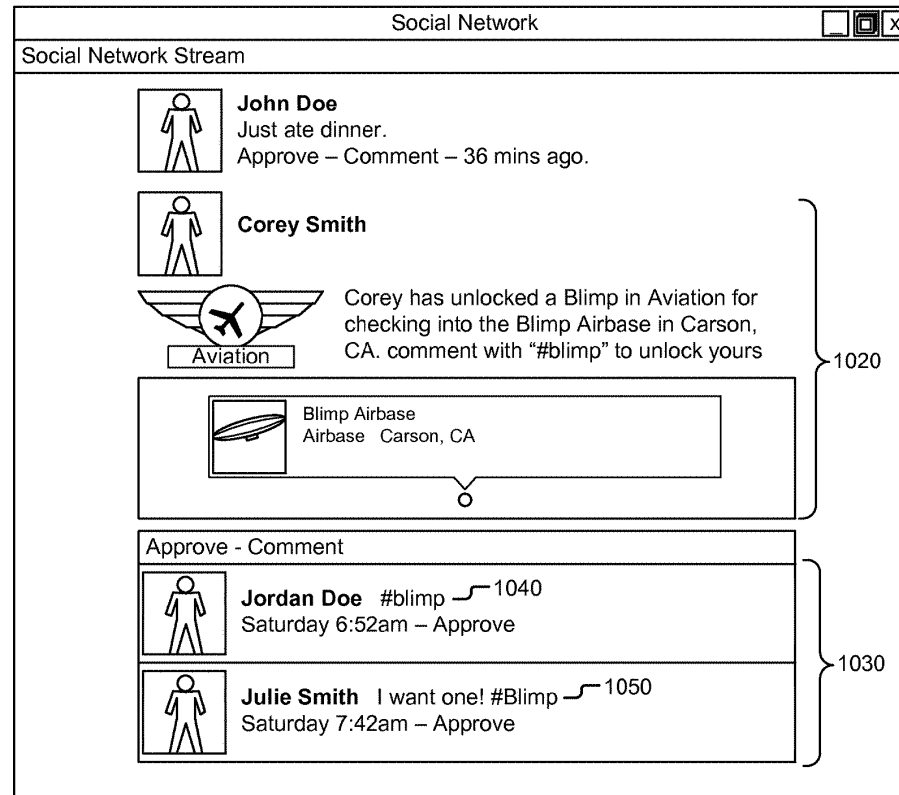


Figure 10

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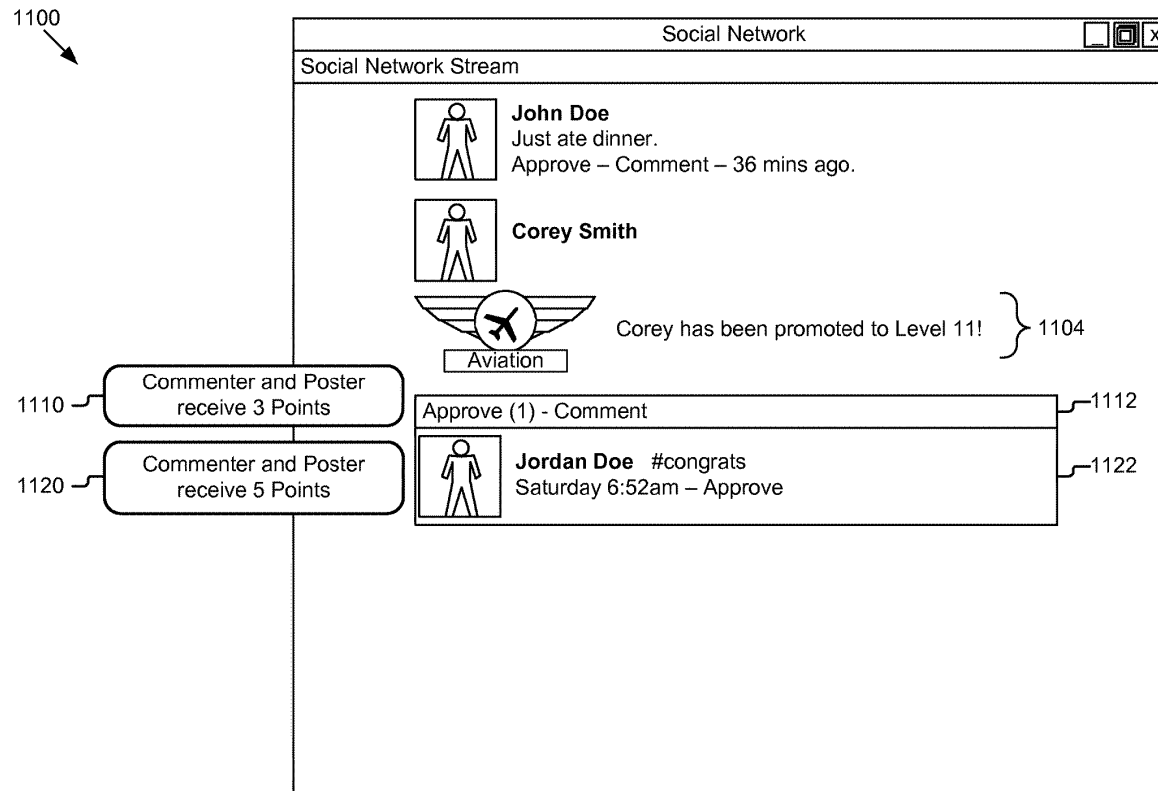


Figure 11A

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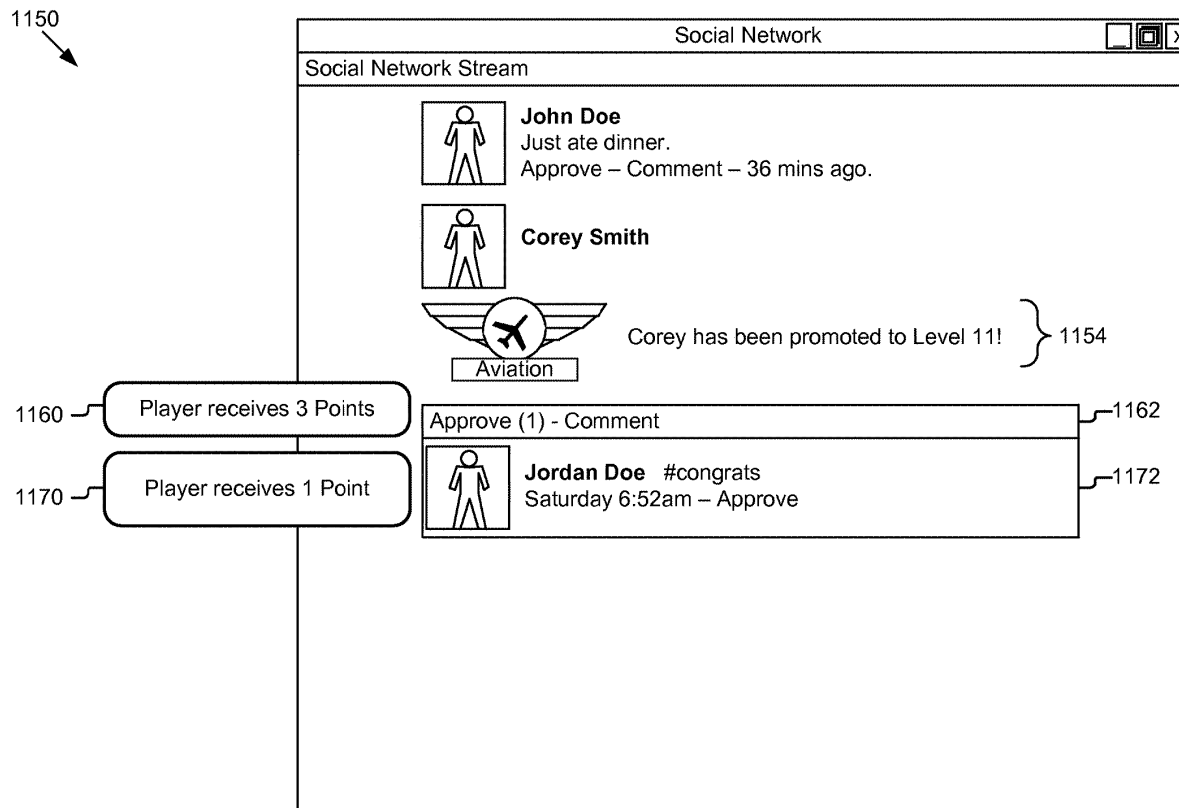


Figure 11B

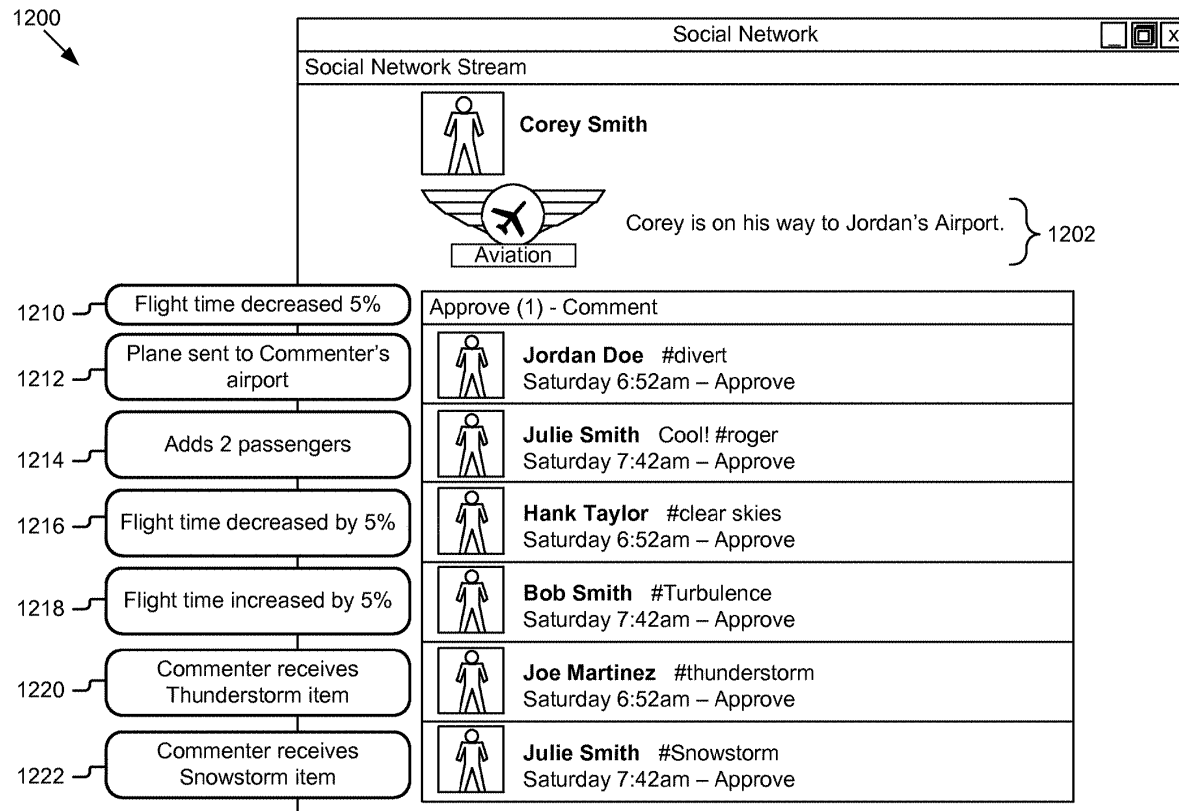


Figure 12A

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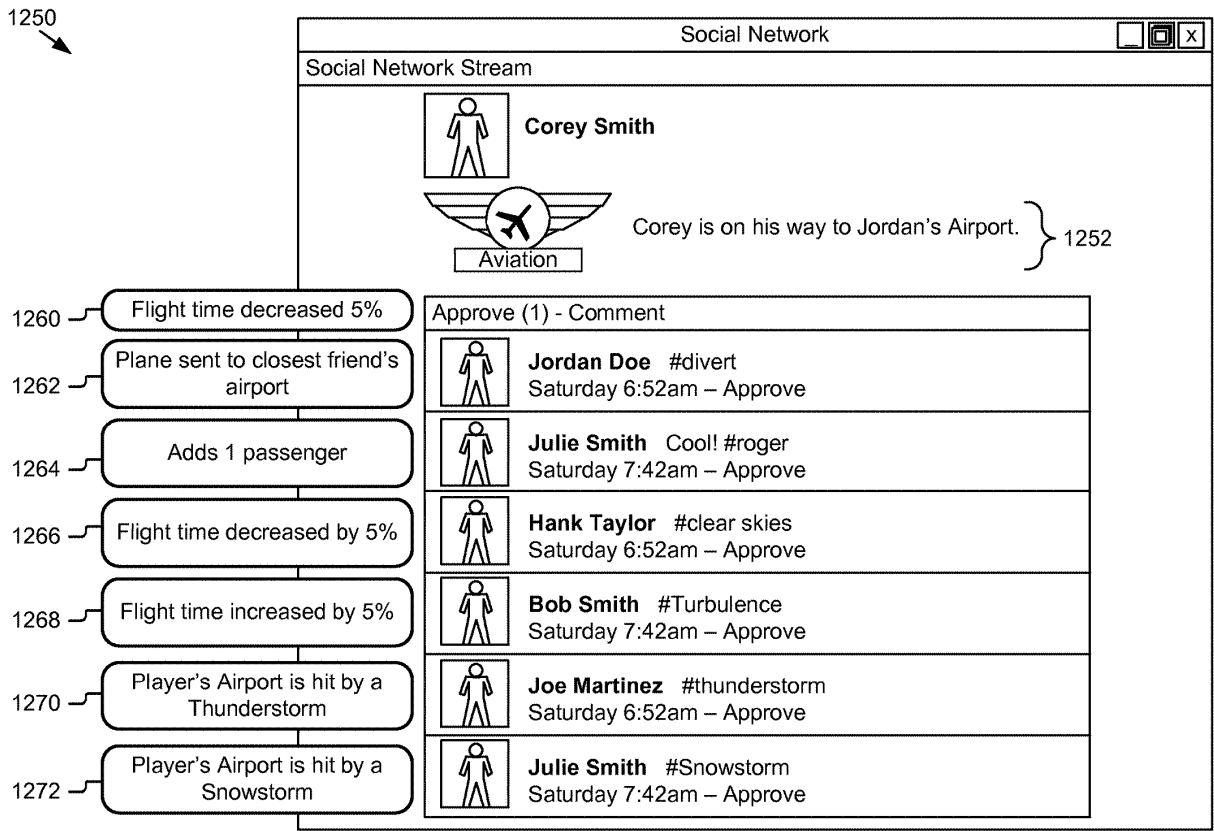


Figure 12B

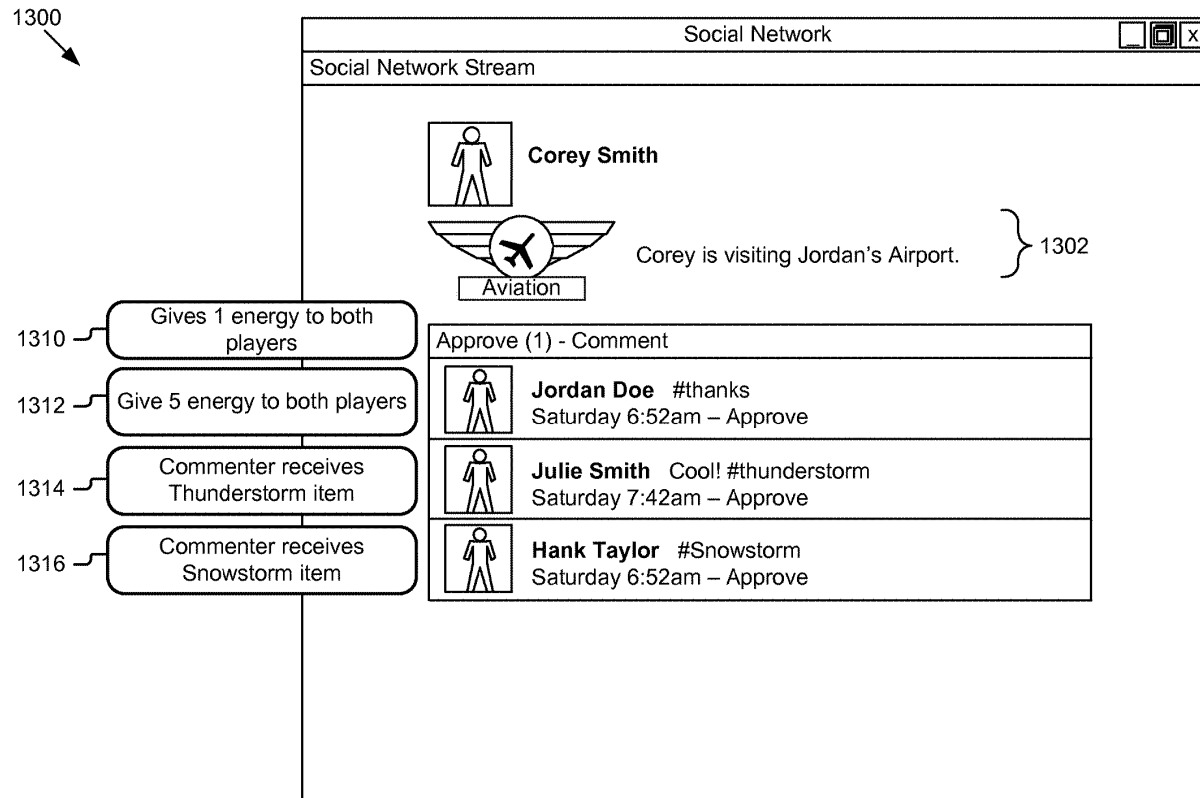


Figure 13A

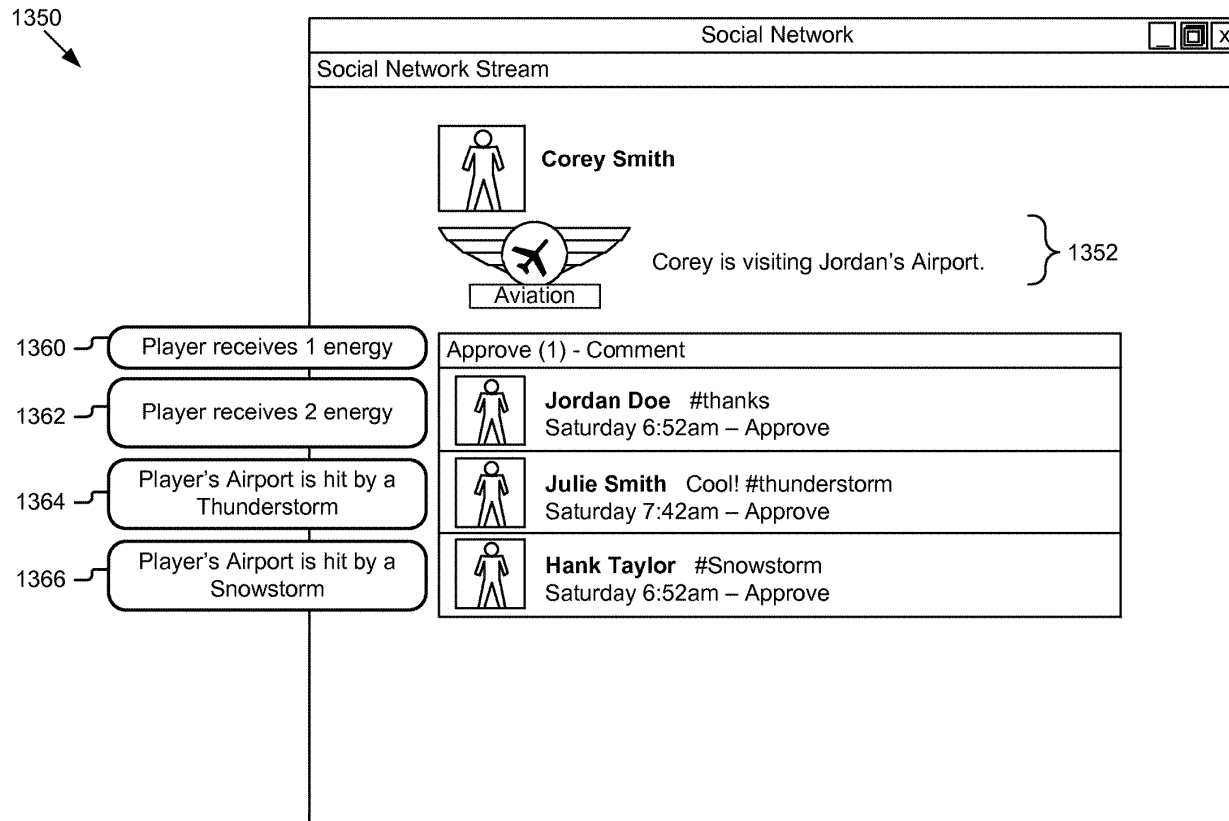


Figure 13B

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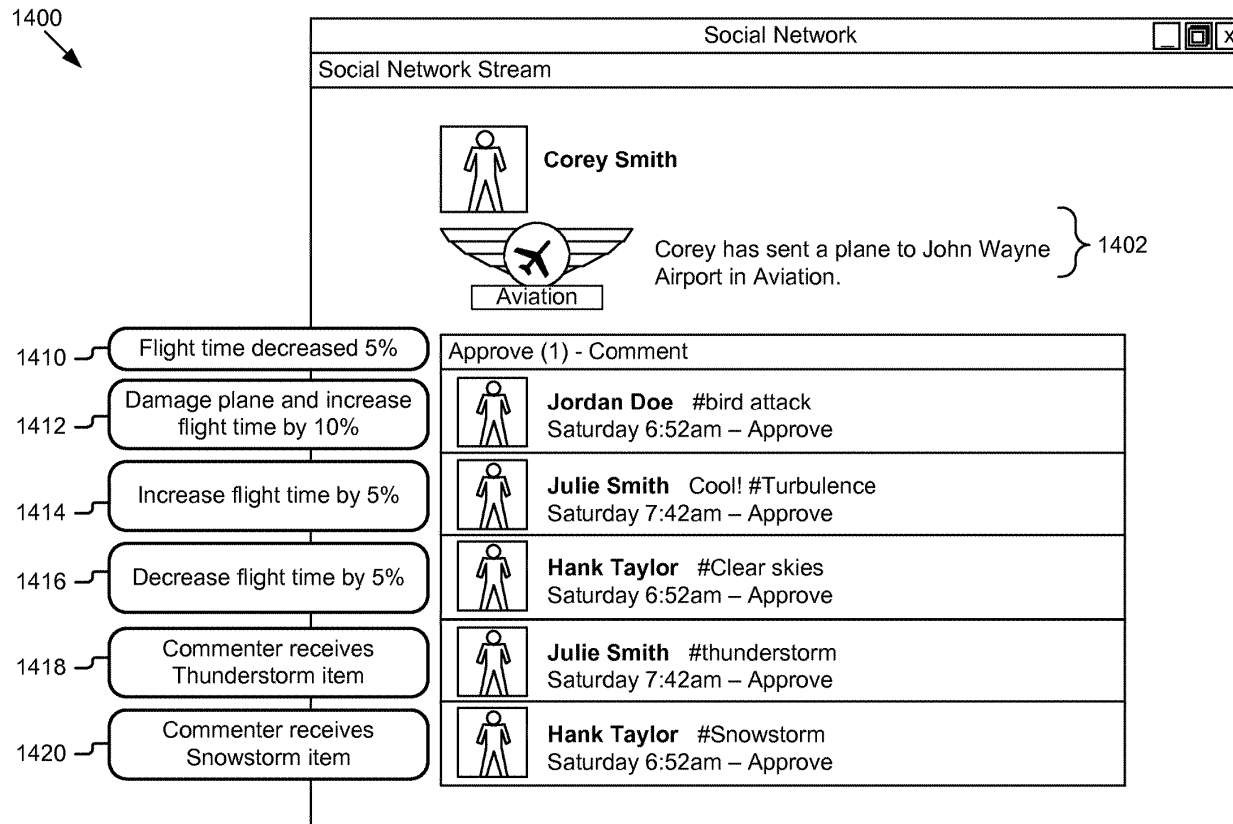


Figure 14A

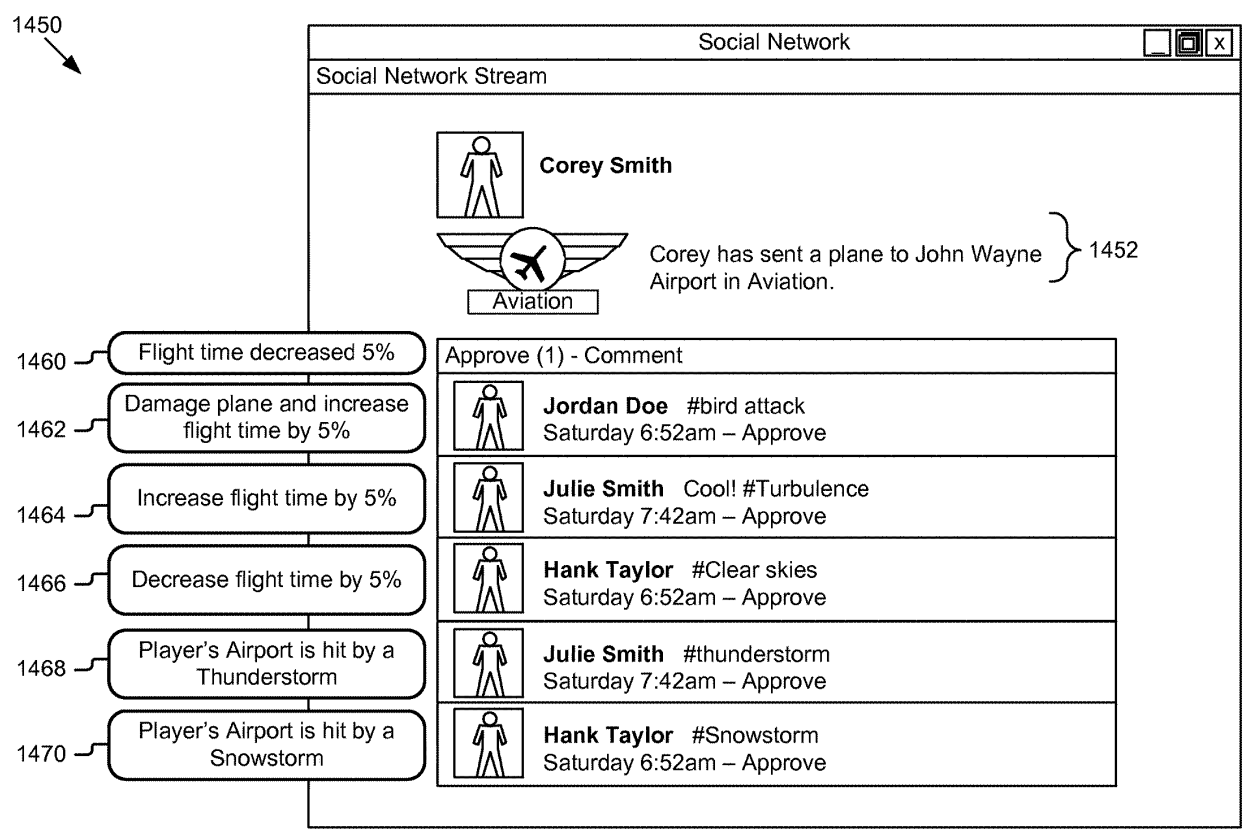


Figure 14B

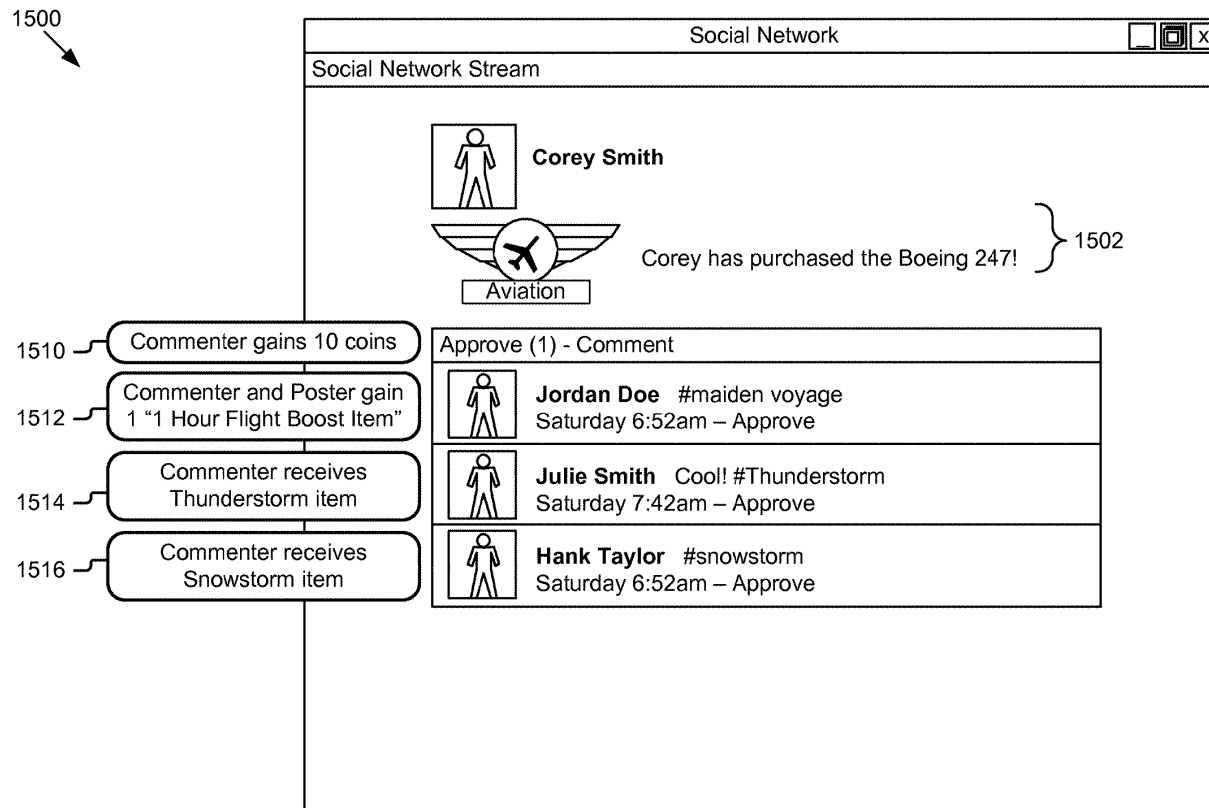


Figure 15A

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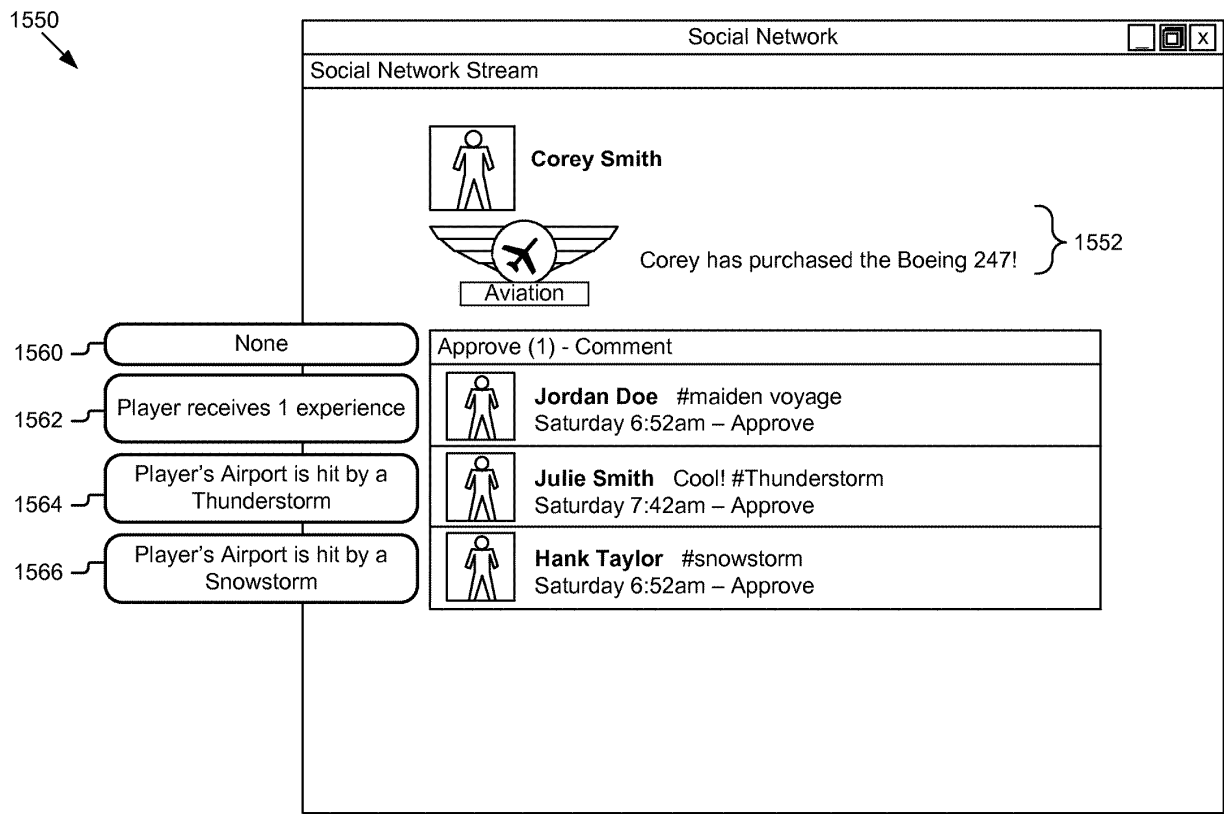


Figure 15B

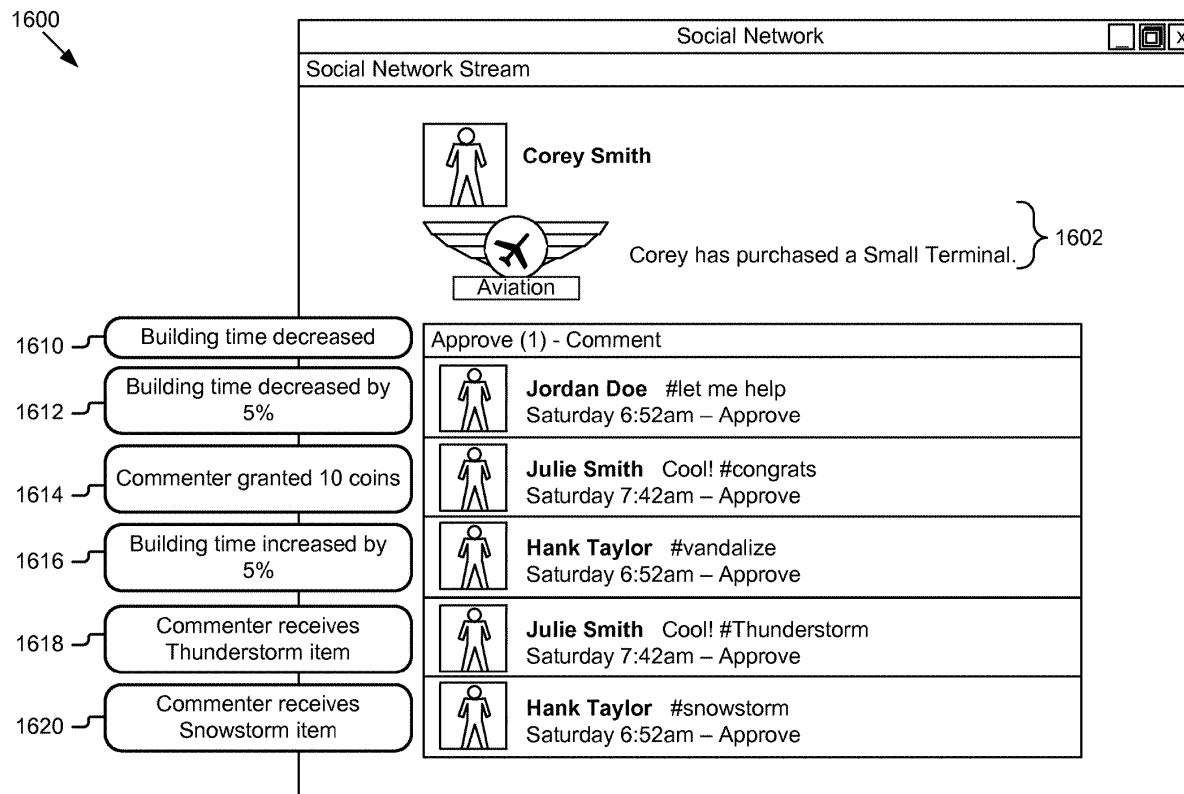


Figure 16A

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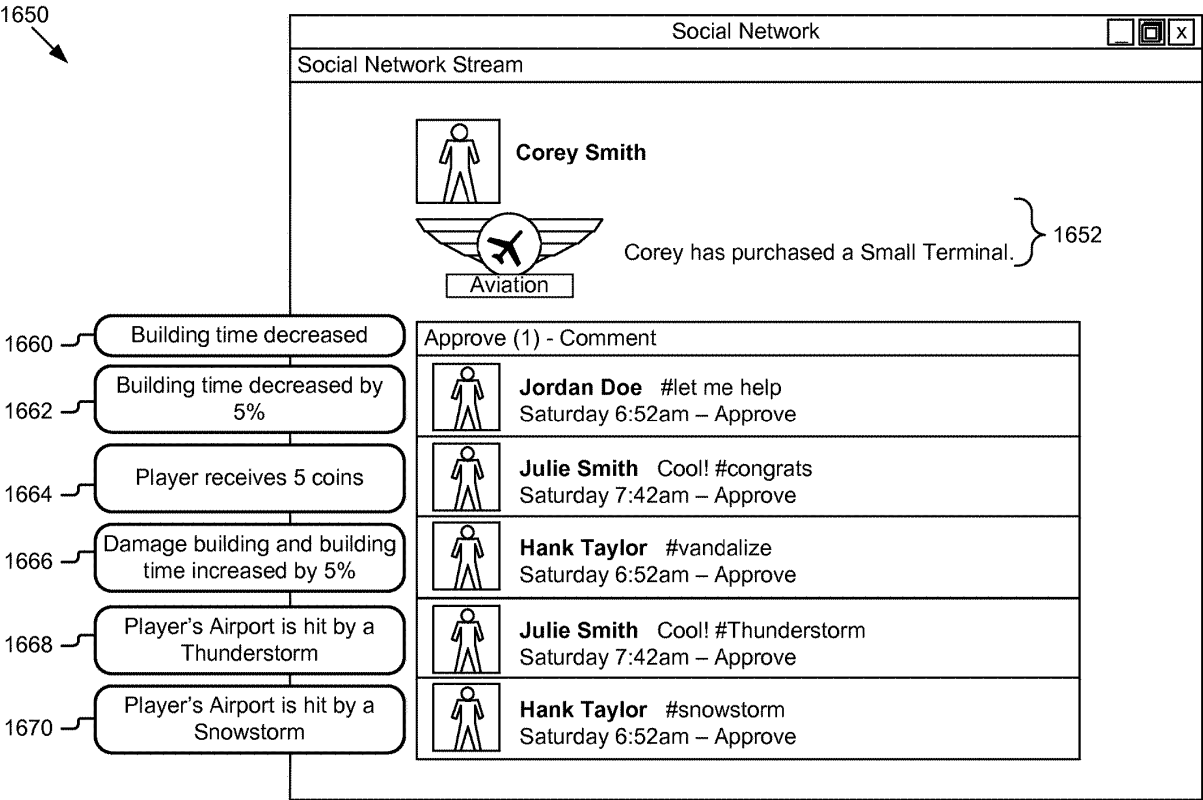


Figure 16B

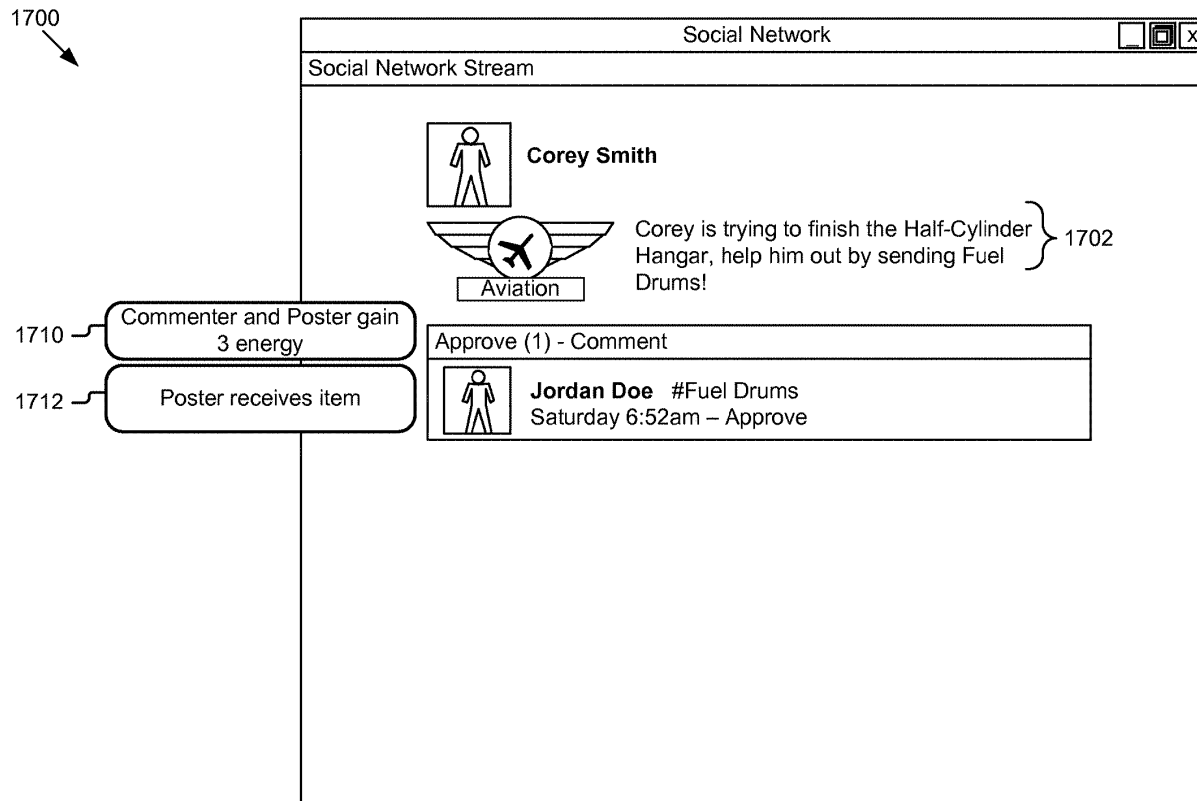


Figure 17A

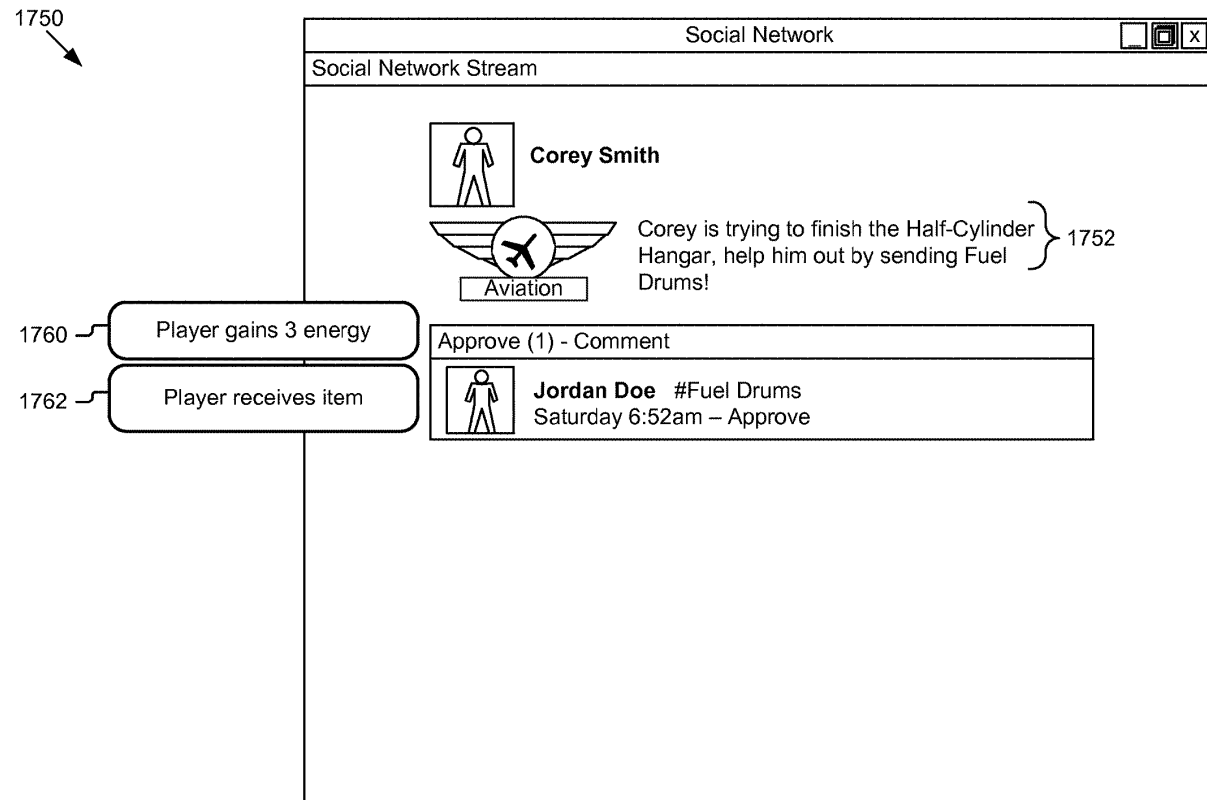


Figure 17B

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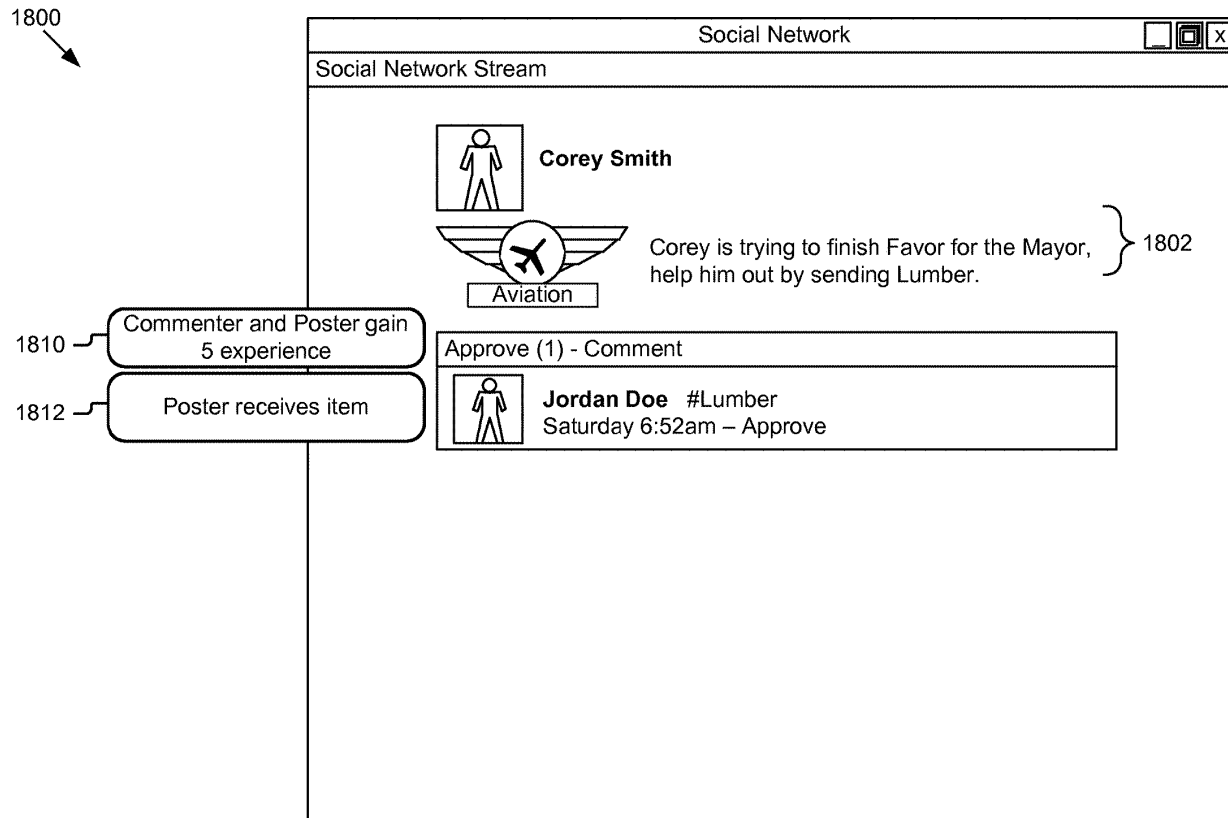


Figure 18A

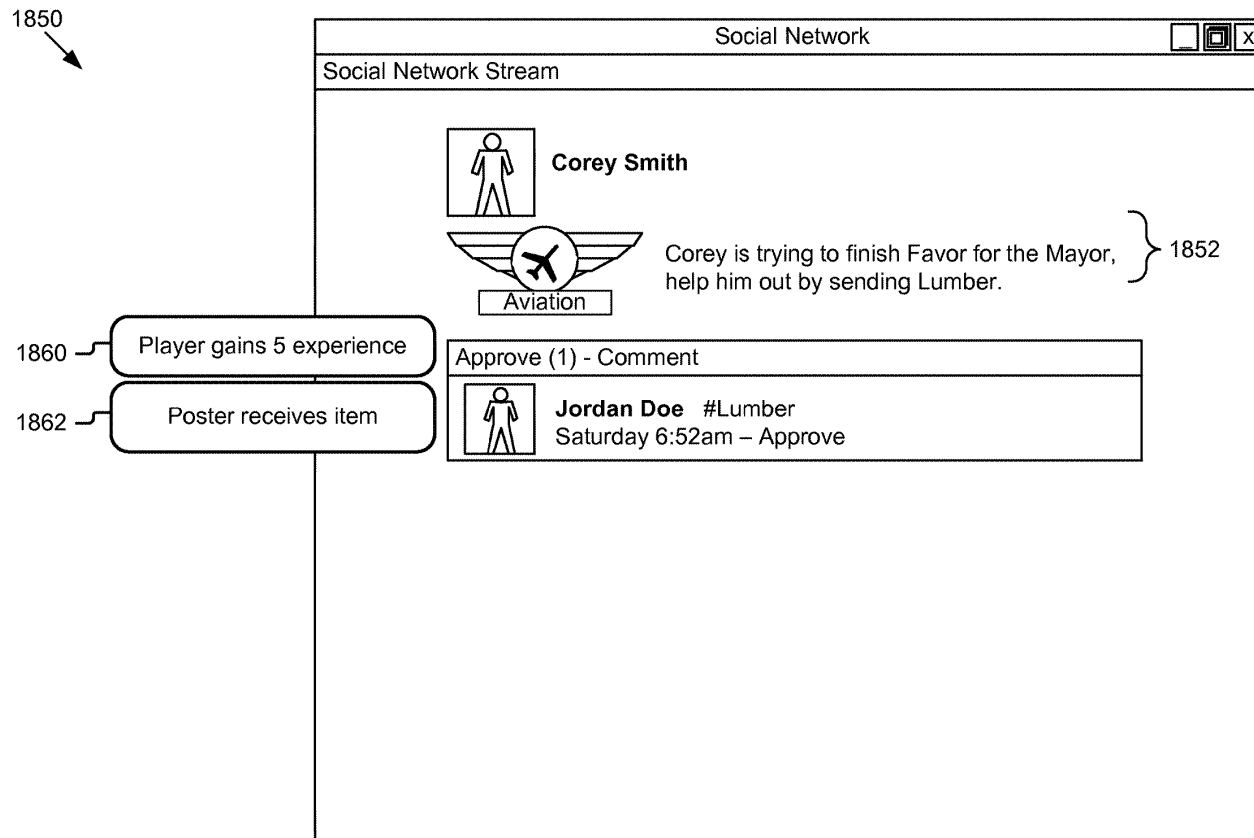


Figure 18B

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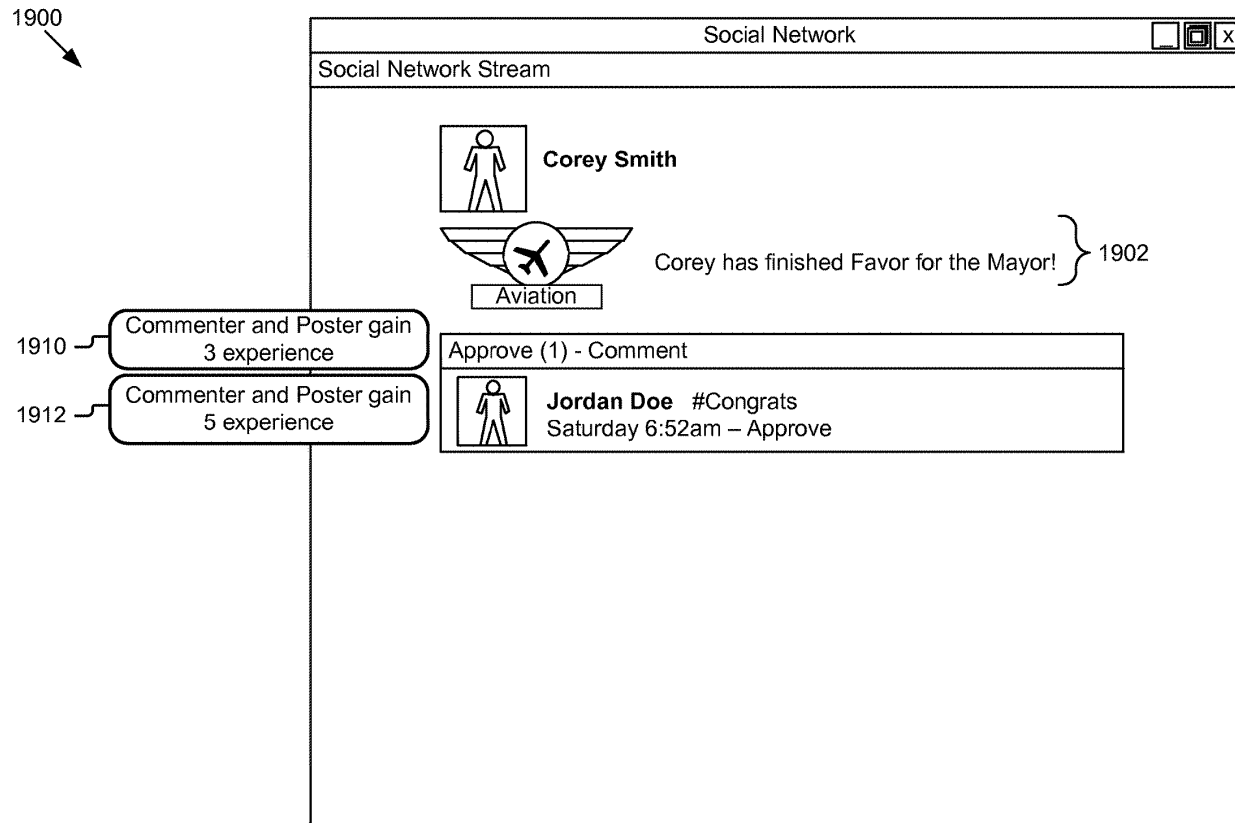


Figure 19A

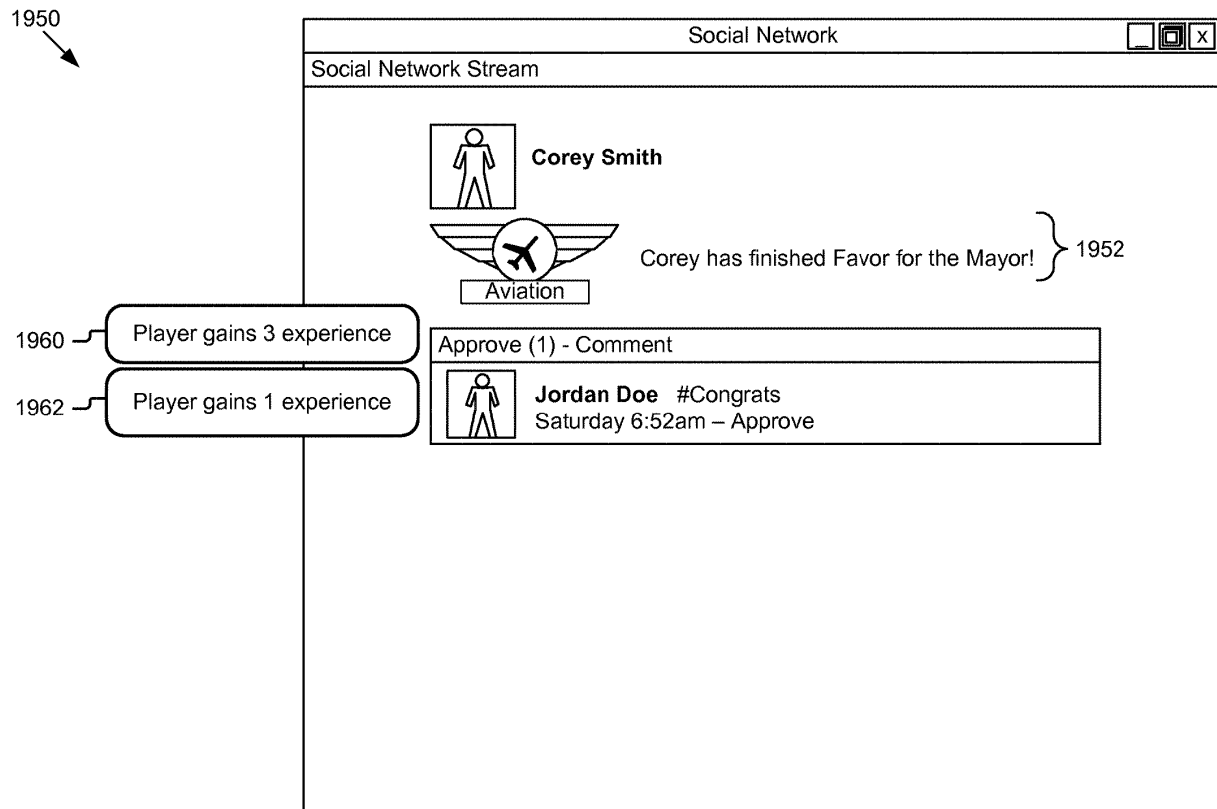


Figure 19B

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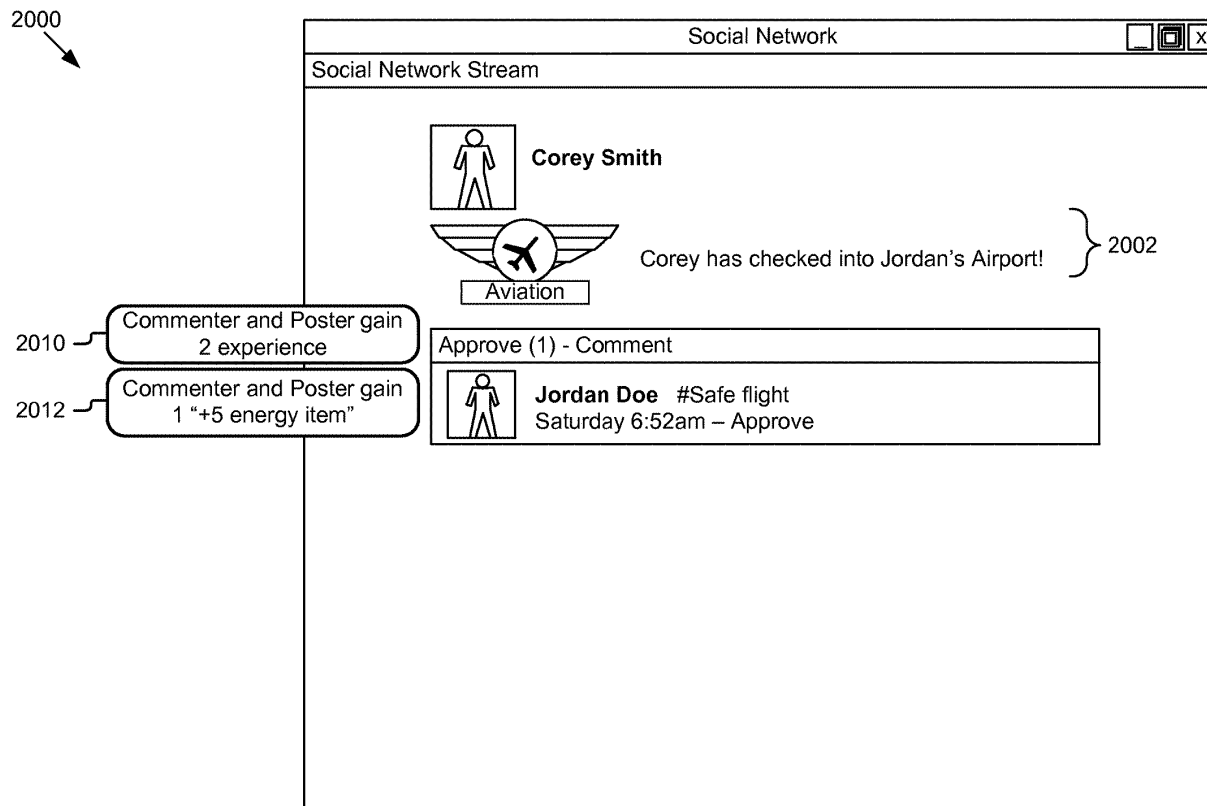


Figure 20A

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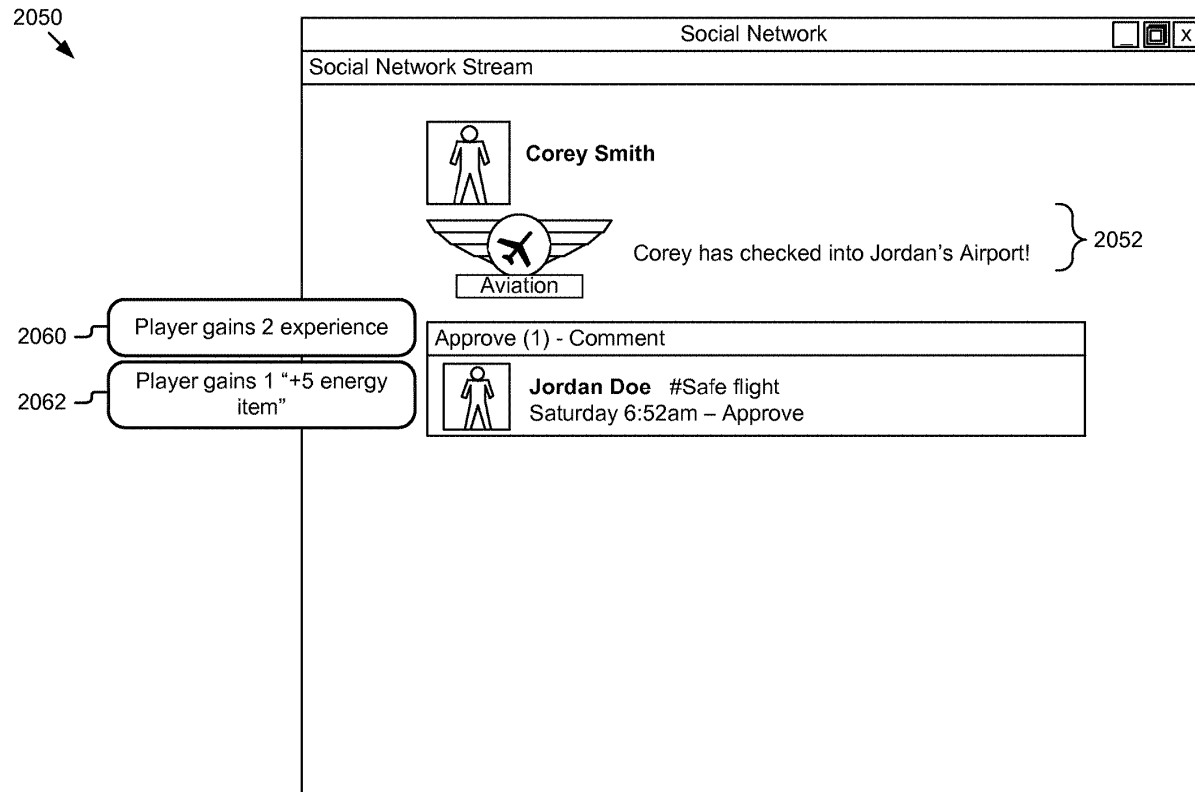


Figure 20B

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**PROVIDING VIDEO GAMING ACTION VIA
COMMUNICATIONS IN A SOCIAL
NETWORK**

**CROSS REFERENCE TO RELATED
APPLICATIONS**

The present application claims the benefit of priority under 35 U.S.C. §119(e) from U.S. Provisional Application No. 61/643,352 entitled “MULTILAYER FRAMEWORK ARCHITECTURE AND USER INTERFACES FOR VIDEO GAMING APPLICATIONS,” filed on May 7, 2012, by Brian Joseph Wiklem, Christopher Robert Masterton, and Carrie Ann Cowan. The entire contents of the provisional application are incorporated by reference herein. The present application also incorporates by reference the contents of utility applications entitled “MULTILAYER SYSTEM FRAMEWORK AND ARCHITECTURE WITH VARIABLE GAMING CAPABILITIES,” “PROVIDING SYNCHRONIZED AND INTEGRATED VIDEO GAMING,” AND “VIDEO GAMING PLATFORM AND USER INTERFACE,” all of which are concurrently submitted and also claim priority under 35 U.S.C. §119(e) from U.S. Provisional Application No. 61/643,352.

BACKGROUND

The present disclosure relates to video gaming applications and platforms, including those accessed via online services or communities, for example, social networks, or directly via hosted websites, dedicated either wholly or partially to them. In particular, the present disclosure relates to providing video gaming action or play via communications in a social network.

In recent years, video games have become extremely popular. Video games are used not only for entertainment, but also for instructional purposes. Players typically interact with a gaming application through computer or console peripherals such as keyboard, mouse, joysticks, a wide variety of game pads, and funny controllers such as the NES Zapper®. More recently, nontraditional controller technologies such as dance pads, the Wii-mote® or the Kinect®, offering new types of gaming experiences are beginning to emerge. These technologies are capable of enhancing games to incorporate movement, creating a new experience and attracting new audiences.

With the popularity of social networks reaching epic proportions, social games have also become very popular. Yet, these social games have a rigid and restricted architecture.

With the ongoing trends and exponential growth in video gaming, it would certainly be beneficial to find better architectures for gaming applications associated with social networks that continue to enhance the user experience.

SUMMARY

The present disclosure overcomes the deficiencies and limitations of the prior art by providing a technology with a flexible architecture for video gaming applications in social networks. In some embodiments, the flexible architecture provides a continuous visual experience for players across different platforms (platform agnostic) and engages them at different levels in social games. Each of the players may have a unique and different visual experience, depending upon the gaming platform a player uses. The architecture facilitates access to video gaming applications in various

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ways, including 1) via social networks or sites, for example, accessed directly via personal computers; 2) via wall posts or via an online social networking service that enables its users to send and read text-based posts; 3) via mobile devices (iOS, Android, or Windows-based smart phones) that may be used to access digital games in association with social networks; and 4) via game consoles (for example, PS3, Xbox 360, or Wii) configured to access games in association with social networks.

Video gaming applications offered or operated in association with social networks may be purchased via platform application stores. These applications are supported by Android (Android is a Linux-based operating system for mobile devices such as smartphones and tablet computers—it is developed by the Open Handset Alliance), iOS (a mobile operating system developed by Apple Inc.) platforms, and phones operating windows. The user interface of an iOS platform is based on the concept of direct manipulation, using multi-touch gestures. Interface control elements consist of sliders, switches, and buttons. The response to user input is immediate and provides a fluid interface.

Video gaming applications in association with social networks may be hosted or accessed via social networks, other third party services or on third party servers, stand-alone platforms, tablets, smartphones or the like. Multiple players (hundreds, thousands, if not millions) may access gaming applications (in association with social networks) via any or all of these ways. In addition, the flexible architecture provides a scalable infrastructure with cross-platform pollination technology (achievements and rewards are transferred between platforms used by particular players) and secure collection of data. Video gaming applications may be based on universal themes that appeal to a broad range of demographics and provides a continuous flow of data analytics. They offer opportunities for configuring advertisements and promotions to accomplish strategic goals.

In some embodiments, the flexible architecture provides multiple levels of play, permitting players to engage in different ways. The different levels of play options include 1) a peer-to-peer competitive challenge level for core players, 2) a casual play option for play with friends with whom a player shares an affinity, for example, in a social network; and a 3) spectator mode that permits non-players in a network to assist friends. Feed-based triggers allow for greater rewards to players and ease of discovering games.

In yet other embodiments, which may include any or all of the aspects described above, the flexible architecture permits mobile play, extending the gaming arena or world to different platforms, so achievements in a particular game (in association with social networks) may be earned and shared more easily across platforms. In addition, a player may earn location-based rewards.

Moreover, the flexible architecture provides a system of rewards at check-in, to coax players by providing greater incentives. The flexible architecture permits concurrent “solo” play by a player or gamer, collaborative and competitive play by multiple players. The flexible architecture has user interfaces that are configured to provide different experiences for different players, including for example, a three-dimensional user experience. In some embodiments, the video gaming applications include story-driven quests and game play, giving players more than just tasks and chores. As one example, an aviation gaming application (operated in association with a social network) may utilize a collection of 250 or more aircrafts and include transactions relating to the aircrafts and their environment, creation of the

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environment in which the aircrafts operate, etc. In this particular application, players may create and manage their experience (for example, build and manage an aviation empire), enjoy the thrill of history (aviation's past), and travel the globe and fly through an open network of friendly and rival airports.

In yet other embodiments, the system provides a plurality of features for player control of the virtual arena relating to the social network including control of "play" times, "gifts" and "rewards," "collect" and "decorate" features, monitor types of "play" (for example, acceleration progress), generate user content, etc.

In some embodiments, the video gaming applications in association with the social networks may be free, when typically accessed via social-network platforms, in which instances revenue is generated via market place for products used during the game, direct advertising, etc. The flexible architecture permits for easy access through a particular player's social network, allowing other players to discover a particular game and permit conversion as necessary.

In yet other embodiments, linking or connecting gaming platforms creates a more interesting gaming world.

BRIEF DESCRIPTION OF THE DRAWINGS

The present disclosure is illustrated by way of example, and not by way of limitation, in the figures of the accompanying drawings, in which like reference numerals are used to refer to similar elements.

FIG. 1 is a high-level block diagram illustrating some embodiments of a system for providing a video gaming platform, accessed either directly via a social network (hosted on a social network server or a server associated with it), an online live gaming server, or a third party video gaming website (hosted by a third party on its server), which may be associated with social networks.

FIG. 2 is a block diagram illustrating some embodiments of a social network server or a third party server (associated with a social network) shown in FIG. 1, including its hardware components.

FIG. 3 is a block diagram illustrating some embodiments of a gaming platform shown in FIGS. 1 and 2, and its software components.

FIG. 4 is a flow chart illustrating an example general method for posting game-play activity on a social network.

FIG. 5 is a flow chart illustrating an example general method for interacting with a game based on social network activity.

FIG. 6 is a graphical representation of a particular user's (Player A) social network or social graph.

FIG. 7 is a graphical representation illustrating some embodiments of multiple devices connected for centralized game play.

FIG. 8 is a graphical representation illustrating some embodiments of receiving an in-game reward based on social network activity.

FIG. 9 is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including accepting a virtual request.

FIG. 10 is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including unlocking new content.

FIG. 11A is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including players commenting on a player promotion within the game.

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FIG. 11B is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including non-players commenting on a player promotion within the game.

FIG. 12A is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including players commenting on a player's activity within the game.

FIG. 12B is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including non-players commenting on a player's activity within the game.

FIG. 13A is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including players commenting on a player visiting another player's virtual area within the game.

FIG. 13B is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including non-players commenting on a player visiting another player's virtual area within the game.

FIG. 14A is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including players commenting on a player sending items within the game.

FIG. 14B is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including non-players commenting on a player sending items within the game.

FIG. 15A is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including players commenting on an item purchase within the game.

FIG. 15B is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including non-players commenting on an item purchase within the game.

FIG. 16A is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including players commenting on an area purchase within the game.

FIG. 16B is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including non-players commenting on an area purchase within the game.

FIG. 17A is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including players commenting on building an item within the game.

FIG. 17B is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including non-players commenting on building an item within the game.

FIG. 18A is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including players commenting on a task within the game.

FIG. 18B is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including non-players commenting on a task within the game.

FIG. 19A is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including players commenting on completing a task within the game.

FIG. 19B is a graphical representation illustrating some embodiments of a user interface for interacting with a game

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via a social network including non-players commenting on completing a task within the game.

FIG. 20A is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including players commenting on arriving at another player's virtual area within the game.

FIG. 20B is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including non-players commenting on arriving at another player's virtual area within the game.

DETAILED DESCRIPTION

The present technology is directed to a multilayer or multi-tier, flexible architecture for video gaming applications with variable video gaming capabilities, for play by users (players or gamers), either via social networks, or on third party servers associated with social networks. The specification describes examples of systems and methods for providing this multilayer architecture, video gaming platforms, and user interfaces to facilitate a unique user experience. These video gaming applications may either be hosted by an online community, for example, one or more social networks, or alternatively, by third party servers that are wholly or partially dedicated to gaming applications and associated or linked to social networks.

In some embodiments, the flexible architecture provides a continuous visual experience for players across different platforms (platform agnostic) and engages them at different levels of play. Each of the players may have a unique and different visual experience, depending upon the gaming platform a player uses. This flexible architecture facilitates access to video gaming applications either implemented in social networks or linked to social networks, in various ways, including 1) directly via accessing social networks or sites, for example, accessed via personal computers (desktops or laptops); 2) via wall posts or via an online social networking service that enables its users to send and read text-based posts; 3) via mobile devices (iOS, Android, or Windows-based smart phones) that may be used to access social networks or sites linked to the social networks; and 4) via game consoles (for example, PS3, Xbox 360, or Wii) configured to access social networks or sites linked to social networks.

Video gaming applications linked with social networks may be purchased via platform application stores. These applications are supported by Android (Android is a Linux-based operating system for mobile devices such as smartphones and tablet computers—it is developed by the Open Handset Alliance), iOS (a mobile operating system developed by Apple Inc.) platforms, and phone operating windows. The user interface of iOS is based on the concept of direct manipulation, using multi-touch gestures. Interface control elements consist of sliders, switches, and buttons. The response to user input is immediate and provides a fluid interface.

Video gaming applications may be hosted or accessed via social networks, other third party services or on third party servers linked with the social networks, stand-alone platforms, tablets, smartphones, or the like, configured to access social networks. Multiple players (hundreds, thousands, if not millions) may access one or more gaming applications via any or all of these ways. In addition, the flexible architecture provides a scalable infrastructure with cross-platform pollination technology (achievements and rewards are transferred between platforms for particular players) and secure data collection. Video gaming applications linked

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with social networks may be based on universal themes that appeal to a broad range of demographics and provides a continuous flow of data analytics. They offer opportunities for configuring advertisements and promotions to accomplish strategic goals.

In yet other embodiments, which may include any or all of the aspects described above, the gaming architecture permits mobile play, extending the gaming arena or world to different platforms and/or networks, so achievements in a particular game may be earned and shared more easily across platforms. In addition, a player may earn location-based rewards.

Moreover, the system architecture provides rewards at check-in, to coax players by providing greater incentives. The architecture permits for concurrent "solo" play by a player or gamer and collaborative and competitive play between multiple players. User interfaces are configured to provide different experiences for different players, including a three-dimensional user experience. In some embodiments, the video gaming applications include story-driven quests and game play, giving players more than just tasks and chores. As one example, an aviation gaming application, may utilize a collection of 250 aircrafts and include transactions relating to the aircrafts and its environment, permitting players to create an environment in which the aircrafts operate, etc. In this particular application, players may create and manage their experience (for example, by creating an aviation empire), enjoy the thrill of history (aviation's past), and travel the globe and fly through an open network of friendly and rival airports.

The system provides features for player control of the virtual arena associated with a social network including control of "play" times, "gifts" and "rewards," "collect" and "decorate," monitor "play" (for example, acceleration progress), generate user content, etc.

The video gaming applications may be free, when directly accessed via social-network platforms, in which instances revenue is generated via market place for products used during the game, direct advertising, etc. The flexible architecture permits for easy access through a particular player's social network, allowing other players to discover a particular game and permit conversion as necessary. Linking or connecting platforms creates a more interesting and viable gaming world.

The architecture accords variable status to players who can opt for different levels of play. A "core" game play status enables players to be leaders and play the entire game. A leader has control of all aspects of a particular gaming application. A "casual" or "follower" game play status enables players to play from a different perspective, providing access to only a portion of the entire game. A "spectator" or "bystander" game play enables players to play from a reactive perspective. Players are accorded this status when they initiate play via a social network wall posting, a response to a social networking service facilitating exchange of text or via any other key word response, which has direct impact on game play. Players with this status can request permission to visit game play arenas of other players. This request may be in response to advertising or promotion displays.

Players (with any status described above) may access game play via mobile devices, at any location, and receive location-based rewards. They may access a virtual game arena, their own or that of other players, via several platforms and take up play where they left off. They may link up friends for collaborative play. Players may also participate in standalone game play, via tablets, mobile devices, console-

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based game play, target-based game play or the like. In addition, the system permits cross-pollination game play, sending game objects from one game world or arena to another.

In the following description, for purposes of explanation, numerous specific details are indicated in order to provide a thorough understanding of the technology described. This technology may be practiced without these specific details. In the instances illustrated, structures and devices are shown in block diagram form in order to avoid obscuring the technology. For example, the present technology is described with some implementations illustrated below with reference to user interfaces and particular hardware. However, the present technology applies to any type of computing device that can receive data and commands, and any devices providing services. Moreover, the present technology is described below primarily in the context of providing video game architecture; however, the present technology applies to any type of situation and may be used for other applications beyond video games. In particular, this technology may be used in other contexts besides video games.

Reference in the specification to “one embodiment,” “an embodiment,” or “some embodiments” means simply that one or more particular features, structures, or characteristics described in connection with the one or more embodiments is included in at least one or more embodiments that are described. The appearances of the phrase “in one embodiment or instance” in various places in the specification are not necessarily all referring to the same embodiment or instance.

Some portions of the detailed descriptions that follow are presented in terms of algorithms and symbolic representations of operations on data bits within a computer memory of either one or more computing devices. These algorithmic descriptions and representations are the means used to most effectively convey the substance of the technology. An algorithm as indicated here, and generally, is conceived to be a self-consistent sequence of steps leading to a desired result. The steps are those requiring physical manipulations of physical quantities. Usually, though not necessarily, these quantities take the form of electrical or magnetic signals capable of being stored, transferred, combined, compared, and otherwise manipulated. It has proven convenient at times, principally for reasons of common usage, to refer to these signals as bits, values, elements, symbols, characters, terms, numbers, or the like.

It should be understood, however, that all of these and similar terms are to be associated with the appropriate physical quantities and are merely convenient labels applied to these quantities. Unless specifically stated otherwise, as apparent from the following discussion, it should be appreciated that throughout the description, discussions utilizing terms, for example, “processing,” “computing,” “calculating,” “determining,” or “displaying” or the like, refer to the action and processes of a computer system, or similar electronic computing device, that manipulates and transforms data represented as physical (electronic) quantities within the computer system’s registers and memories into other data similarly represented as physical quantities within the computer system memories or registers or other such information storage, transmission, or display devices.

The present technology also relates to an apparatus for performing the operations described here. This apparatus may be specially constructed for the required purposes, or it may include a general-purpose computer selectively activated or reconfigured by a computer program stored in the computer. For example, a computer program may be stored

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in a computer-readable storage medium, for example, but not limited to, any type of disk including floppy disks, optical disks, CD-ROMs, magnetic disks, read-only memories (ROMs), random access memories (RAMs), EPROMs, EEPROMs, magnetic or optical cards, flash memories including USB keys with non-volatile memory or any type of media suitable for storing electronic instructions, each coupled to a computer system bus.

This technology may take the form of an entirely hardware implementation, an entirely software implementation, or an implementation including both hardware and software components. In some instances, this technology is implemented in software, which includes but is not limited to firmware, resident software, microcode, etc.

Furthermore, this technology may take the form of a computer program product accessible from a computer-usable or computer-readable medium providing program code for use by or in connection with a computer or any instruction execution system. For the purposes of this description, a computer-usable or computer-readable medium may be any apparatus that can include, store, communicate, propagate, or transport the program for use by or in connection with the instruction execution system, apparatus, or device.

A data processing system suitable for storing and/or executing program code includes at least one processor coupled directly or indirectly to memory elements through a system bus. The memory elements may include local memory employed during actual execution of the program code, bulk storage, and cache memories, which provide temporary storage of at least some program code in order to reduce the number of times code may be retrieved from bulk storage during execution.

Input/output or I/O devices (including but not limited to keyboards, displays, pointing devices, etc.) may be coupled to the system either directly or through intervening I/O controllers.

Communication units including network adapters may also be coupled to the systems to enable them to couple to other data processing systems, remote printers, or storage devices, through either intervening private or public networks. Modems, cable modems, and Ethernet cards are just a few examples of the currently available types of network adapters.

Finally, the algorithms and displays presented in this application are not inherently related to any particular computer or other apparatus. Various general-purpose systems may be used with programs in accordance with the teachings here, or it may prove convenient to construct more specialized apparatus to perform the required method steps. The required structure for a variety of these systems is outlined in the description below. In addition, the present technology is not described with reference to any particular programming language. It should be understood that a variety of programming languages may be used to implement the technology as described here.

Architecture Overview

FIG. 1 is a high-level block diagram illustrating some embodiments of systems for providing gaming applications, either directly via social networks, an online live gaming server associated or linked with a social network, or on third party servers associated with or linked with a social network. The system 100 illustrated in FIG. 1 provides gaming platforms 106a or 106b so that participants (players or gamers) may access one or more gaming applications, initiate a play on one device or gaming platform and continue play at another device or gaming platform, making

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transitions between devices or platforms essentially seamless and enabling a continuous playing experience.

The system 100 includes one or more social network servers 102a through 102n that may be accessed via user devices 115a, 115b through 115n, which are used by users 125a, 125b, through 125n, to connect to any one of the social network servers 102a through 102n. The user devices 115a through 115n may be a desktop computer, a game system or a mobile phone. These entities (user devices 115a-115n and social network servers 102a-102n) are communicatively coupled via one or more networks 105a, 105b, and 105n. Although only three user devices or platforms 115a, 115b through 115n are illustrated, any numbers of user devices or platforms 115n may be used by any number of users (players, gamers, or the like) 125n. Moreover, those skilled in the art should recognize that while the present disclosure is described below primarily in the context of providing gaming applications, the present disclosure may be applicable to other types of applications, for entertainment or otherwise. By way of example, gaming applications may include operations for creating plays, participating in plays, etc.

The user devices 115a through 115n in FIG. 1 are illustrated by way of example. Although FIG. 1 illustrates only three devices, the present disclosure applies to any system architecture having one or more user devices 115a through 115n, therefore, any number of user devices 115n (hundreds, thousands, even millions or more) may be used.

Furthermore, while only three networks 105a, 105b, and 105n are illustrated as coupled to the user devices 115a, 115b through 115n, the social network servers 102a-102n, the profile server 130, the web server 132, the online live gaming server 140, the cross-platform server 142, and one or more third party servers 134a through 134n, in practice, any number of networks 105n may be connected, either directly or indirectly, to these entities. In addition, although only two third party servers 134a through 134n are shown, the system architecture 100 may include one or more third party servers 134n, each with a gaming platform 106b through 106n, operating one or more gaming applications that are similar or different.

In some embodiments, the social network server 102a is coupled to the network 105a, via a signal line 110. The social network server 102a includes a social network application 104, which comprises the software routines and instructions to operate the social network server 102a and its functions and operations. Although only one social network server 102a is described here, persons of ordinary skill in the art should recognize that multiple servers may be present, as illustrated by social network servers 102n, each with functionality similar to social network server 102a or different.

The term "social network" as used here encompasses its plain and ordinary meaning including, but not limited to, any type of social structure where the users are connected by a common feature or link. The common feature includes relationships/connections, e.g., friendship, family, work, a similar interest, etc. The common features are provided by one or more social networking systems, such as those included in the system architecture 100, including explicitly-defined relationships and relationships implied by social connections with other online users, where the relationships form a social graph 108.

The term "social graph" as used here encompasses its plain and ordinary meaning including, but not limited to, a set of online relationships between users (players and non-players), such as provided by one or more social networking systems, operating on social network servers 102a through

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102n, including explicitly-defined relationships and relationships implied by social connections with other online users, where the relationships form a social graph. In some examples, the social graph 108 may reflect a mapping of these users and how they are related.

It should be understood that social network server 102a and the social network software/application 104 are representative of a single social network. Each of the plurality of social networks 102a through 102n is coupled to any one of the networks 105a, 105b, and 105n, each having its own server, application, and social graph. For example, a first social network system operated or hosted on a social network server may be directed to business networking, a second directed to or centered on academics, a third directed to local business, a fourth directed to dating or gaming, and yet others directed to other general interests or perhaps a specific focus. Yet, each may provide access to a gaming platform 106a for operating or providing access to video gaming applications.

A profile server 130 is illustrated as a stand-alone server in FIG. 1. In other embodiments of the system architecture 100, all or part of the profile server 130 may be part of the social network server 102a. The profile server 130 is directly connected to the network 105a, via a line 131. The profile server 130 stores profiles for all the users that belong to a social network. A third party server 134a is connected to the network 105b, via a signal line 135. A web server 132 is connected, via a line 133, to the network 105n. The web server 132 delivers access to content, via the internet, for example, by hosted websites or the like. Users may use the web browsers on their electronic devices or gaming platforms to browse for gaming applications and access websites hosting gaming applications.

An online live gaming server 140 is an online multiplayer gaming and digital media delivery service connected to the network 105a through 105n via signal line 141 for providing users (i.e., players) with online gaming capabilities. This allows users to interact (e.g., play games) with multiple players (hundreds, thousands, if not millions) via the online live gaming server 140 (e.g., Xbox Live, Playstation Network, etc.).

A cross-platform server 142 is an online server connected to the network 105a through 105n via signal line 143 that receives information from one or more clients (e.g., mobile device, social network, gaming server, etc.) and translates the data such that it becomes usable by the gaming platform 106a through 106n. The cross-platform server 142 also translates information from the gaming platform 106a through 106n such that it becomes usable by the one or more clients (e.g., mobile device, social network, gaming server, etc.).

The user devices or player gaming platforms 115a through 115n may be a computing device, for example, a laptop computer, a desktop computer, a tablet computer, a mobile telephone (iOS, Android, or windows-based phone, a personal digital assistant (PDA), a mobile email device, a portable game player, a game console (PS3, Xbox 360, Wii or the like) a portable music player, a television with one or more processors embedded in the television or coupled to it, or any other electronic device capable of accessing a network and participating in a gaming application.

The network 105a, 105b, or 105n, is of conventional type, wired or wireless, and may have any number of configurations, such as a star configuration, token ring configuration, or other configurations known to those skilled in the art. Furthermore, the network 105 may comprise a local area network (LAN), a wide area network (WAN, e.g., the

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Internet), and/or any other interconnected data path across which one or more devices may communicate.

In another embodiment, the network **105a**, **105b**, or **105n** may be a peer-to-peer network. The network **105a**, **105b**, or **105n** may also be coupled to or include portions of one or more telecommunications networks for sending data in a variety of different communication protocols.

In yet another embodiment, the network **105a**, **105b**, or **105n**, includes Bluetooth communication networks or a cellular communications network for sending and receiving data such as via short messaging service (SMS), multimedia messaging service (MMS), hypertext transfer protocol (HTTP), direct data connection, WAP, email, etc.

In some embodiments, the social network server **102a**, the profile server **130**, the web server **132**, online live gaming server **140**, cross-platform server **142**, and the third party servers **134a** through **134n** are hardware servers including a processor, memory, and network communication capabilities. One or more of the users (players or gamers) **125a** through **125n** access any of the social network servers **102a** through **102n**, or the third party servers **134a** through **134n**, via browsers in their user devices or gaming platforms and via the web server **132**. The user devices **115a** through **115n** have user interface applications **117a**, **117b**, through **117n**, that manage access by particular players to select gaming applications or their choice.

FIG. 2 is a block diagram illustrating some embodiments of the social network server **102** (a through n) or third party server **134** (a through n). In FIG. 2, like reference numerals have been used to reference like components with the same or similar functionality that has been described above with reference to FIG. 1. Since those components have been described above that description is not repeated here. The social network server **102a** generally comprises one or more processors, although only one processor **235** is illustrated in FIG. 2. The processor is coupled via a bus **220** to memory **237** and database storage **233**, which stores user account data **252**, game options data **254**, user rewards/points **256**, user play/save data **258**, game options/preferences **260**, promotion data **262** and advertising data **264**.

In some embodiments, the database storage **233** is a database organized by the hosting server and the user. For each user or player, the data storage **233** stores data on the user and user game plays, etc. For example, this data may include related social network activity such as posts, shares, invitations, status changes, etc., associated with each user engaged in a video gaming application.

A user or player **125a**, via a user or gaming device **115a**, communicates a request to initiate a gaming application or reacts to a keyword via communication unit **239**. The “set up” for a video gaming application is managed by the gaming platform **106a**. It should be recognized that the gaming platform **106a** (illustrated in the social network server **102a**) and **106b** (illustrated in the third party server **134a**) are shown separately, but include similar functionality, at least for purposes of operating the gaming applications. A user or player display **25** coupled to the user device **115a** through **n**, is configured to provide the video source of the gaming application in one of many formats, high definition graphics, three dimensional formats, etc.

Referring now to FIG. 3, like reference numerals have been used to reference like components with the same or similar functionality that has been described above with reference to FIG. 1. Since those components have been described above, that description is not repeated here. The gaming platform **106** (a or b) includes various modules that are programmed to perform the functionalities described

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here. These modules may be variously distributed or may be in a single unit. The gaming platform **106** includes a user interface module **301**, a permissions module **303**, a user/player account module **305**, a user/player status module **307**, a promotion/rewards module **309**, a game initiation/operation module **311**, and a social network module **313**. Each of these modules is coupled to a software communication mechanism **320** to communicate the other modules. Examples of a software communications mechanism **320** may be an object bus (such as COBRA), direct socket communication (such as TCP/IP sockets) among software modules, remote procedure calls, UDP broadcasts and receipts, HTTP connections, function or procedure calls, etc. Further, any or all of the communication could be secure (SSH, HTTPS, etc.). The software communication can be implemented on any underlying hardware, such as a network, the Internet, a bus **220** of FIG. 2, or a combination thereof, etc.

By way of example, a particular user **125a** communicates via a user device **115a**, to either initiate or react to a game play. The user interface module **301** facilitates a connection of the user device **115a** with the social network server **102a**, in the event the player wishes to engage or participate in a gaming application via the social network server **102a**. The permission module **303** ensures that the user device is compliant with protocols and any privacy concerns. Once a video gaming application has been set up, the user/player account module **305** makes a note of the user to determine if the user has an existing account or must create one. The user/player status module **307** considers the status of the various users (“leader,” “follower,” or “spectator”). A promotion/rewards module **309** operates the necessary promotions permitting players to earn rewards accorded by the promotions. The game initiation/operation module **311** initiates play and the social network module **313** tracks the applications engaged by a particular player and updates the player’s social profile accordingly.

Methods

FIG. 4 illustrates an example method for posting game-play activity on a social network. It should be understood that the order of the operations in FIG. 4 is merely by way of example and may be performed in different orders than those that are illustrated and some operations may be excluded, and different combinations of the operations may be performed. In the example method illustrated, one or more operations may include signing in or displaying log-in options, as illustrated by block **402**. The method **400** then proceeds to the next block **404** and may include one or more operations to initiate or perform game play. The method **400** then proceeds to the next block **406** and may include one or more operations to post an event to a social network feed. The method **400** then proceeds to the next block **408** and may include one or more operations to store post identification information.

FIG. 5 illustrates an example method for interacting with a game based on social network activity. It should be understood that the order of the operations in FIG. 5 is merely by way of example and may be performed in different orders than those that are illustrated and some operations may be excluded, and different combinations of the operations may be performed. In the example method illustrated, one or more operations may include posting game-play event to the social network feed, as illustrated by block **502**. The method **500** then proceeds to the next block **504** and may include one or more operations to receive social interaction (e.g., comments, likes, etc.) related to the posted event. The method **500** then proceeds to the next

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block 506 and may include one or more operations to generate a reward for the player based on the social interaction related to the posted event. The method 500 then proceeds to the next block 508 and may include one or more operations to send in-game reward to player.

FIG. 6 illustrates a video gaming scenario, with two core players 1 and 2 (at A and D), who have a “leader” status, indicated by reference numerals 602 and 608. A “casual” player or “follower” (at B) is illustrated by reference numeral 604 and has the capability to influence both the core players, as indicated by the arrows. Additionally, a “core” player, for example, Player 2, can participate as a “bystander” as well and influence another “core” player, Player 1. A non-player or “bystander” also participates (at C), providing keyword-based participation, as indicated by reference numeral 606. All the various players interact with each other, some having larger impact (those that are “leader” or “core” players) on the play of another “core” player, whereas a “casual” player has a smaller or little impact on the play of others, and a “bystander” has even less impact.

As one example, a religious gaming application is described here. A “core” player may create his or her own church or organization. Another “core” player 2 may create his or her own church or organization as well. The “casual” player 3 may be a follower of both “core” Player 1 and Player 2, such that acts by the “follower” either enhance or detract a play by Player 1 or Player 2. By way of example, the follower Player 3 may give virtual money (\$10 per day out of a \$20) to each of the core players. Circumstances may change this flow of money, for example, “core” Player 2 upsets follower Player 3, who routes all of his virtual money to Player 1. Player 2 may retaliate against Player 3, by initiating an action against Player 1, creating a deficit in his or her account, thereby impacting the play by Player 1. Likewise, the bystander C may continue to influence plays by Player 1 or Player 2. Finally, FIG. 6 illustrates a social network 1, illustrated by reference numeral 610 and a social network 2 illustrated by reference numeral 612, each indicating Player responses and friend responses in Player A’s social network or social graph.

FIG. 7 is a graphical representation 700 illustrating some embodiments of multiple devices connected for centralized game play in a gaming application linked with a social network. For example, multiple user devices may be connected to a virtual game-play cloud 720. The multiple user devices may be all the same or different and may include, for example, one or more personal computers 710 via a social network server 102a, one or more game consoles 712, one or more mobile devices 714, and one or more tablets 716. All or some of these devices are connected to the virtual game-play cloud for platform agnostic, shared, and synchronized gameplay.

FIG. 8 is a graphical representation 800 illustrating some embodiments of receiving an in-game reward based on social network activity. In some implementations, in-game rewards (experience, coins, special game events etc.) may be triggered by the player’s friends commenting or interacting with the player’s game activity wall post. For example, the player signs in/logs-in to the game illustrated by block 810. Simultaneously the player is logged into the client (that hosts the game application) and the social network to perform social network activity illustrated by blocks 820 and 830. While logged-in to the client, the player may participate in game play, as illustrated by block 822. While playing the game, the player may post an event to a social network feed, as illustrated by block 824 at which point the postID (for

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access) is written to a database, as illustrated by block 826. Also while playing the game, the player may receive an in-game reward, as illustrated by block 828.

In the social network, when the postID (for access) is written to a database, as illustrated by block 826, the social network application (e.g., game application) loops through all postIDs generated in the game, as illustrated by block 832. The social network application then processes each post for comments and likes, as illustrated by block 834. The social network application then generates a friend reward within the social network, as illustrated by block 836. The social network application then generates a player reward, as illustrated by block 838 which also sends a request to the game to give the reward to the player in the game.

FIG. 9 illustrates an example of the user interface display 900 to a user in the event a video gaming application is hosted or accessed by a social network. A user may accept a request via posting a comment (#accept in this example) to the social network post. User posts are indicated by 910, user activities or operations during play are indicated by 920, and user acceptances (indicated by reference numeral 940) and approvals are indicated by reference numeral 930.

FIG. 10 illustrates an example of a user interface 1000 for unlocking game play content within the game. A user may unlock in-game content by posting a comment on a player’s social network post. A friend’s activities and status during a game are indicated by 1020, and promotion approvals are indicated by 1030. Approvals may be by the user’s friends 1040 and 1050.

As one example, an aviation video gaming application is described here. The specific rules of the social network aspect of the aviation gaming application (e.g., AviNation) are indicated below, simply by way of example:

- GPS/Check-in Game Play—Airport Specific
- Player must log back into the game to collect all that they have earned every time someone posts. If not, they are subject to losing benefits (see comments)
1. Airport Check-ins (only players who are playing the game):
 1. For the player who checks in receives:
 1. Passengers (e.g. Extra 10/100)—[can only check-in to same airport once per day]
 2. Virtual currency (e.g. \$10,000) [automatically added to players account]
 3. Either experience or energy points (not both)
 2. For the players who “like” the check-in:
 1. The player who checked in receives:
 1. Passengers
 2. Energy points
 2. The player who clicked “like” receives:
 1. Additional passengers
 2. Energy points
 3. Non-Players who “like” the check-in, the main player is awarded a fraction of passengers/energy (e.g., 1/5 or less)
 3. Comments (Key Words)—each player can only post one key word—subsequent posts from the same player are ignored.
 1. “Oversold”
 1. Each player of AviNation receive 10% of the passengers that the primary check-in player has earned but not collected yet;
 2. Each non-player results in a loss of one-passenger from the primary check-in player has earned but not collected yet;

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2. "Flight Cancelled"
 1. Player who first posts this that plays AviNation receives all of the passengers that the primary check-in player has earned but not yet collected;
 2. Player who second posts this receives all the energy a player has earned upon check-in but has not yet collected;
 3. "Mechanical"—anyone can post
 1. One of the check-in player's aircraft must be repaired (random aircraft) before it can fly again—only one airplane can be affected and only once by a player.
 4. "Frequent Flyer"
 1. Each player of AviNation receives a 10% passenger bump for the day; check-in player receives a 10% bump on uncollected passengers
- Airport specific check-ins should be focused on passengers, money, and possibly experience or energy (not both).
 Player Wall Post of a New Route Established
 For players advertising a new route on their wall:
1. "like" post:
 1. Player who posted the new route receives:
 1. New passengers for the day (player must log in to collect)
 2. Experience or Energy (not both)
 2. Player who "liked" the post that plays the game receives:
 1. Certain number of passengers for the day
 3. Non-players who "like" the post add 1/5 (or minimum number) of the passengers (e.g., 1)
 2. Comments (key words):
 1. "Oversold"
 1. Each player of AviNation receive 10% of the passengers that primary check-in player has earned but not collected yet;
 2. Each non-player results in a loss of one-passenger from the primary check-in player has earned but not collected yet;
 2. "Flight Cancelled"
 1. Player who first posts this that plays AviNation receives all of the passengers that the primary check-in player has earned but not yet collected;
 2. Player who second posts this receives all the energy a player earned upon check-in but has not yet collected;
 3. "Mechanical"—anyone can post
 1. One of the check-in players aircraft must be repaired (random aircraft) before it can fly again—only one airplane can be affected and only once by a player.
 4. "Frequent Flyer"
 1. Each player of AviNation receives a 10% passenger bump for the day; check-in player receives a 10% bump on uncollected passengers
- Action of a Player Who Buys a New Airplane:
1. "like"
 1. Player who posted receives:
 1. Additional fuel (free)
 2. Player who "liked" the post receives:
 1. 5 additional passengers
 - Comments (key words):
 1. "Mechanical"—anyone can post
 1. One of the check-in players aircraft must be repaired (random aircraft) before it can fly again—only one airplane can be affected and only once by a player.

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2. "Frequent Flyer"
 1. Each player (original post and respondent) of AviNation receives a 10% passenger bump for the day; check-in player receives a 10% bump on uncollected passengers
- In general for each action, the following are examples:
1. Each post does NOT have to award a lot of game items to the original poster or the respondent. It is kept in context to what is being posted. Examples:
 1. Setting up a new route may earn experience and passengers
 2. Buying an airplane may award fuel and passengers
 3. Setting up a terminal may award passengers and energy
 2. There needs to be competitive play in the spectator wall posts with key words:
 1. Key words that continue to award to the primary poster and also the spectator;
 2. Key words that 'steal' items away from primary poster to respondent player;
 3. Key words that are detrimental to a player (whether completely detrimental or just gives everything not collected to the respondent player)
 4. Key words that are descriptive to the action involved.
 3. The "like" button should award items to both players
 4. Players who are being awarded items must go back (log-in) to the game to collect them or they are fair game for other players
- FIG. 11A illustrates an example of a user interface 1100 within a social network with a player notification about one player's promotion within the game and other player comments on the player notification. For example, the post 1104 indicates that the player has been promoted within the game. The notification 1110 indicates that for the approval 1112 from a player, the commenter and the poster receive three points within the game. The notification 1120 indicates that for the comment 1122, the commenter and the poster receive five points within the game.
- FIG. 11B illustrates an example of a user interface 1150 within a social network with a player notification about one player's promotion within the game and other non-player comments on the player notification. For example, the post 1154 indicates that the player has been promoted within the game. The notification 1160 indicates that for the approval 1162, the player (i.e., poster) receives three points within the game. The notification 1170 indicates that for the comment 1172 from a non-player, the player (i.e., poster) receives one point within the game.
- FIG. 12A illustrates an example of a user interface 1200 within a social network with a player notification about one player traveling to another player's area within the game and other player comments on the player notification. For example, the post 1202 indicates that the player is traveling to another player's airport. The notification 1210 indicates that for the approval, the flight time is decreased by 5%. The notification 1212 indicates that for the comment "#divert" from a player, the airplane is sent to the commenter's airport. The notification 1214 indicates that for the comment "#roger" from a player, the airplane receives two passengers. The notification 1216 indicates that for the comment "#clear skies" from a player, the flight time is decreased by 5%. The notification 1218 indicates that for the comment "#turbulence" from a player, the flight time is increased by 5%. The notification 1220 indicates that for the comment "#thunderstorm" from a player, the commenter receives a thunderstorm item (in-game item). The notification 1222 indicates

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that for the comment “#snowstorm” from a player, the commenter receives a snowstorm item (in-game item).

FIG. 12B illustrates an example of a user interface 1250 within a social network with a player notification about one player traveling to another player’s area within the game and other non-player comments on the player notification. For example, the post 1252 indicates that the player is traveling to another player’s airport. The notification 1260 indicates that for the approval, the flight time is decreased by 5%. The notification 1262 indicates that for the comment “#divert” from a non-player, the airplane is sent to the closest friend’s airport. The notification 1264 indicates that for the comment “#roger” from a non-player, the airplane receives one passenger. The notification 1266 indicates that for the comment “#clear skies” from a non-player, the flight time is decreased by 5%. The notification 1268 indicates that for the comment “#turbulence” from a non-player, the flight time is increased by 5%. The notification 1270 indicates that for the comment “#thunderstorm” from a non-player, the player’s airport is hit by a thunderstorm. The notification 1272 indicates that for the comment “#snowstorm” from a non-player, the player’s airport is hit by a snowstorm.

FIG. 13A illustrates an example of a user interface 1300 within a social network with a player notification about one player visiting another player’s area within the game and other player comments on the player notification. For example, the post 1302 indicates that the player is visiting another player’s airport. The notification 1310 indicates that for the approval, one energy point is given to both players. The notification 1312 indicates that for the comment “#thanks” from a player, five energy points are given to both players. The notification 1314 indicates that for the comment “#thunderstorm” from a player, the commenter receives a thunderstorm item (in-game item). The notification 1316 indicates that for the comment “#snowstorm” from a player, the commenter receives a snowstorm item (in-game item).

FIG. 13B illustrates an example of a user interface 1350 within a social network with a player notification about one player visiting another player’s area within the game and other non-player comments on the player notification. For example, the post 1352 indicates that the player is visiting another player’s airport. The notification 1360 indicates that for the approval, one energy point is given to the player (i.e., poster). The notification 1362 indicates that for the comment “#thanks” from a non-player, two energy points are given to the player (i.e., poster). The notification 1364 indicates that for the comment “#thunderstorm” from a non-player, the player’s (i.e., poster) airport is hit by a thunderstorm. The notification 1366 indicates that for the comment “#snowstorm” from a non-player, the player’s (i.e., poster) airport is hit by a snowstorm.

FIG. 14A illustrates an example of a user interface 1400 within a social network with a player notification about one player sending a game-play item within the game and other player comments on the player notification. For example, the post 1402 indicates that the player has sent an airplane to an in-game airport (in this example John Wayne Airport). The notification 1410 indicates that for the approval, the flight time is decreased by 5%. The notification 1412 indicates that for the comment “#bird attack” from a player, the plane is damaged and the flight time is increased by 5%. The notification 1414 indicates that for the comment “#turbulence” from a player, the flight time is increased by 5%. The notification 1416 indicates that for the comment “#clear skies” from a player, the flight time is decreased by 5%. The notification 1418 indicates that for the comment “#thunderstorm” from a player, the commenter receives a thunder-

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storm item (in-game item). The notification 1420 indicates that for the comment “#snowstorm” from a player, the commenter receives a snowstorm item (in-game item).

FIG. 14B illustrates an example of a user interface 1450 within a social network with a player notification about one player sending a game-play item within the game and other non-player comments on the player notification. For example, the post 1452 indicates that the player has sent an airplane to an in-game airport (in this example John Wayne Airport). The notification 1460 indicates that for the approval, the flight time is decreased by 5%. The notification 1462 indicates that for the comment “#bird attack” from a non-player, the airplane is damaged and the flight time is increased by 5%. The notification 1464 indicates that for the comment “#turbulence” from a non-player, the flight time is increased by 5%. The notification 1466 indicates that for the comment “#clear skies” from a non-player, the flight time is decreased by 5%. The notification 1468 indicates that for the comment “#thunderstorm” from a non-player, the player’s (i.e., poster) airport is hit by a thunderstorm. The notification 1470 indicates that for the comment “#snowstorm” from a non-player, the player’s (i.e., poster) airport is hit by a snowstorm.

FIG. 15A illustrates an example of a user interface 1500 within a social network with a player notification about one player purchasing a game-play item within the game and other player comments on the player notification. For example, the post 1502 indicates that the player has purchased an in-game airplane. The notification 1510 indicates that for the approval, the commenter gains 10 coins. The notification 1512 indicates that for the comment “#maiden voyage” from a player, the commenter and the poster gain one “1 hour boost item”. The notification 1514 indicates that for the comment “#thunderstorm” from a player, the commenter receives a thunderstorm item (in-game item). The notification 1516 indicates that for the comment “#snowstorm” from a player, the commenter receives a snowstorm item (in-game item).

FIG. 15B illustrates an example of a user interface 1550 within a social network with a player notification about one player purchasing a game-play item within the game and other non-player comments on the player notification. For example, the post 1552 indicates that the player has purchased an in-game airplane. The notification 1560 indicates that for the approval, no award is given. The notification 1562 indicates that for the comment “#maiden voyage” from a non-player, the player (i.e., poster) receives one experience point. The notification 1564 indicates that for the comment “#thunderstorm” from a non-player, the player’s (i.e., poster) airport is hit by a thunderstorm. The notification 1566 indicates that for the comment “#snowstorm” from a non-player, the player’s (i.e., poster) airport is hit by a snowstorm.

FIG. 16A illustrates an example of a user interface 1600 within a social network with a player notification about one player purchasing a game-play area within the game and other player comments on the player notification. For example, the post 1602 indicates that the player has purchased a small terminal. The notification 1610 indicates that for the approval, the building time is decreased. The notification 1612 indicates that for the comment “#let me help” from a player, the building time is decreased by 5%. The notification 1614 indicates that for the comment “#congrats” from a player, the commenter is given 10 coins. The notification 1616 indicates that for the comment “#vandalize” from a player, the building time is increased by 5%. The notification 1618 indicates that for the comment “#thunder-

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storm" from a player, the commenter receives a thunderstorm item (in-game item). The notification 1620 indicates that for the comment "#snowstorm" from a player, the commenter receives a snowstorm item (in-game item).

FIG. 16B illustrates an example of a user interface 1650 within a social network with a player notification about one player purchasing a game-play area within the game and other non-player comments on the player notification. For example, the post 1652 indicates that the player has purchased a small terminal. The notification 1660 indicates that for the approval, the building time is decreased. The notification 1662 indicates that for the comment "#let me help" from a non-player, the building time is decreased by 5%. The notification 1664 indicates that for the comment "#congrats" from a non-player, the player (i.e., poster) is given 5 coins. The notification 1666 indicates that for the comment "#vandalize" from a non-player, the building is damaged and the building time is increased by 5%. The notification 1668 indicates that for the comment "#thunderstorm" from a non-player, the player's (i.e., poster) airport is hit by a thunderstorm. The notification 1670 indicates that for the comment "#snowstorm" from a non-player, the player's (i.e., poster) airport is hit by a snowstorm.

FIG. 17A illustrates an example of a user interface 1700 within a social network with a player notification about one player building a game-play item within the game and other player comments on the player notification. For example, the post 1702 indicates that the player is trying to finish building a hangar. The notification 1710 indicates that for the approval, the poster and commenter receive three energy points. The notification 1712 indicates that for the comment "#fuel drums" from a player, the poster receives an in-game item.

FIG. 17B illustrates an example of a user interface 1750 within a social network with a player notification about one player building a game-play item within the game and other non-player comments on the player notification. The notification 1760 indicates that for the approval, the player (i.e., poster) receives three energy points. The notification 1762 indicates that for the comment "#fuel drums" from a non-player, the player (i.e., poster) receives an in-game item.

FIG. 18A illustrates an example of a user interface 1800 within a social network with a player notification about one player performing a task within the game and other player comments on the player notification. For example, the post 1802 indicates that the player is trying to finish a task, in this example, "favor for the mayor." The notification 1810 indicates that for the approval, the poster and commenter receive five experience points. The notification 1812 indicates that for the comment "#lumber" from a player, the poster receives an in-game item.

FIG. 18B illustrates an example of a user interface 1850 within a social network with a player notification about one player performing a task within the game and other non-player comments on the player notification. For example, the post 1852 indicates that the player is trying to finish a task, in this example, "favor for the mayor." The notification 1860 indicates that for the approval, the player (i.e., poster) receives five experience points. The notification 1862 indicates that for the comment "#lumber" from a non-player, the player (i.e., poster) receives an in-game item.

FIG. 19A illustrates an example of a user interface 1900 within a social network with a player notification about one player finishing a task within the game and other player comments on the player notification. For example, the post 1902 indicates that the player has finished a task, in this example, "favor for the mayor." The notification 1910

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indicates that for the approval, the poster and commenter receive three experience points. The notification 1912 indicates that for the comment "#congrats" from a player, the poster and commenter receive five experience points.

FIG. 19B illustrates an example of a user interface 1950 within a social network with a player notification about one player finishing a task within the game and other non-player comments on the player notification. For example, the post 1952 indicates that the player has finished a task, in this example, "favor for the mayor." The notification 1960 indicates that for the approval, the player (i.e., poster) receives three experience points. The notification 1962 indicates that for the comment "#congrats" from a non-player, the player (i.e., poster) receives one experience point.

FIG. 20A illustrates an example of a user interface 2000 within a social network with a player notification about one player arriving at another player's area within the game and other player comments on the player notification. For example, the post 2002 indicates that the player has checked into a friend's airport. The notification 2010 indicates that for the approval, the poster and commenter receive two experience points. The notification 2012 indicates that for the comment "#safe flight" from a player, the poster and commenter receive one "+5 energy item."

FIG. 20B illustrates an example of a user interface 2050 within a social network with a player notification about one player arriving at another player's area within the game and other non-player comments on the player notification. For example, the post 2052 indicates that the player has checked into a friend's airport. The notification 2060 indicates that for the approval, the player (i.e., poster) receives two experience points. The notification 2062 indicates that for the comment "#safe flight" from a non-player, the player (i.e., poster) receives one "+5 energy item."

The comments and game actions they invoke which are described in FIGS. 9-20B are used by way of example, one skilled in the art will recognize that other examples and configurations are possible.

The foregoing description of the implementations of the present technology has been presented for the purposes of illustration and description. It is not intended to be exhaustive or to limit the present technology to the precise form disclosed. Many modifications and variations are possible in light of the above teaching. It is intended that the scope of the present technology be limited not by this detailed description, but rather by the claims of this application. As should be understood by those familiar with the art, the present technology may be implemented in other specific forms, without departing from the spirit or essential characteristics thereof. Likewise, the particular naming and division of the modules, routines, features, attributes, methodologies, and other aspects are not mandatory or significant, and the mechanisms that implement the present disclosure or its features may have different names, divisions and/or formats. Furthermore, as should be apparent to one of ordinary skill in the relevant art, the modules, routines, features, attributes, methodologies and other aspects of the present technology can be implemented as software, hardware, firmware, or any combination of the three. Also, wherever a component, an example of which is a module, of the present technology is implemented as a standalone program, as part of a larger program, as a plurality of separate programs, as a statically or dynamically linked library, as a kernel loadable module, as a device driver, and/or in every and any other way known now or in the future to those of ordinary skill in the art of computer programming. Additionally, the

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present technology is in no way limited to implementation in any specific programming language, or for any specific operating system or environment. Accordingly, the disclosure of the present technology is intended to be illustrative, but not limiting, of the scope of the present disclosure, which is set forth in the following claims. 5

What is claimed is:

1. A computer-implemented method operated using one or more computing devices for providing video gaming hosted on one or more servers in association with a social network, comprising: 10

providing access using the one or more computing devices to a video gaming environment associated with the social network, by one or more users using at least one of a plurality of different user electronic devices, the at least one of a plurality of different user electronic devices including a user interface configured to display the video gaming environment; 15

posting, using the one or more computing devices, a post to the social network including an event relating to the video gaming environment of interest to the social network; 20

generating, using the one or more computing devices, a post identification of the post;

writing, using the one or more computing devices, the post identification to a database, the database configured to store one or more post identifications; 25

processing, using the one or more computing devices, each of the one or more post identifications in the database for comments to determine whether the comments include one or more particular keywords commented on the post by a second user; and 30

in response to determining that the comments include the one or more particular keywords commented on the post by the second user, using the one or more particular keywords as play relating to a select game in the video gaming environment, the video gaming environment being displayed on the user interface of the at least one of a plurality of different user electronic devices and being affected by the determination that the comments include the one or more particular keywords. 40

2. A computer-implemented method according to claim 1, wherein the plurality of different user electronic devices include at least one of a personal computer, a laptop, a mobile device, a gaming console, and a tablet. 45

3. A computer-implemented method according to claim 1, wherein the video gaming environment is hosted on a social network server.

4. A computer-implemented method according to claim 1, wherein the video gaming environment is hosted on a third party server linked to the social network. 50

5. A computer-implemented method according to claim 1, wherein the video gaming environment is hosted in a cloud linked to the social network, wherein the video gaming environment provides a plurality of different games. 55

6. A computer-implemented method according to claim 1, wherein the video gaming environment is hosted by a cross-platform server accommodating access by all of the different user electronic devices.

7. A computer-implemented method according to claim 1, wherein at least one of the one or more users performs a play in the video gaming environment via a comment posted in the social network. 60

8. A computer-implemented method according to claim 1, wherein the select game includes at least one of a main game for play via the social network and a sub-game for play via the social network. 65

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9. A computer-implemented method according to claim 1, further comprising:

designating a particular status level to the one or more users, wherein the particular status designated controls a play capability accorded to the one or more users depending upon the particular status level.

10. A system architecture for providing video gaming hosted on one or more servers in association with a social network, comprising one or more computing devices configured to operate based on instructions that cause the one or more computing devices to: 10

provide access using the one or more computing devices to a video gaming environment associated with the social network, by one or more users using at least one of a plurality of different user electronic devices, the at least one of the plurality of different user electronic devices including a user interface configured to display the video gaming environment; 15

post, using the one or more computing devices, a post to the social network including an event relating to the video gaming environment of interest to the social network; 20

generate, using the one or more computing devices, a post identification of the post;

writing, using the one or more computing devices, the post identification to a database, the database configured to store one or more post identifications; 25

process, using the one or more computing devices, each of the one or more post identifications in the database for comments to determine whether the comments include one or more particular keywords commented on the post by a second user; and 30

in response to determining that the comments include the one or more particular keywords commented on the post by the second user, use the one or more particular keywords as play relating to a select game in the video gaming environment, the video gaming environment being displayed on the user interface of the at least one of the plurality of different user electronic devices and being affected by the determination that the comments include the one or more particular keywords. 40

11. A system architecture according to claim 10, wherein the plurality of different user electronic devices include at least one of a personal computer, a laptop, a mobile device, a gaming console, and a tablet. 45

12. A system architecture according to claim 10, wherein the video gaming environment is hosted on a social network server.

13. A system architecture according to claim 10, wherein the video gaming environment is hosted on a third party server associated with a social network. 50

14. A system architecture according to claim 10, wherein the video gaming environment is hosted in a cloud linked to the social network, wherein the video gaming environment provides a plurality of different games. 55

15. A system architecture according to claim 10, wherein the video gaming environment is hosted by a cross-platform server accommodating access by all of the different user electronic devices.

16. A system architecture according to claim 10, wherein at least one of the one or more users performs a play in the video gaming environment via a comment posted in the social network.

17. A system architecture according to claim 10, wherein the select game includes at least one of a main game for play via the social network and a sub-game for play via the social network.

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18. A system architecture according to claim 10, further comprising:

designating a particular status level to the one or more users, wherein the particular status designated controls a play capability accorded to the one or more users 5 depending upon the particular status level.

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(54) **MULTILAYER FRAMEWORK AND
ARCHITECTURE WITH VARIABLE VIDEO
GAMING CAPABILITIES**

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- (*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 343 days.

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(21) Appl. No.: **13/889,276**

(22) Filed: **May 7, 2013**

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A63F 13/00 (2014.01)
A63F 13/30 (2014.01)
- (52) **U.S. Cl.**
CPC **A63F 13/12** (2013.01)
- (58) **Field of Classification Search**
CPC A63F 13/12; A63F 13/23; A63F 13/822
See application file for complete search history.

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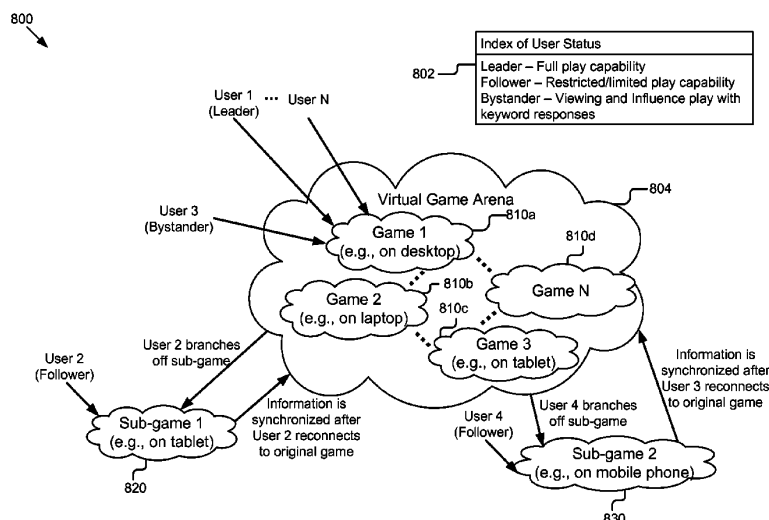
Primary Examiner — Omkar Deodhar
Assistant Examiner — Eric M Thomas

(74) *Attorney, Agent, or Firm* — Patent Law Works LLP

(57) **ABSTRACT**

A multilayer framework and architecture with variable video or digital gaming capabilities provides multiple levels of play, permitting players to engage in different ways. The different levels of play options include 1) a peer-to-peer competitive challenge level for “core” players, 2) a “follower” play option for players with restricted capabilities and access to portions of a game; and a 3) “bystander” play option that permits non-players in a network to either observe or play from a reactive perspective.

14 Claims, 11 Drawing Sheets



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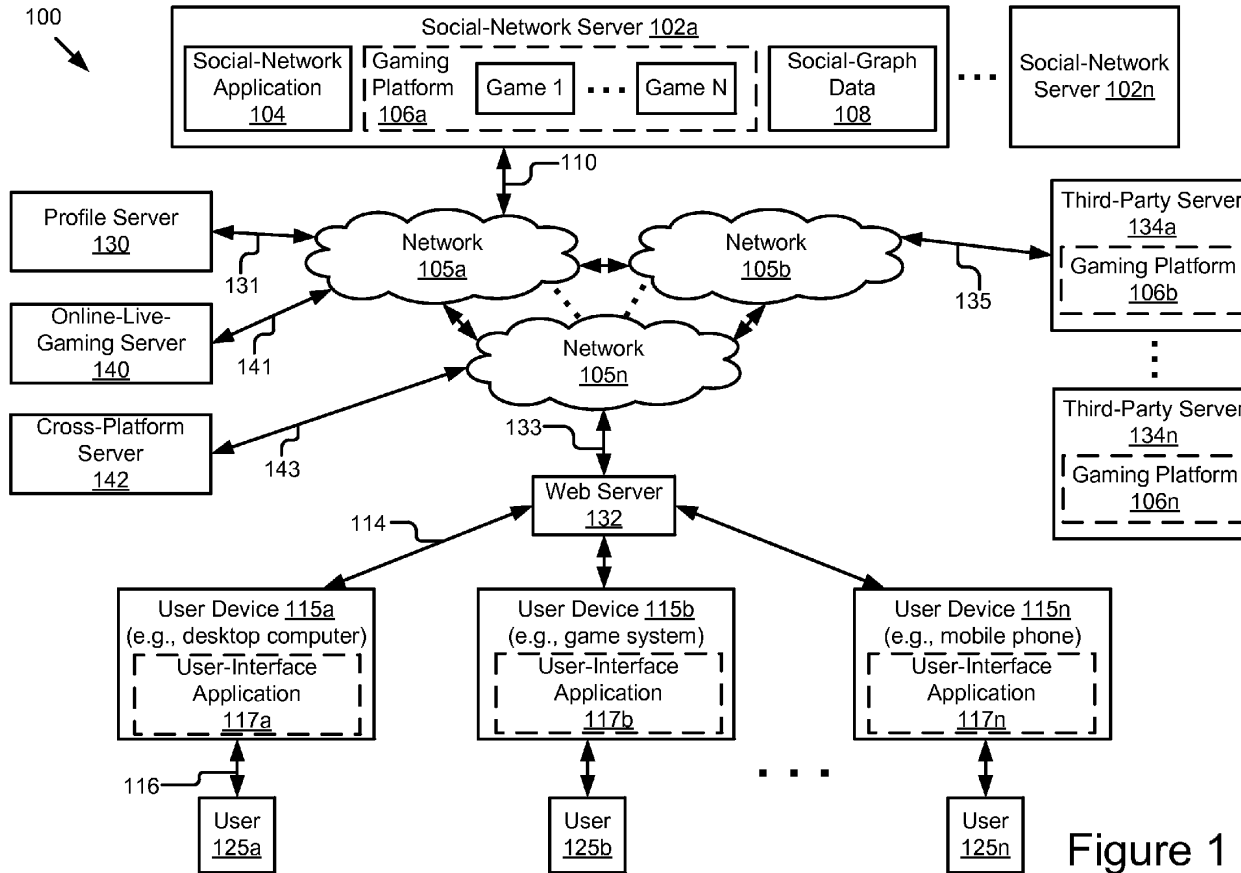


Figure 1

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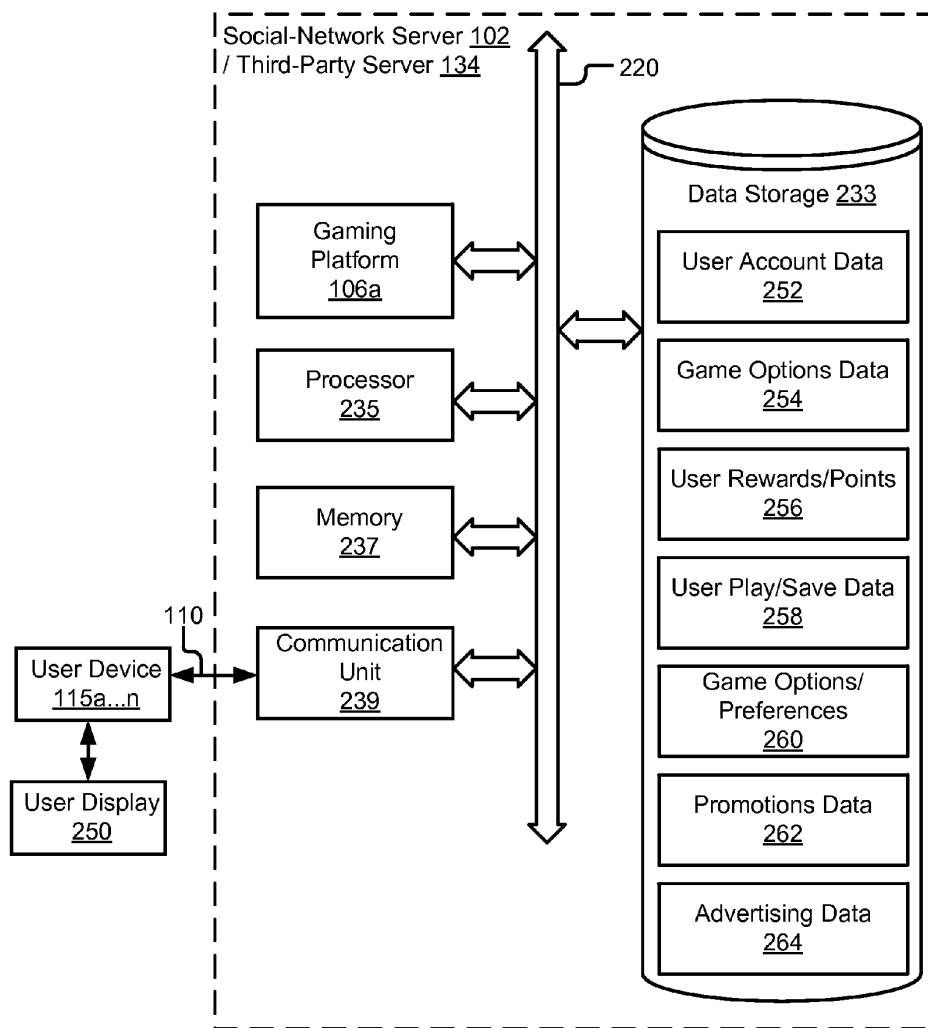


Figure 2

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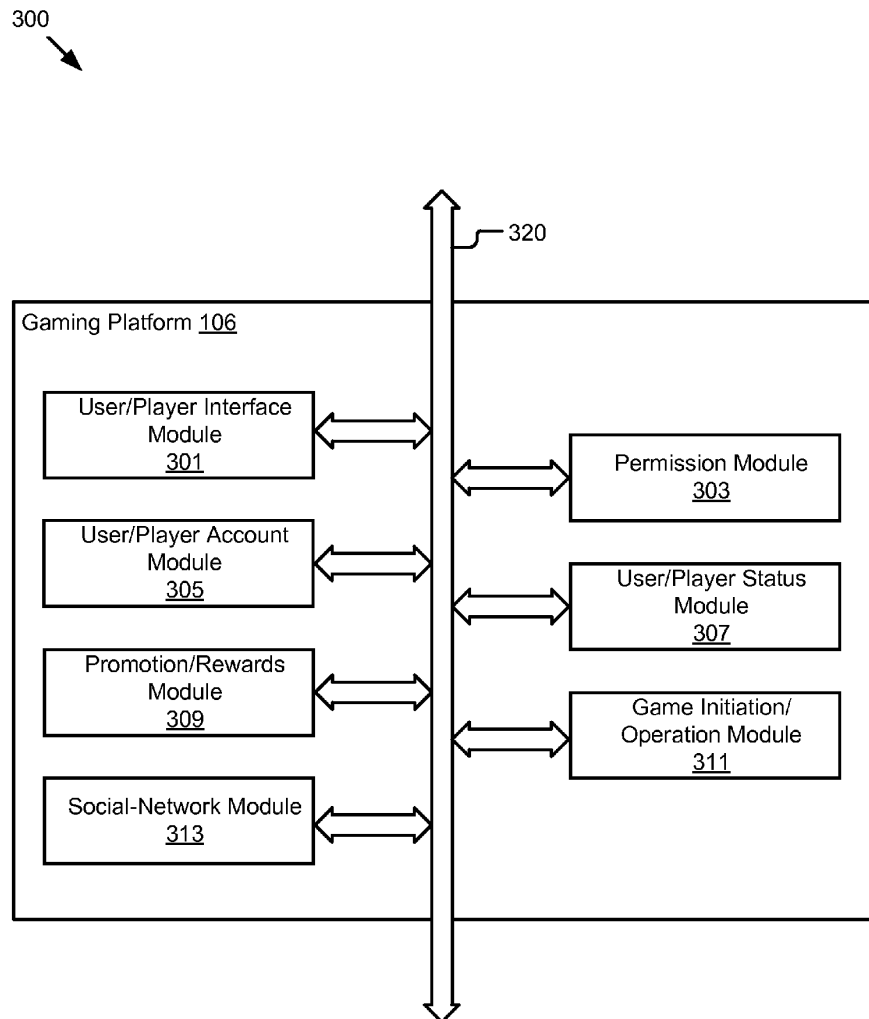


Figure 3

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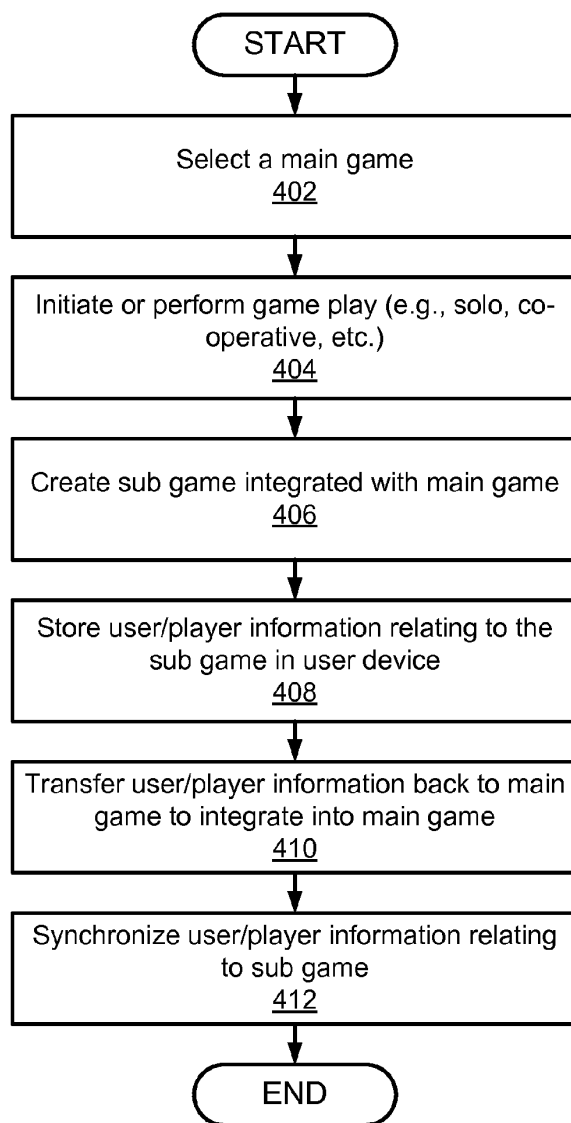


Figure 4

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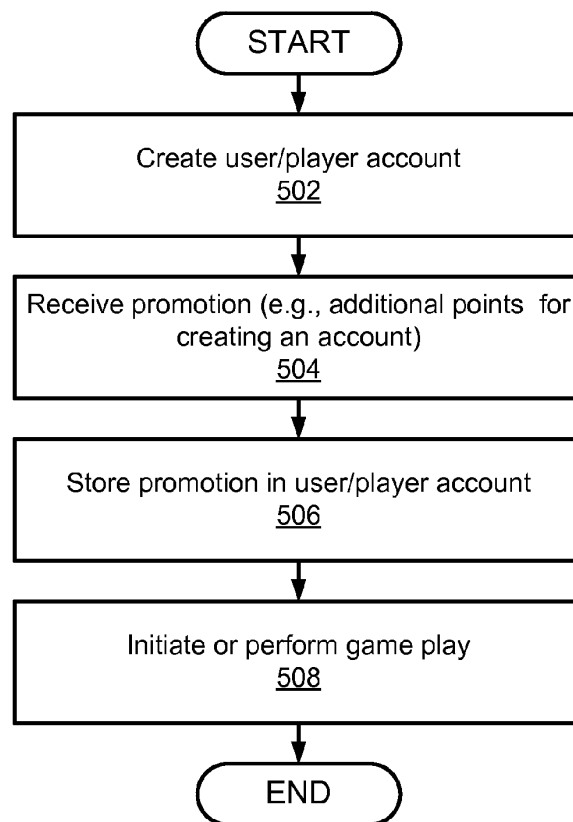


Figure 5

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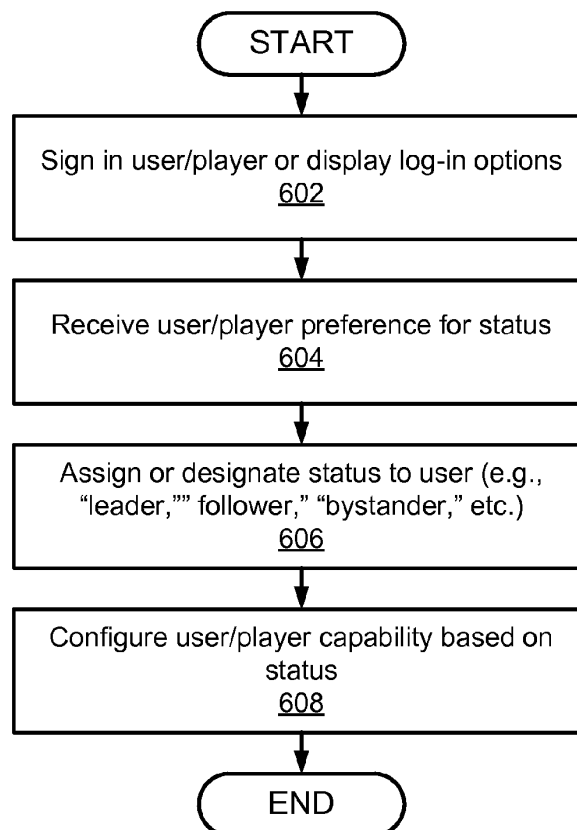


Figure 6

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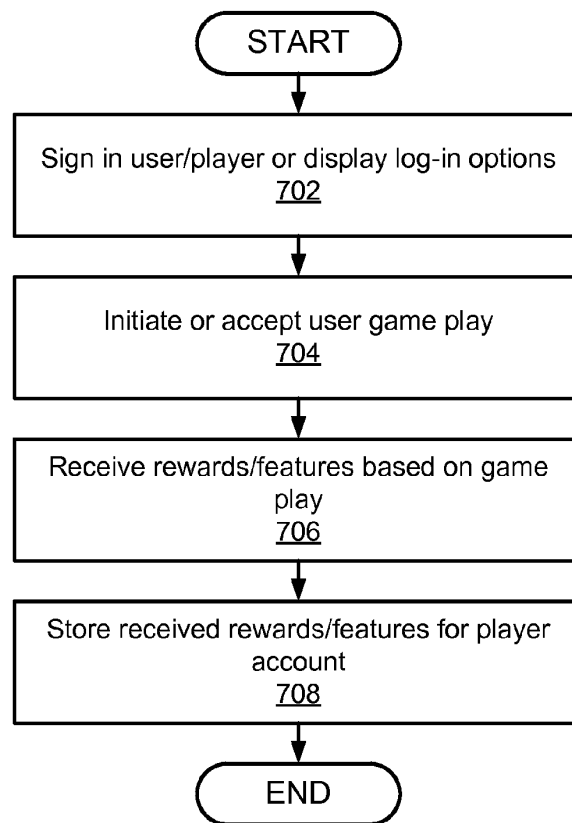


Figure 7

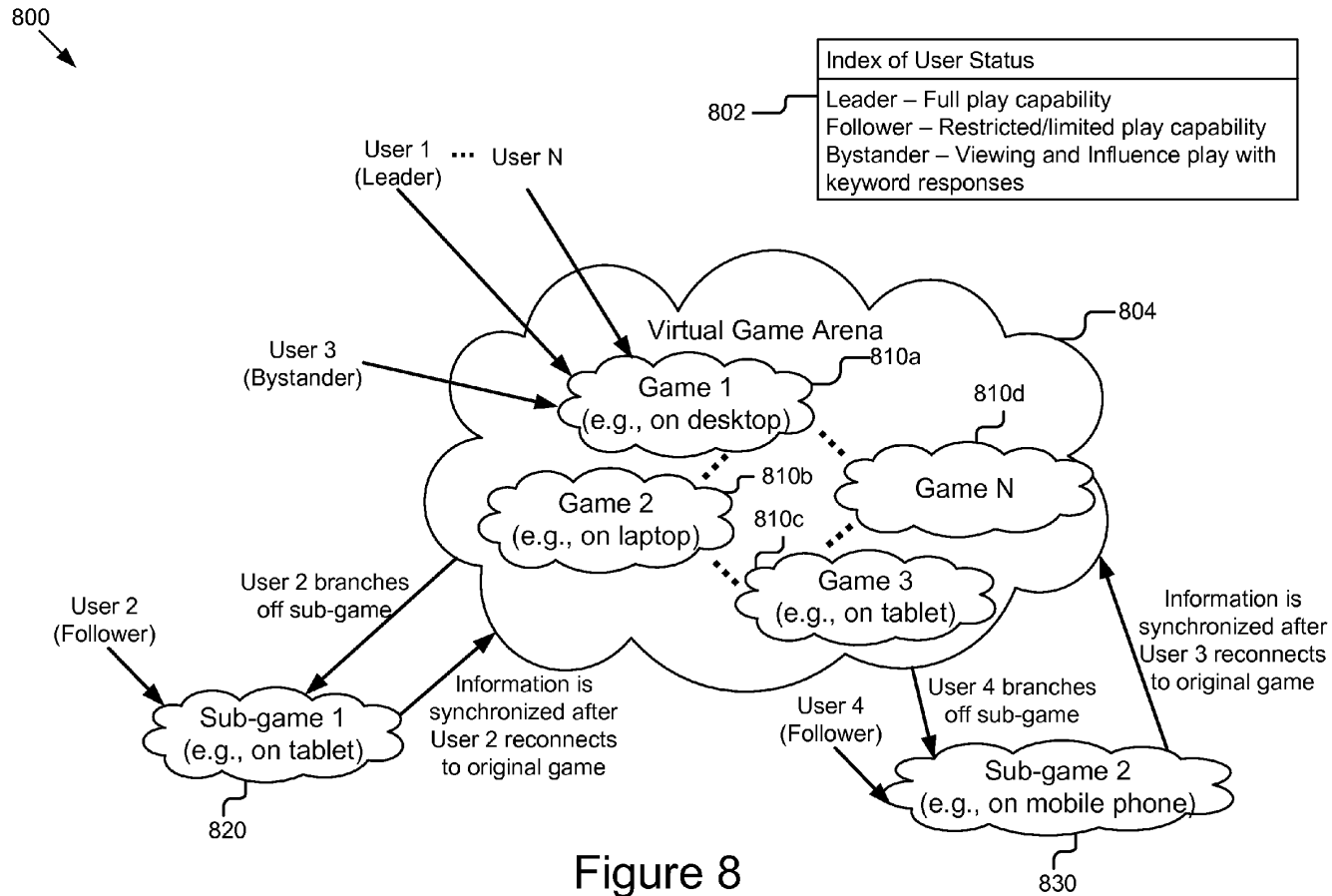


Figure 8

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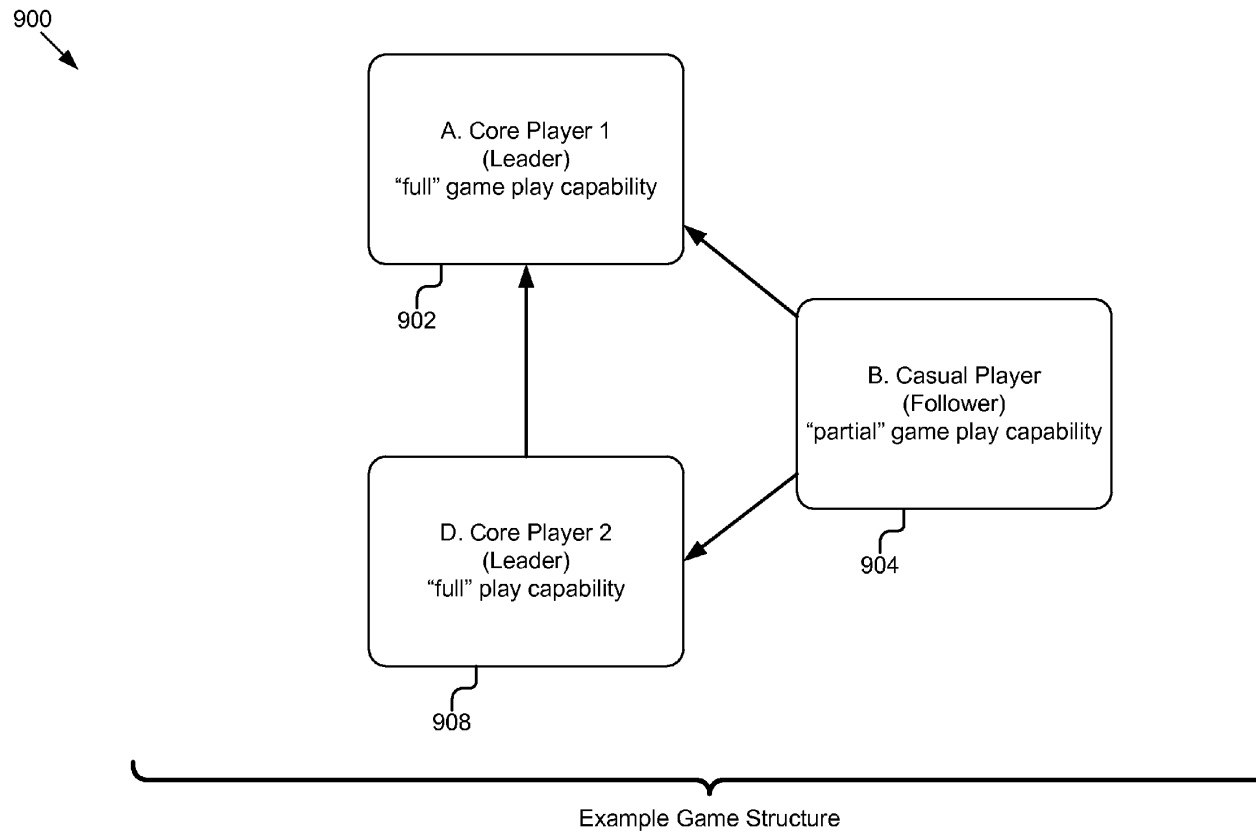


Figure 9

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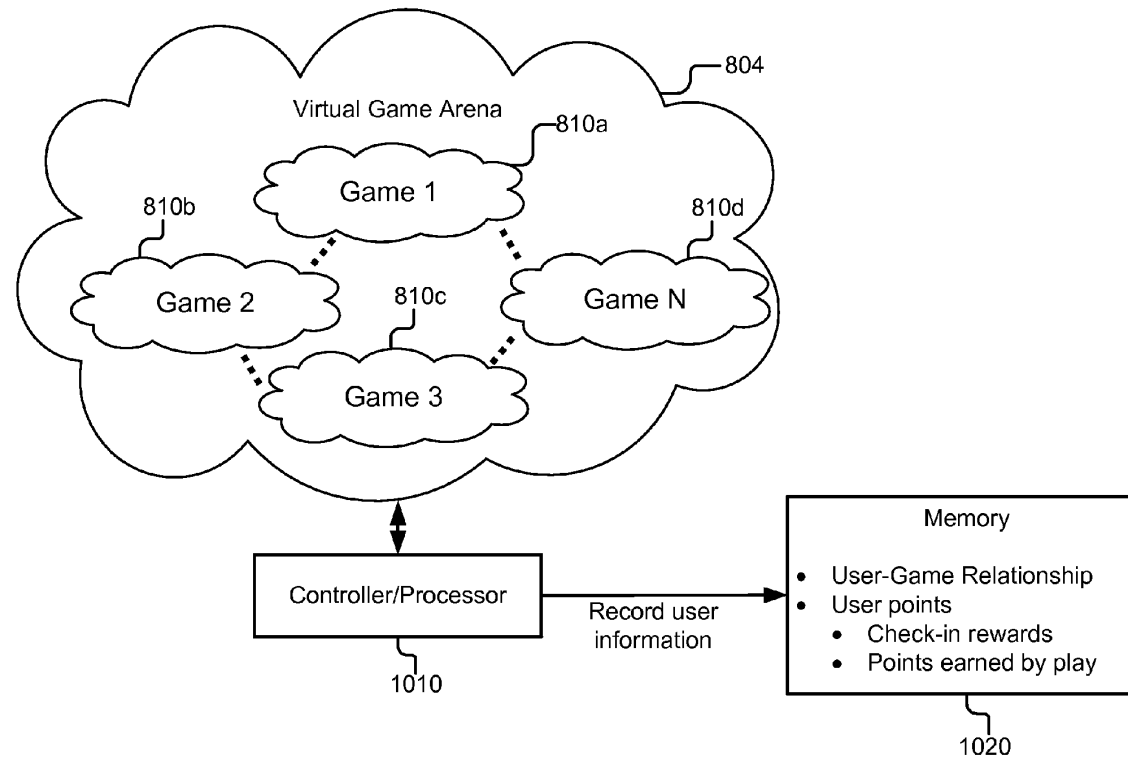


Figure 10

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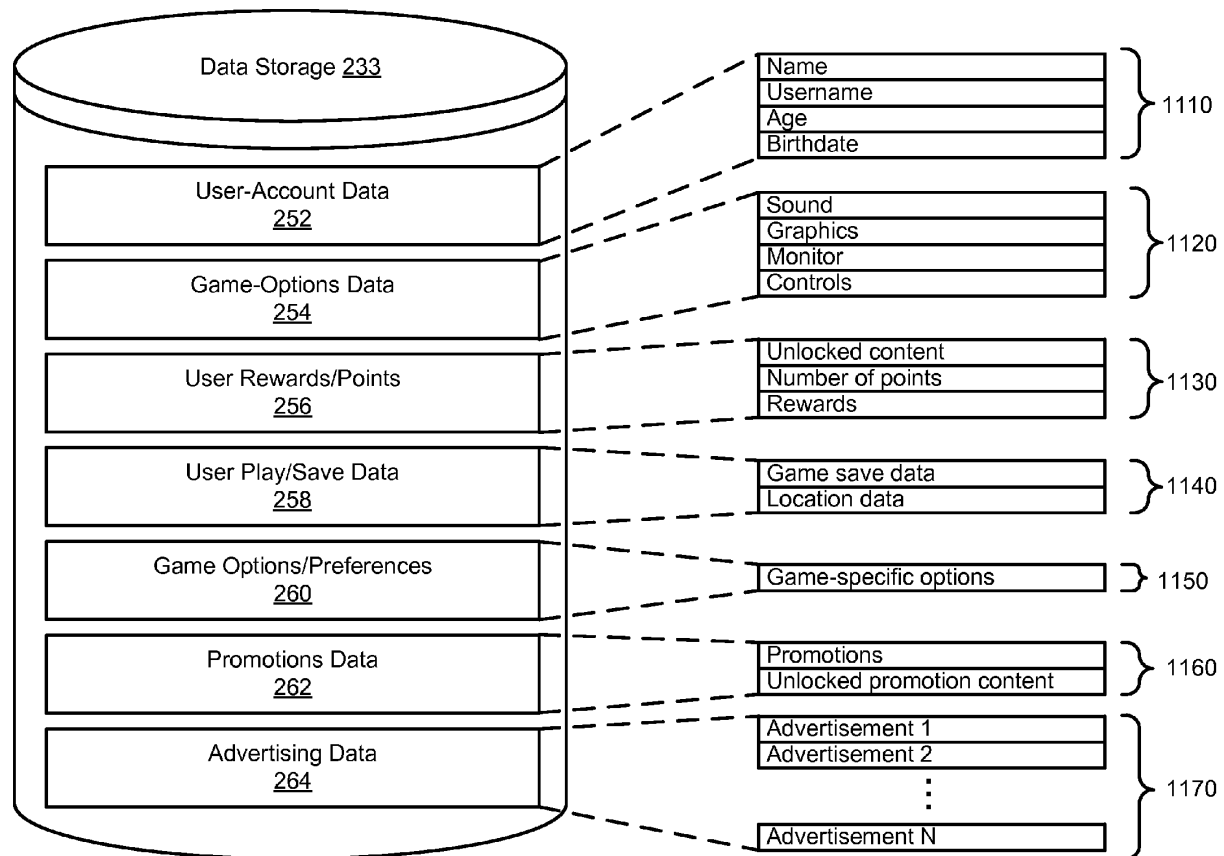


Figure 11

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**MULTILAYER FRAMEWORK AND
ARCHITECTURE WITH VARIABLE VIDEO
GAMING CAPABILITIES**

**CROSS REFERENCE TO RELATED
APPLICATIONS**

The present application claims the benefit of priority under 35 U.S.C. § 119(e) from U.S. Provisional Application No. 61/643,352 entitled “MULTILAYER FRAMEWORK ARCHITECTURE AND USER INTERFACES FOR VIDEO GAMING APPLICATIONS,” filed on May 7, 2012, by Brian Joseph Wiklem, Christopher Robert Masterton, and Carrie Ann Cowan. The entire contents of the provisional application are incorporated by reference herein. The present application also incorporates by reference the contents of utility applications entitled “PROVIDING SYNCHRONIZED AND INTEGRATED VIDEO GAMING,” “PROVIDING VIDEO GAMING ACTION VIA COMMUNICATIONS IN A SOCIAL NETWORK,” AND “VIDEO GAMING PLATFORM AND USER INTERFACE,” which are concurrently submitted, and also claim priority under 35 U.S.C. § 119(e) from U.S. Provisional Application No. 61/643,352.

BACKGROUND

The present disclosure relates to video gaming applications and platforms, including those accessed via online services or communities, for example, social networks, or directly via hosted websites, dedicated either wholly or partially to them. In particular, the present disclosure relates to multilayer system framework and architecture with variable video gaming capabilities.

In recent years, video games have become extremely popular. Video games are used not only for entertainment, but also for instructional purposes. Players typically interact with a gaming application through computer or console peripherals such as keyboard, mouse, joysticks, a wide variety of game pads, and funny controllers such as the NES Zapper®. More recently, nontraditional controller technologies such as dance pads, the Wii-mote® or the Kinect®, offering new types of gaming experiences are beginning to emerge. These technologies are capable of enhancing games to incorporate movement, creating a new experience and attracting new audiences.

With the popularity of social networks reaching epic proportions, social games have also become very popular.

With the ongoing trends and exponential growth in video gaming, it would certainly be beneficial to find better architectures for gaming applications that continue to enhance the user experience.

SUMMARY

The present disclosure overcomes the deficiencies and limitations of the prior art by providing a technology with a flexible architecture for video gaming applications. In some embodiments, the flexible architecture provides a continuous visual experience for players across different platforms (platform agnostic) and engages them at different levels. Each of the players may have a unique and different visual experience, depending upon the gaming platform a player uses. The architecture facilitates access to video gaming applications in various ways, including 1) via social networks or sites, for example, accessed via personal computers; 2) via wall posts or via an online social networking

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service that enables its users to send and read text-based posts; 3) via mobile devices (iOS®, Android™, or Windows-based smart phones); and 4) via game consoles (for example, PS3®, Xbox 360®, or Wii®).

5 Video gaming applications may be purchased via platform application stores. These applications are supported by Android (Android is a Linux-based operating system for mobile devices such as smartphones and tablet computers—it is developed by the Open Handset Alliance), iOS (a mobile operating system developed by Apple Inc.) platforms, and phones operating windows. The user interface of an iOS platform is based on the concept of direct manipulation, using multi-touch gestures. Interface control elements consist of sliders, switches, and buttons. The response to user input is immediate and provides a fluid interface.

10 Video gaming applications may be hosted or accessed via social networks, other third party services or on third party servers, stand-alone platforms, tablets, smartphones or the like. Multiple players (hundreds, thousands, if not millions) may access gaming application via any or all of these ways. In addition, the flexible architecture provides a scalable infrastructure with cross-platform pollination technology (achievements and rewards are transferred between platforms used by particular players) and secure collection of data. Video gaming applications may be based on universal themes that appeal to a broad range of demographics and provides a continuous flow of data analytics. They offer opportunities for configuring advertisements and promotions to accomplish strategic goals.

15 In some embodiments, the flexible architecture provides multiple levels of play, permitting players to engage in different ways. The different levels of play options include 1) a peer-to-peer competitive challenge level for core players, 2) a casual play option for play with friends with whom a player shares an affinity, for example, in a social network; and a 3) spectator mode that permits non-players in a network to assist friends. Feed-based triggers allow for greater rewards to players and ease of discovering games.

20 In yet other embodiments, which may include any or all of the aspects described above, the flexible architecture permits mobile play, extending the gaming arena or world to different platforms, so achievements in a particular game may be earned and shared more easily across platforms. In addition, a player may earn location-based rewards.

25 Moreover, the flexible architecture provides a system of rewards at check-in, to coax players by providing greater incentives. The flexible architecture permits concurrent “solo” play by a player or gamer, collaborative and competitive play by multiple players. The flexible architecture has user interfaces that are configured to provide different experiences for different players, including for example, a three-dimensional user experience. In some embodiments, the video gaming applications include story-driven quests and game play, giving players more than just tasks and chores. As one example, an aviation gaming application may utilize a collection of 250 or more aircrafts and include transactions relating to the aircrafts and their environment, creation of the environment in which the aircrafts operate etc. In this particular application, players may create and manage their experience (for example, build and manage an aviation empire), enjoy the thrill of history (aviation’s past), and travel the globe and fly through an open network of friendly and rival airports.

30 In yet other embodiments, the system provides a plurality of features for player control of the virtual arena including control of “play” times, “gifts” and “rewards,” “collect” and

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“decorate” features, monitor types of “play” (for example, acceleration progress), generate user content, etc.

In some embodiments, the video gaming applications may be free, when accessed via social-network platforms, in which instances revenue is generated via market place for products used during the game, direct advertising etc. The flexible architecture permits for easy access through a particular player’s social network, allowing other players to discover a particular game and permit conversion as necessary.

In yet other embodiments, linking or connecting platforms creates a more interesting gaming world.

BRIEF DESCRIPTION OF THE DRAWINGS

The present disclosure is illustrated by way of example, and not by way of limitation, in the figures of the accompanying drawings, in which like reference numerals are used to refer to similar elements.

FIG. 1 is a high-level block diagram illustrating some embodiments of a system architecture for providing video gaming platforms, accessed either via a social network (hosted on a social network server or a server associated with it) or a third party video gaming website (hosted by a third party on its server).

FIG. 2 is a block diagram illustrating some embodiments of a social network server or a third party server shown in FIG. 1, including its hardware components.

FIG. 3 is a block diagram illustrating some embodiments of a gaming platform shown in FIGS. 1 and 2, and its software components.

FIG. 4 is an example flow chart illustrating an example general method for creating or branching off a sub game.

FIG. 5 is an example flow chart illustrating an example method for obtaining a promotion.

FIG. 6 is an example flow chart illustrating an example method for assigning a status (“leader” or “core,” “follower” or “casual,” or “bystander” or “spectator”) to a player.

FIG. 7 is an example flow chart illustrating an example method for earning rewards or features within a game.

FIG. 8 is a graphical representation illustrating a virtual game arena accessed by various users with varying status and an index of user status.

FIG. 9 is a graphical representation illustrating one example of a game structure.

FIG. 10 is a graphical representation illustrating a virtual game arena with concurrent operation of multiple games.

FIG. 11 is a graphical representation of a data storage configuration with storage of game-related information.

DETAILED DESCRIPTION

The present technology is directed to a multilayer or multi-tier architecture or framework for video games or video gaming applications with variable video gaming capabilities accorded to players or gamers. The video games are for play by users (players or gamers), accessed either via social networks, or directly, on games hosted by third party servers. The specification describes examples of systems and methods for providing this multilayer architecture, video gaming platforms, and user interfaces to facilitate a unique user experience. These video gaming applications may either be hosted by an online community, for example, one or more social networks, or alternatively, by third party servers that are wholly or partially dedicated to gaming applications.

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In some embodiments, the flexible and multilayer architecture provides a continuous game and visual experience for players across different platforms (platform agnostic) and engages them at different levels of play and capability. Each of the players may have a unique and different gaming experience, depending upon the level of play and capability accorded to each player. This flexible architecture facilitates access to video gaming applications in various ways, including 1) via social networks or sites, for example, accessed via personal computers (desk tops or lap tops); 2) via wall posts or via an online social networking service that enables its users to send and read text-based posts; 3) via mobile devices (iOS, Android, or Windows-based smart phones); and 4) via game consoles (for example, PS3, Xbox 360, or Wii).

Video gaming applications may be purchased via platform application stores. These applications are supported by Android (Android is a Linux-based operating system for mobile devices such as smartphones and tablet computers—it is developed by the Open Handset Alliance), iOS (a mobile operating system developed by Apple Inc.) platforms, and phone operating windows. The user interface of iOS is based on the concept of direct manipulation, using multi-touch gestures. Interface control elements consist of sliders, switches, and buttons. The response to user input is immediate and provides a fluid interface.

Video gaming applications may be hosted or accessed via social networks, other third party services or on third party servers, stand-alone platforms, tablets, smartphones, or the like. Multiple players (hundreds, thousands, if not millions) may access gaming one or more applications via any or all of these ways. In addition, the flexible architecture provides a scalable infrastructure with cross-platform pollination technology (achievements and rewards are transferred between platforms for particular players depending on their status) and secure data collection. Video gaming applications may be based on universal themes that appeal to a broad range of demographics and provides a continuous flow of data analytics. They offer opportunities for configuring advertisements and promotions to accomplish strategic goals.

In some embodiments, the flexible architecture provides multiple levels of play, permitting players to engage in different ways and at different levels. The different levels of play options include 1) a peer-to-peer competitive challenge level for “core” players, 2) a “casual” play option for play with friends with whom a particular player shares an affinity, for example, in a social network; and 3) a “spectator” mode that permits non-players in a network to assist friends. Feed-based triggers allow for greater rewards to players and ease of discovering games.

In yet other embodiments, which may include any or all of the aspects described above, the architecture permits play via mobile devices, extending the gaming arena or world to different environments, so achievements in a particular game may be earned and shared more easily across environments, depending upon player status. In addition, a player may earn location-based rewards.

Moreover, the system provides rewards at check-in, to coax players by providing greater incentives. The architecture permits for concurrent “solo” play by a player or gamer and collaborative and competitive play between multiple players. User interfaces are configured to provide different experiences for different players, including a three-dimensional user experience in some environments. In some embodiments, the video gaming applications include story-driven quests and game play, giving players more than just

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tasks and chores. As one example, a “core” player in an aviation gaming application, may utilize a collection of 250 aircrafts and include transactions relating to the aircrafts and its environment, to create an environment in which the aircrafts operate etc. In this particular application, “core” players may create and manage their experience (for example, by creating an aviation empire), enjoy the thrill of history (aviation’s past), and travel the globe and fly through an open network of friendly and rival airports. Other players, for example, “followers” may be accorded more restricted play and capability.

The system provides variable features for player control (depending upon player status) of the virtual arena including control of “play” times, “gifts” and “rewards,” “collect” and “decorate,” monitor “play” (for example, acceleration progress), generate user content, etc.

In some implementations, the architecture accords variable status to players who can opt for different levels of play. A “core” game play status enables players to be “leaders” and play the entire game. A leader has control of all aspects of a particular gaming application. A “casual” or “follower” game play status enables players to play from a different perspective, providing access to only a portion of the entire game. A “spectator” or “bystander” game play enables players to play from a reactive perspective.

Players (with any status described above) may access game play via mobile devices, at any location, and receive location-based rewards. They may access a virtual game arena, their own or that of other players, via several platforms and take up play where they left off. They may link up friends for collaborative play. Players may also participate in standalone game play, via tablets, mobile devices, console-based gameplay, target-based game play or the like. In addition, the system permits cross-pollination game play, sending game objects from one game world or arena to another.

In the following description, for purposes of explanation, numerous specific details are indicated in order to provide a thorough understanding of the technology described. It should be apparent, however, to one skilled in the art, that this technology can be practiced without these specific details. In other instances, structures and devices are shown in block diagram form in order to avoid obscuring the technology. For example, the present technology is described with some embodiments below with reference to particular user interfaces or user platforms and particular hardware. However, the present technology applies to any type of computing device or platform that can receive data and commands, and any devices providing services. Moreover, the present technology is described below primarily in the context of video gaming applications configured to enhance and improve the quality of these gaming applications in order to facilitate synchronous play by hundreds, thousands, if not millions of players. The players may enjoy different user experiences based on their individual preferences and may enjoy seamless play across different gaming platforms or devices (desktop computer, mobile device or the like). However, those skilled in the art should understand that the present technology applies to any type of application and can be used for other applications beyond gaming applications.

Reference in the specification to “one embodiment,” “an embodiment,” or “some embodiments” means simply that one or more particular features, structures, or characteristics described in connection with the one or more embodiments is included in at least one or more embodiments that are described. The appearances of the phrase “in one embodi-

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ment” in various places in the specification are not necessarily all referring to the same embodiment.

Some portions of the detailed descriptions that follow may be presented in terms of algorithms and symbolic representations of operations on data bits within a computer memory of either one or more computing devices or gaming platforms. These algorithmic descriptions and representations are the means used by those skilled in the data processing arts to most effectively convey the substance of their work to others skilled in the art. An algorithm as indicated here, and generally, is conceived to be a self-consistent sequence of steps leading to a desired result. The steps are those requiring physical manipulations of physical quantities. Usually, though not necessarily, these quantities take the form of electrical or magnetic signals capable of being stored, transferred, combined, compared, and otherwise manipulated. It has proven convenient at times, principally for reasons of common usage, to refer to these signals as bits, values, elements, symbols, characters, terms, numbers, or the like.

It should be understood, however, that all of these and similar terms are to be associated with the appropriate physical quantities and are merely convenient labels applied to these quantities. Unless specifically stated otherwise, as apparent from the following discussion, it should be appreciated that throughout the description, discussions utilizing terms such as “processing,” “computing,” “calculating,” “determining,” or “displaying” or the like, refer to the action and processes of a computer system, or similar electronic computing device or platform, that manipulates and transforms data represented as physical (electronic) quantities within the computer system’s registers and memories into other data similarly represented as physical quantities within the computer system memories or registers or other such information storage, transmission, or display devices.

The present technology also relates to an apparatus or one or more systems for performing the operations described here. This apparatus or one or more systems may be specially constructed for the required purposes, or it may comprise a general-purpose computer selectively activated or reconfigured by a computer program stored in the computer. Such a computer program may be stored in a computer-readable storage medium, such as, but not limited to, any type of disk including floppy disks, optical disks, CD-ROMs, magnetic disks, read-only memories (ROMs), random access memories (RAMs), EPROMs, EEPROMs, magnetic or optical cards, flash memories including USB keys with non-volatile memory or any type of media suitable for storing electronic instructions, each coupled to a computer system bus.

This technology can take the form of an entirely hardware embodiment, an entirely software embodiment, or an embodiment containing both hardware and software components. In some embodiments, this technology is implemented in software, which includes but is not limited to firmware, resident software, microcode, etc.

Furthermore, this technology can take the form of a computer program product accessible from a computer-usable or computer-readable medium providing program code for use by or in connection with a computer or any instruction execution system. For the purposes of this description, a computer-usable or computer-readable medium may be any apparatus that can contain, store, communicate, propagate, or transport the program for use by or in connection with the instruction execution system, apparatus, or device.

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A data processing system suitable for storing and/or executing program code includes at least one processor coupled directly or indirectly to memory elements through a system bus. The memory elements may include local memory employed during actual execution of the program code, bulk storage, and cache memories, which provide temporary storage of at least some program code in order to reduce the number of times code must be retrieved from bulk storage during execution.

Input/output or I/O devices (including but not limited to keyboards, displays, pointing devices, etc.) can be coupled to the system either directly or through intervening I/O controllers.

Communication units including network adapters may also be coupled to the systems to enable them to couple to other data processing systems, remote printers, or storage devices, through either intervening private or public networks. Modems, cable modems, and Ethernet cards are just a few examples of the currently available types of network adapters.

Finally, the algorithms and displays presented in this application are not inherently related to any particular computer, gaming platform or other apparatus. Various general-purpose systems may be used with programs in accordance with the teachings here, or it may prove convenient to construct more specialized apparatus to perform the required method steps. The required structure for a variety of these systems is outlined in the description below. In addition, the present technology is not described with reference to any particular programming language. It should be understood that a variety of programming languages may be used to implement the technology as described here.

System Architecture Overview

FIG. 1 is a high-level block diagram illustrating some embodiments of systems for providing gaming applications, either via social networks or on third party servers. The system 100 illustrated in FIG. 1 provides gaming platforms 106a or 106b so that participants (players or gamers) may access one or more gaming applications, initiate a play on one device or gaming platform and continue play at another device or gaming platform, making transitions between devices or platforms essentially seamless and enabling a continuous playing experience.

The system 100 includes one or more social network servers 102a through 102n that may be accessed via user devices 115a, 115b through 115n, which are used by users 125a, 125b, through 125n, to connect to any one of the social network servers 102a through 102n. The user devices 115a through 115n may be a desktop computer, a game system or a mobile phone. These entities (user devices 115a-115n and social network servers 102a-102n) are communicatively coupled via one or more networks 105a, 105b, and 105n. Although only three user devices or platforms 115a, 115b through 115n are illustrated, any numbers of user devices or platforms 115n may be used by any number of users (players, gamers, or the like) 125n. Moreover, those skilled in the art should recognize that while the present disclosure is described below primarily in the context of providing gaming applications, the present disclosure may be applicable to other types of applications, for entertainment or otherwise. As one example, gaming applications may include operations for creating plays, participating in plays, etc.

The user devices 115a through 115n in FIG. 1 are illustrated by way of example. Although FIG. 1 illustrates only three devices, the present disclosure applies to any system architecture having one or more user devices 115a through

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115n, therefore, any number of user devices 115n (hundreds, thousands, even millions or more) may be used.

Furthermore, while only three networks 105a, 105b, and 105n are illustrated as coupled to the user devices 115a, 115b through 115n, the social network servers 102a-102n, the profile server 130, the web server 132, and one or more third party servers 134a through 134n, in practice, any number of networks 105n may be connected, either directly or indirectly, to these entities. In addition, although only two third party servers 134a through 134n are shown, the system architecture 100 may include one or more third party servers 134n, each with a gaming platform 106b through 106n, operating one or more gaming applications that are similar or different.

In some embodiments, the social network server 102a is coupled to the network 105a, via a signal line 110. The social network server 102a includes a social network application 104, which comprises the software routines and instructions to operate the social network server 102a and its functions and operations. Although only one social network server 102a is described here, persons of ordinary skill in the art should recognize that multiple servers may be present, as illustrated by social network servers 102n, each with functionality similar to social network server 102a or different.

The term "social network" as used here encompasses its plain and ordinary meaning including, but not limited to, any type of social structure where the users are connected by a common feature or link. The common feature includes relationships/connections, e.g., friendship, family, work, a similar interest, etc. The common features are provided by one or more social networking systems, such as those included in the system architecture 100, including explicitly-defined relationships and relationships implied by social connections with other online users, where the relationships form a social graph 108.

The term "social graph" as used here encompasses its plain and ordinary meaning including, but not limited to, a set of online relationships between users (players and non-players), such as provided by one or more social networking systems, operating on social network servers 102a through 102n, including explicitly-defined relationships and relationships implied by social connections with other online users, where the relationships form a social graph. In some examples, the social graph 108 may reflect a mapping of these users and how they are related.

It should be understood that social network server 102a and the social network software/application 104 are representative of a single social network. Each of the plurality of social networks 102a through 102n is coupled to any one of the networks 105a, 105b, and 105n, each having its own server, application, and social graph. For example, a first social network system operated or hosted on a social network server may be directed to business networking, a second directed to or centered on academics, a third directed to local business, a fourth directed to dating or gaming, and yet others directed to other general interests or perhaps a specific focus. Yet, each may provide access to a gaming platform 106a for operating or providing access to video gaming applications.

A profile server 130 is illustrated as a stand-alone server in FIG. 1. In other embodiments of the system architecture 100, all or part of the profile server 130 may be part of the social network server 102a. The profile server 130 is directly connected to the network 105a, via a line 131. The profile server 130 stores profiles for all the users that belong to a social network. A third party server 134a is connected to the network 105b, via a signal line 135. A web server 132 is

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connected, via a line 133, to the network 105 n . The web server 132 delivers access to content, via the internet, for example, by hosted websites or the like. Users may use the web browsers on their electronic devices or gaming platforms to browse for gaming applications and access websites hosting gaming applications. An online-live-gaming server 140 is connected to the network 105 a by line 141 and a cross-platform server 142 is connected to a network 105 n by line 143. The cross-platform server 142 may serve as a gateway to different servers and accommodating access by different user platforms.

The user devices or player gaming platforms 115 a through 115 n can be a computing device, for example, a laptop computer, a desktop computer, a tablet computer, a mobile telephone (iOS, Android, or windows-based phone, a personal digital assistant (PDA), a mobile email device, a portable game player, a game console (PS3, Xbox 360, Wii or the like) a portable music player, a television with one or more processors embedded in the television or coupled to it, or any other electronic device capable of accessing a network and participating in a gaming application. The user devices 115 a through 115 n include user-interface applications indicated by reference numerals 117 a , 117 b , through 117 n .

The network 105 a , 105 b , or 105 n , is of conventional type, wired or wireless, and may have any number of configurations, such as a star configuration, token ring configuration, or other configurations known to those skilled in the art. Furthermore, the network 105 may comprise a local area network (LAN), a wide area network (WAN, e.g., the Internet), and/or any other interconnected data path across which one or more devices may communicate.

In another embodiment, the network 105 a , 105 b , or 105 n may be a peer-to-peer network. The network 105 a , 105 b , or 105 n may also be coupled to or include portions of one or more telecommunications networks for sending data in a variety of different communication protocols.

In yet another embodiment, the network 105 a , 105 b , or 105 n , includes Bluetooth communication networks or a cellular communications network for sending and receiving data such as via short messaging service (SMS), multimedia messaging service (MMS), hypertext transfer protocol (HTTP), direct data connection, WAP, email, etc.

In some embodiments, the social network server 102 a , the profile server 130, the web server 132, the online-live-gaming server 140, and cross-platform server 142, and the third party servers 134 a through 134 n are hardware servers including a processor, memory, and network communication capabilities. One or more of the users (players or gamers) 125 a through 125 n access any of the social network servers 102 a through 102 n , or the third party servers 134 a through 134 n , or any of the other servers, via browsers in their user devices or gaming platforms and via the web server 132. The user devices 115 a through 115 n have user interface applications 117 a , 117 b , through 117 n , that manage access by particular players to select gaming applications or their choice.

FIG. 2 is a block diagram illustrating some embodiments of the social network server 102 (a through n) or third party server 134 (a through n) or any other server hosting a gaming environment. In FIG. 2, like reference numerals have been used to reference like components with the same or similar functionality that has been described above with reference to FIG. 1. Since those components have been described above that description is not repeated here. The social network server 102 a generally comprises one or more processors, although only one processor 235 is illustrated in

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FIG. 2. The processor is coupled via a bus 220 to memory 237 and database storage 233, which stores user account data 252, game options data 254, user rewards/points 256, user play/save data 258, game options/preferences 260, promotion data 262 and advertising data 264.

In some embodiments, the database storage 233 is a database organized by the hosting server and the user or either one. For each user or player, the data storage 233 stores data on the user and user game plays etc. For example, this data may include related social network activity such as posts, shares, invitations, status changes etc., associated with each user engaged in a video gaming application.

A user or player 125 a , via a user or gaming device 115 a , communicates a request to initiate a gaming application or reacts to a keyword via communication unit 239. The “set up” for a video gaming application is managed by the gaming platform 106 a . It should be recognized that the gaming platform 106 a (illustrated in the social network server 102 a) and 106 b (illustrated in the third party server 134 a) are shown separately, but include similar functionality, at least for purposes of operating the gaming applications. A user or player display 25 coupled to the user device 115 a through n , is configured to provide the video source of the gaming application in one of many formats, high definition graphics, three dimensional formats etc.

Referring now to FIG. 3, like reference numerals have been used to reference like components with the same or similar functionality that has been described above with reference to FIG. 1. Since those components have been described above, that description is not repeated here. The gaming platform or environment 106 (a or b) includes various modules that are programmed to perform the functionalities described here. These modules may be variously distributed or may be in a single unit. The gaming platform 106 includes a user/player interface module 301, a permissions module 303, a user/player account module 305, a user/player status module 307, a promotion module 309, a game initiation module 311, and a social-network module 313. Each of these modules is coupled to a software communication mechanism 320 to communicate the other modules. Examples of a software communications mechanism 320 may be an object bus (such as COBRA), direct socket communication (such as TCP/IP sockets) among software modules, remote procedure calls, UDP broadcasts and receipts, HTTP connections, function or procedure calls etc. Further, any or all of the communication could be secure (SSH, HTTPS, etc.). The software communication can be implemented on any underlying hardware, such as a network, the Internet, a bus 220 of FIG. 2, or a combination thereof etc.

As one example, a particular user 125 a communicates via a user device 115 a , to either initiate or react to a game play. The user interface module 301 facilitates a connection of the user device 115 a with the social network server 102 a , in the event the player wishes to engage or participate in a gaming application via the social network server 102 a . The permission module 303 ensures that the user device is compliant with protocols and any privacy concerns. Once a video gaming application has been set up, the user/player account module 305 makes a note of the user to determine if the user has an existing account or must create one. The user/player status module 307 considers the status of the various users (“leader,” “follower,” or “spectator”). A promotion module 309 operates the necessary promotions permitting players to earn rewards accorded by the promotions. The game initiation module 311 initiates play and the social network module

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313 tracks the applications engaged by a particular player and updates the player's social profile accordingly.

Example Methods

FIG. 4 is a flow chart illustrating one example method 400 for one or more users (players or gamers) to select a "main" game and branch off for playing a portion of the "main" game. The method 400 begins with selecting a "main" game at block 402, and initiating a game play, for either "solo" play or collaborative or cooperative play, illustrated by block 404. The method 400 proceeds to the next block 406, at which point, one or more players (with their user devices) create one or more sub games based on the "main" game or branching off from the "main" game. As explained above, players may pursue a particular aspect of the "main" game, separately, either via the same player device, or via another user device (for example, move from a desktop or dedicated game console, to a mobile device, for example, a smart-phone).

The method 400 proceeds to block 408, at which stage, user information relating to the sub game is stored on the user device. At block 410, the method 400 proceeds and transfers the user information to the "main" game. Finally, the method 400 proceeds to block 412, at which stage, the "main" game is synchronized with the user information obtained from the sub game.

Referring now to the flow chart illustrated in FIG. 5, an example method for obtaining a promotion is described. As described above, video gaming applications may be used in conjunction with promotions or advertising in order to coax players to purchase products or services that are either related to the gaming applications or otherwise. The user interface is configured to provide rewards to players upon receiving the promotions or advertising. The example method 500 illustrated here begins at block 502, where user or player accounts are created when a user or player decides to initiate play of a particular gaming application. The player then participates in the promotion, for example, by viewing the particulars of a promotion (advertising on a product or service), and receives additional points for creating an account, as indicated at block 504. The method 500 proceeds to block 506, where the promotion is stored into the particular player's account and at block 508 the player initiates game play.

Referring now to the flow chart illustrated in FIG. 6, some example operations for providing multiple levels of play are illustrated. In particular, FIG. 6 illustrates an example method 600 for assigning a status to a player. The method 600 begins and proceeds to block 602, at which point users are signed in. The user or player can indicate preferences for the level of play the user desires to participate at, which are received by the video gaming platform, as illustrated at block 604. The video gaming platform assigns a status to the user, at block 606, for example, designating the user as a "leader," a "follower," a "bystander" or any other designation used by the video gaming application. Each of these designations imposes limits on play associated with them. For example, as indicated above, a "leader" is permitted to play the entire game whereas a "follower" is permitted to play only a portion of the game. The video gaming platform modifies player capabilities based on user status, as illustrated at block 608. User "status" accords full play capabilities to a "leader," "restricted" or "limited" play capabilities to a "follower" and "viewing" and capability to "influence" play with keyword responses to a "bystander."

FIG. 7 illustrates an example method 700 for earning rewards/features within a game. The example method 700 begins and proceeds to block 702, at which stage, a user or

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player signs in or is displayed log-in options. The method 700 proceeds to block 704 including one or more operations for initiating or accepting user game play. The method 700 proceeds to block 706, at which stage, one or operations receive rewards and/or features for players based on game play. The method 700 proceeds to the next block 708, which includes one or more operations for storing received rewards and/or features for player accounts.

FIG. 8 illustrates that multiple users, for example, Users 1, 2, 3, through N, each with a different status, for example, either "leader," "bystander," or "follower," may initiate games, for example Game 1 (indicated by reference numeral 810a), Game 2 (indicated by reference numeral 810b), Game 3 (indicated by reference numeral 810c), through Game N (indicated by reference numeral 810d). Each of these games is played in a virtual game arena 804, either individual or shared, hosted on a dedicated server or in a cloud. User 2 is illustrated as branching off a sub game 1 (indicated by reference numeral 820), for separate play. Any information accumulated during the sub game is synchronized after User 2 reconnects to the original game. A user with "bystander" status may influence the game by responding to wall posts or responding with a key word. Reward or point allocation is based on the status of the player. For example, a player playing a game (for example, a follower), receives rewards or takes away from the main game player more than a bystander does. A bystander does not receive any rewards; its role is simply to assist a friend or influence game play by a "core" player.

FIG. 9 illustrates a video gaming scenario, with two core players 1 and 2 (at A and D), who have a "leader" status, illustrated at 902 and 908. A "casual" player or "follower" (at B) is illustrated by reference numeral 904 and has the capability to influence both the core players, as indicated by the arrows. Additionally, a "core" player, for example, Player 2, can participate as a "bystander" as well and influence another "core" player, Player 1. A non-player or "bystander" may also participate and provide keyword-based participation. All the various players interact with each other, some having larger impact (those that are "leader" or "core" players) on the play of another "core" player, whereas a "casual" player has a smaller or little impact on the play of others, and a "bystander" has even less impact.

As one example, a religious gaming application is described here. A "core" player may create his or her own church or organization. Another "core" player 2 may create his or her own church or organization as well. The "casual" player 3 may be a follower of both "core" Player 1 and Player 2, such that acts by the "follower" either enhance or detract a play by Player 1 or Player 2. For example, the "follower" Player 3 may give virtual money (\$10 per day out of a \$20) to each of the "core" players. Circumstances may change this flow of money, for example, "core" Player 2 upsets follower Player 3, who routes all of his virtual money to Player 1. Player 2 may retaliate against Player 3, by initiating an action against Player 1, creating a deficit in his or her account, thereby impacting the play by Player 1. Likewise, the bystander C may continue to influence plays by Player 1 or Player 2.

FIG. 10 illustrates a gaming scenario with the virtual game arena 804 with Game 1 (indicated by reference numeral 810a), Game 2 (indicated by reference numeral 810b), Game 3 (indicated by reference numeral 810c) through Games N (indicated by reference numeral 810d) engaged by users. A user creates an account to play any of these games and may receive display of a promotion or

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advertisement. The user may acknowledge the promotion and instantly earn points or rewards from the game. These operations are controlled by a controller or processor 1010. User information is recorded in memory 1020. The user information may be user-game relationship data, user points (check-in rewards and points earned by play).

FIG. 11 illustrates an example data storage configuration. The data storage 233 may include various types of data. In a first data cell 252, the data storage 233 includes user-account data 252, which may include a name, user name, age and birthdate, all of these items indicated generally by reference numeral 1110. The data storage 233 in a second cell may include a game-options data, including data on sound, graphics, monitor, and controls, indicated generally by reference numeral 1120. The data storage 233 may include in a third cell, user rewards/points including data on unlocked content, number of points, and rewards, all of these items indicated generally by reference numeral 1130. In a fourth cell, the data storage 233 includes a user play/save data indicated by reference numeral 258 including as examples "game save" data or "location" data, both examples indicated generally by reference numeral 1160. In a fifth cell, the data storage 233 includes game options/preferences, indicated by reference numeral 260, including as one example game-specific options, indicated by reference numeral 1150. In a sixth cell, the data storage 233 may include promotions data, indicated by reference numeral 262, including as examples data on promotions, and unlocked promotion content, indicated generally by reference numeral 1160. In a seventh cell, the data storage 233 includes advertising data, indicated by reference numeral 264, which may include data on advertisements 1, 2, through N, all of this data indicated generally by reference numeral 1170.

The foregoing description of the embodiments of the present technology has been presented for the purposes of illustration and description. It is not intended to be exhaustive or to limit the present technology to the precise form disclosed. Many modifications and variations are possible in light of the above teaching. It is intended that the scope of the present technology be limited not by this detailed description, but rather by the claims of this application. As should be understood by those familiar with the art, the present technology may be embodied in other specific forms, without departing from the spirit or essential characteristics thereof. Likewise, the particular naming and division of the modules, routines, features, attributes, methodologies, and other aspects are not mandatory or significant, and the mechanisms that implement the present invention or its features may have different names, divisions and/or formats. Furthermore, as should be apparent to one of ordinary skill in the relevant art, the modules, routines, features, attributes, methodologies and other aspects of the present technology can be implemented as software, hardware, firmware, or any combination of the three. Also, wherever a component, an example of which is a module, of the present technology is implemented as software, the component can be implemented as a standalone program, as part of a larger program, as a plurality of separate programs, as a statically or dynamically linked library, as a kernel loadable module, as a device driver, and/or in every and any other way known now or in the future to those of ordinary skill in the art of computer programming. Additionally, the present technology is in no way limited to implementation in any specific programming language, or for any specific operating system or environment. Accordingly, the disclosure of the present technology is intended to be illustrative,

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but not limiting, of the scope of the present invention, which is set forth in the following claims.

What is claimed is:

1. A computer-implemented method for implementing a multilayer architecture for video gaming, comprising:
 - providing a video gaming environment hosted on a server;
 - providing access, using the server, to the video gaming environment by a plurality of user devices associated with a plurality of users; and
 - designating, using the server, a status level from a plurality of status levels to each user of the plurality of users, wherein each status level of the plurality of status levels provides a different capability within the video gaming environment, the plurality of status levels including a first player status level that accords full access and play within the video gaming environment, a second player status level that accords restricted access and play within the video gaming environment; and a third player status level that accords reactive access and play within the video gaming environment, the reactive access specifying that a keyword response commented by a user having the third player status level on a social network post of a user having the first player status level or the second player status level affects elements of gameplay on the video gaming environment.
2. A computer-implemented method according to claim 1, wherein the plurality of users access the video gaming environment via the user devices including at least one of a group of a personal computer, a laptop, a mobile device, a gaming console, and a tablet.
3. A computer-implemented method according to claim 1, wherein the video gaming environment is hosted in association with a social network server.
4. A computer-implemented method according to claim 1, wherein the video gaming environment is hosted on a third party server.
5. A computer-implemented method according to claim 1, wherein the video gaming environment is hosted in a cloud of distributed servers.
6. A computer-implemented method according to claim 1, wherein the video gaming environment is hosted on a cross-platform server accommodating access by all the user devices.
7. A computer-implemented method according to claim 1, wherein the plurality of users access the video gaming environment for concurrent play.
8. A system for implementing a multilayer architecture for video gaming, comprising a processor and a memory, wherein the memory provides instructions that cause the processor to:
 - provide a video gaming environment hosted on a server;
 - provide access to the video gaming environment by a plurality of user devices associated with a plurality of users;
 - designate a status level from a plurality of status levels to each user of the plurality of users, wherein each status level of the plurality of status levels provides a different capability within the video gaming environment, the plurality of status levels including a first player status level that accords full access and play within the video gaming environment, a second player status level that accords restricted access and play within the video gaming environment; and a third player status level that accords reactive access and play within the video gaming environment, the reactive access specifying that a keyword response commented by a user having

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the third player status level on a social network post of a user having the first player status level or the second player status level affects elements of gameplay on the video gaming environment.

9. A system according to claim 8, wherein the plurality of users access the video gaming environment via the user devices including at least one of a group of a personal computer, a laptop, a mobile device, a gaming console, and a tablet.

10. A system according to claim 8, wherein the video gaming environment is hosted in association with a social network server.

11. A system according to claim 8, wherein the video gaming environment is hosted on a third party server.

12. A system according to claim 8, wherein the video gaming environment is hosted in a cloud of distributed servers.

13. A system according to claim 8, wherein the video gaming environment is hosted on a cross-platform server accommodating access by all of the user devices.

14. A system according to claim 8, wherein the plurality of users access the video gaming environment for concurrent play.

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(12) United States Patent
Wiklem et al.**(10) Patent No.: US 9,604,132 B1****(45) Date of Patent: Mar. 28, 2017****(54) VIDEO GAMING PLATFORM AND USER INTERFACE****(71) Applicant: CP Studios LLC**, Salt Lake City, UT (US)**(72) Inventors: Brian Joseph Wiklem**, Salt Lake City, UT (US); **Carrie Ann Cowan**, Salt Lake City, UT (US)**(73) Assignee: CP Studios LLC**, Salt Lake City**(*) Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.**(21) Appl. No.: 13/889,266****(22) Filed: May 7, 2013****Related U.S. Application Data****(60)** Provisional application No. 61/643,352, filed on May 7, 2012.**(51) Int. Cl.**
A63F 13/12 (2006.01)
A63F 13/30 (2014.01)**(52) U.S. Cl.**
CPC **A63F 13/12** (2013.01)**(58) Field of Classification Search**
CPC .. A63F 9/24; A63F 13/00; A63F 13/12; A63F 13/33
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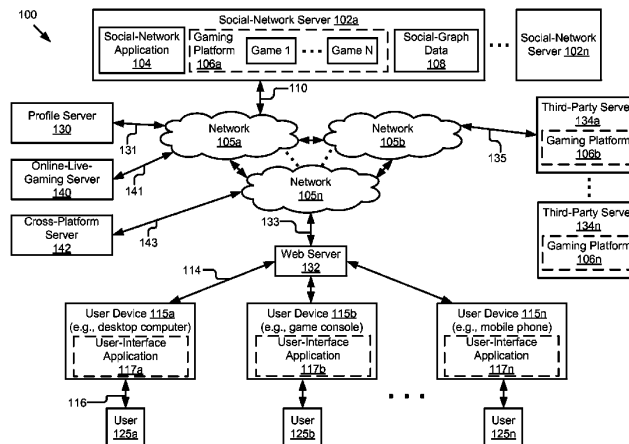
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Primary Examiner — Omkar Deodhar*Assistant Examiner* — Shauna-Kay Hall**(74) Attorney, Agent, or Firm** — Patent Law Works LLP**(57) ABSTRACT**

The present technology is directed to flexible platform architecture for either providing or facilitating video gaming applications. In some implementations, the flexible platform architecture provides a fluid and continuous visual experience for players across different platform types (platform agnostic) that are integrated and engage users at different levels. Each of the players experiences a unique and different visual experience, depending upon the particular gaming platform and/or user interface utilized by a player. The flexible platform architecture has user interfaces that are configured to provide different experiences for different players, including for example, a three-dimensional or a two-dimensional user experience. The platform architecture may facilitate access to video gaming applications via distinct user interfaces, including 1) via social networks or online social networking services, including via wall posts or by enabling users to send and read text-based posts, 3) via mobile devices, and 4) via game consoles.

18 Claims, 33 Drawing Sheets

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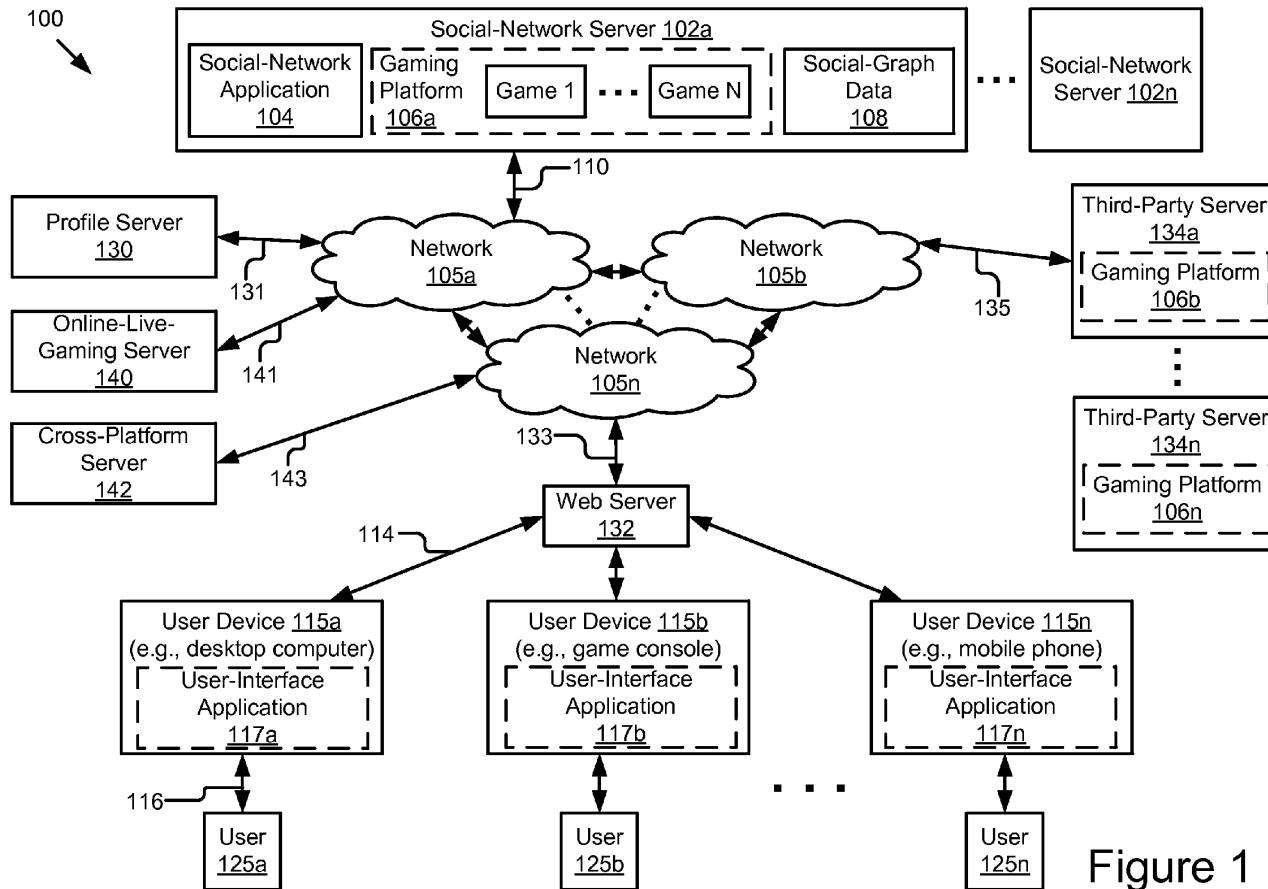


Figure 1

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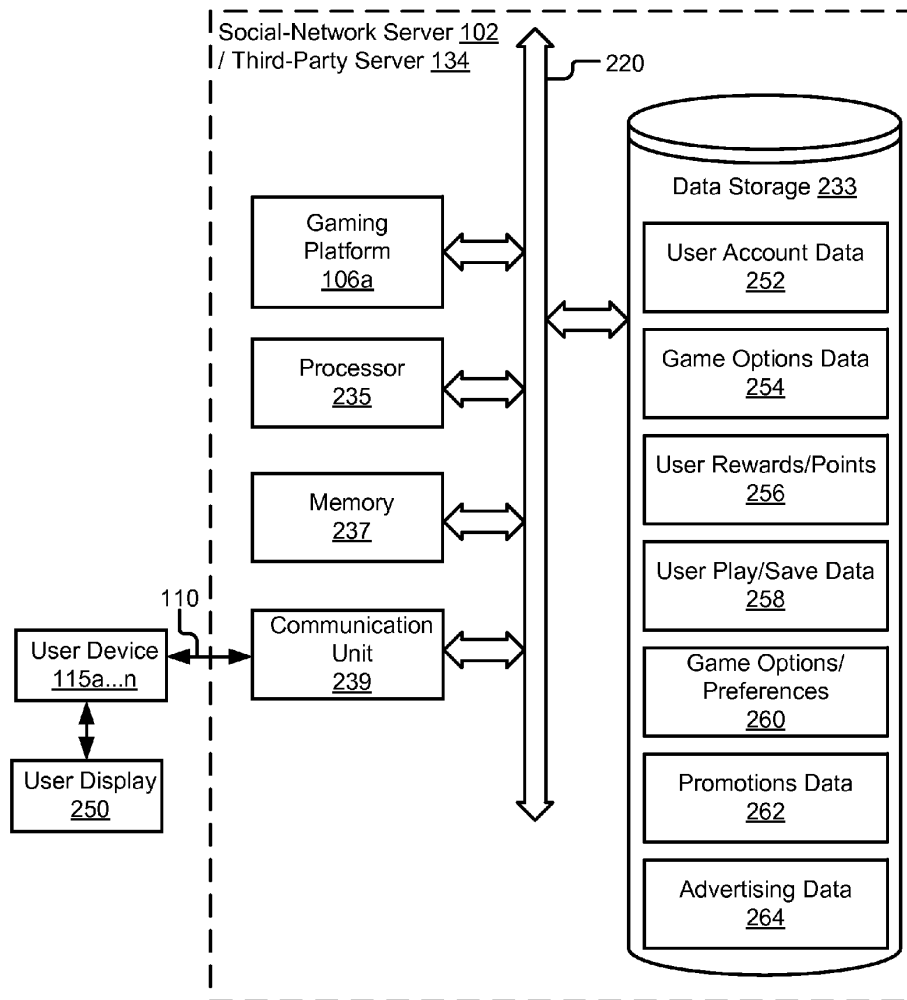


Figure 2

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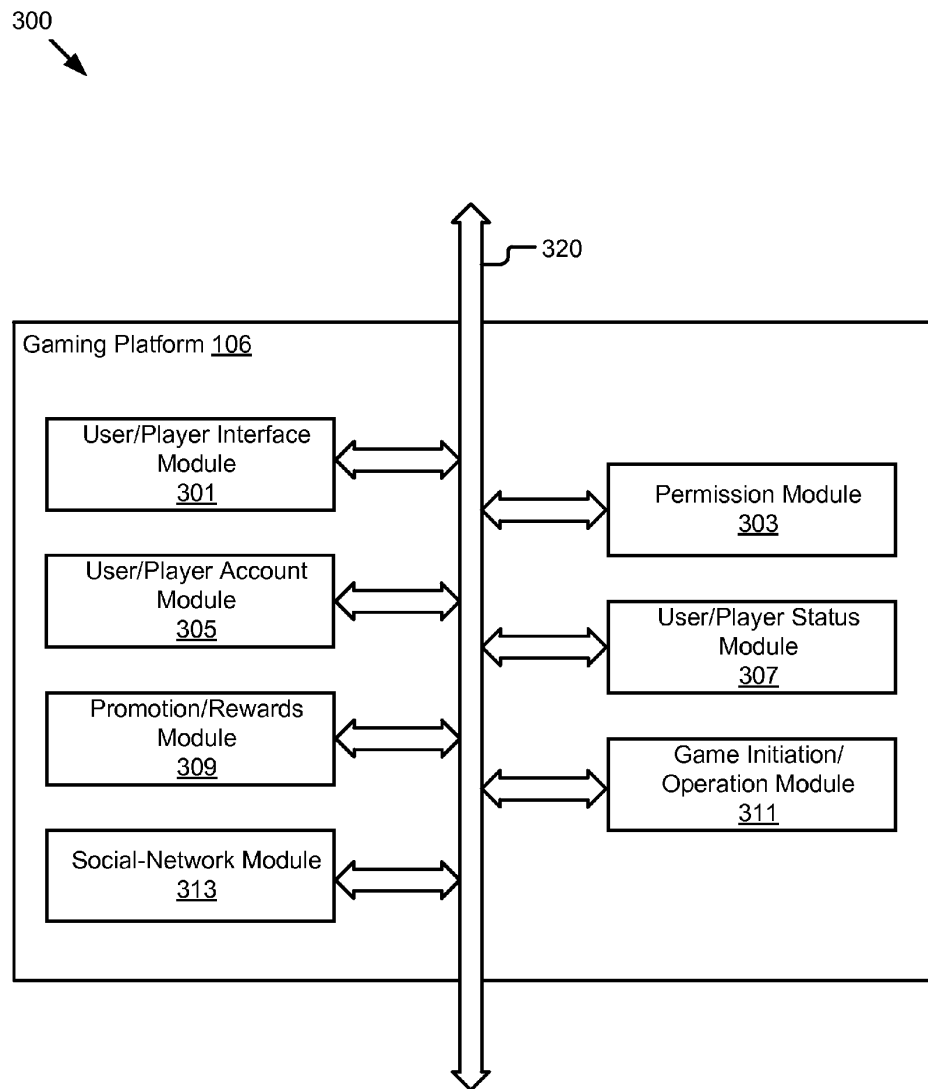


Figure 3

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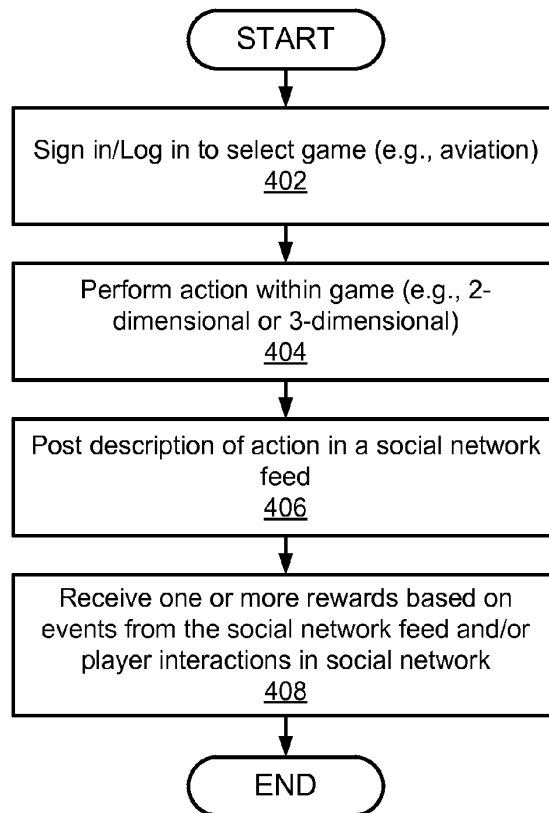


Figure 4

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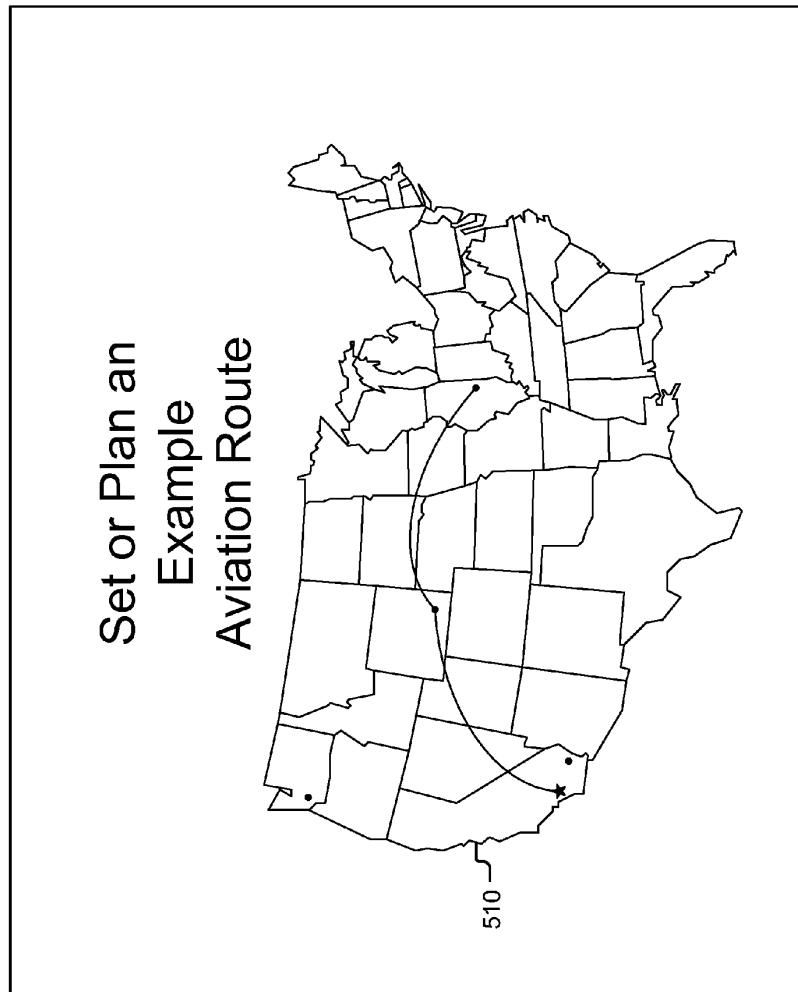


Figure 5

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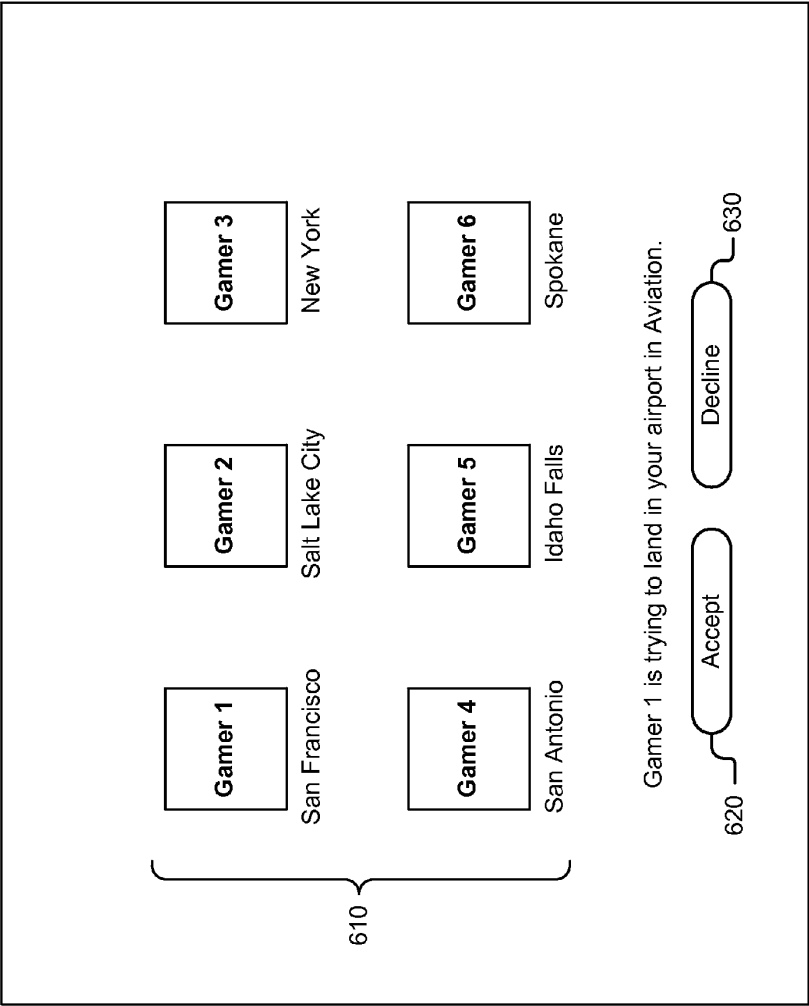


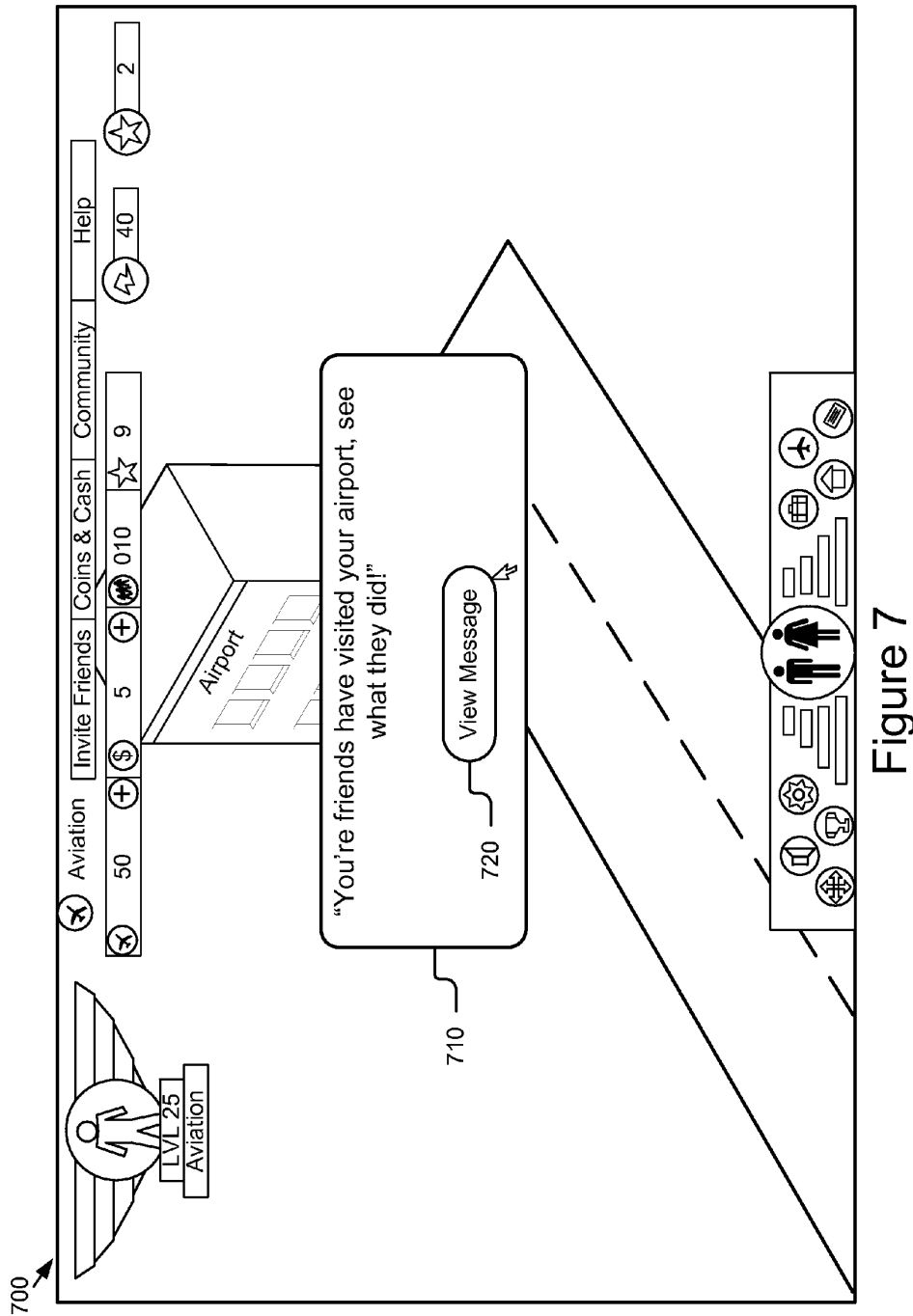
Figure 6

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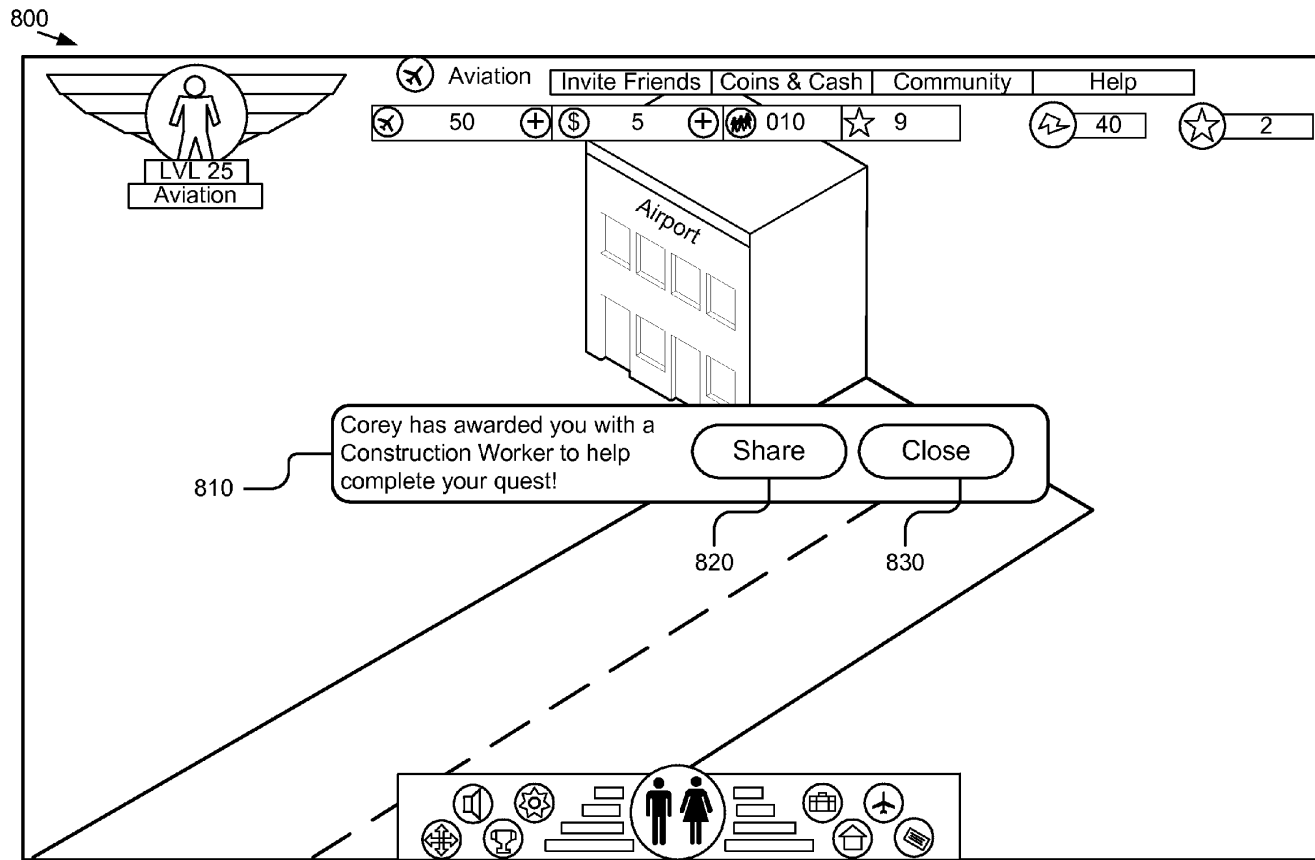


Figure 8

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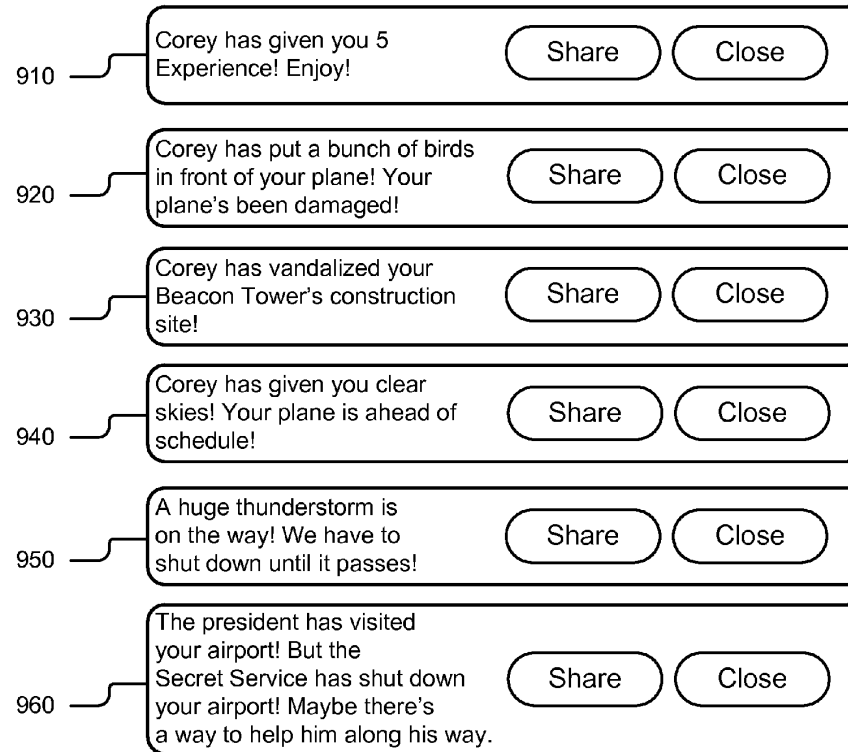


Figure 9

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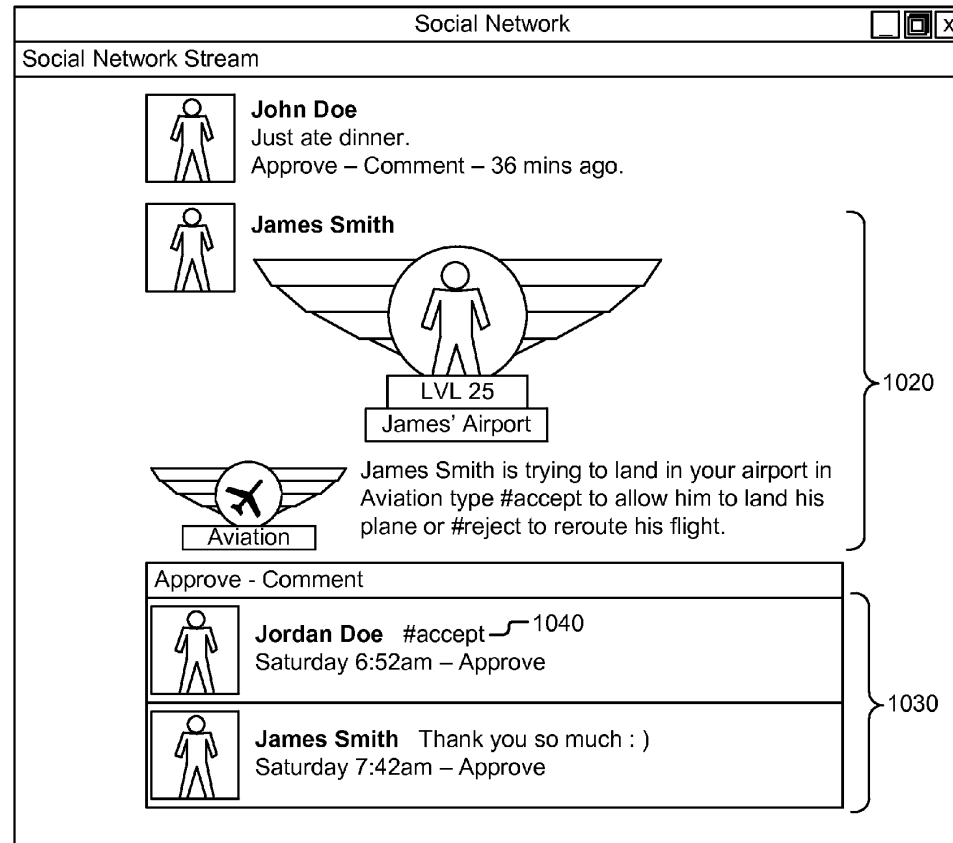


Figure 10

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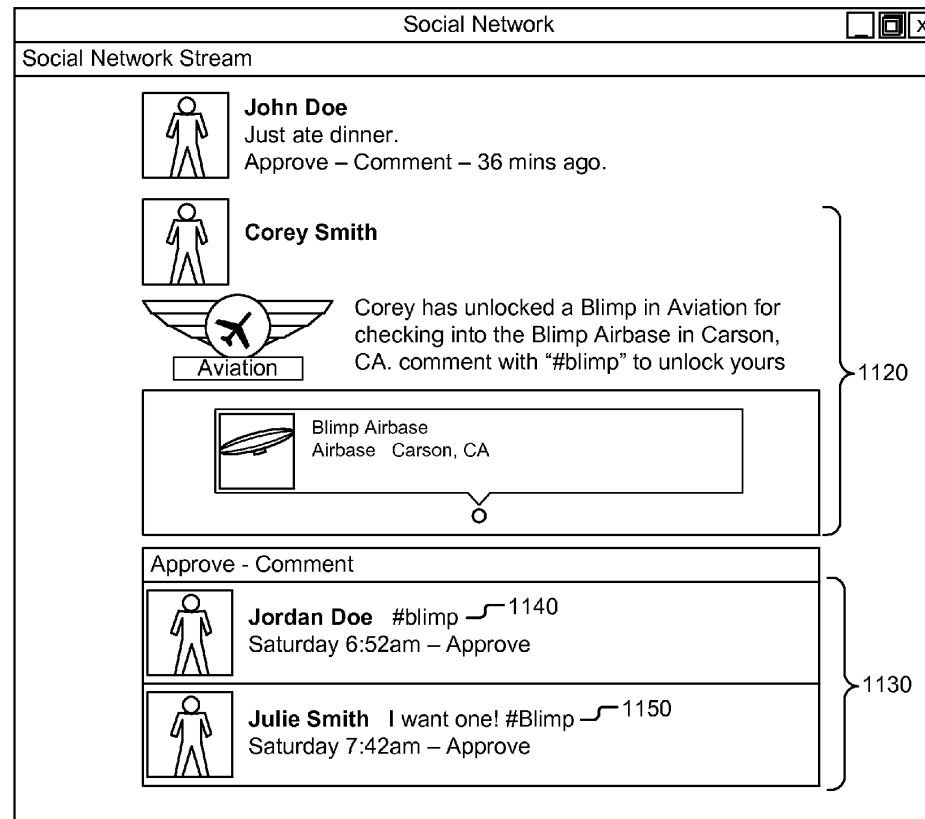


Figure 11

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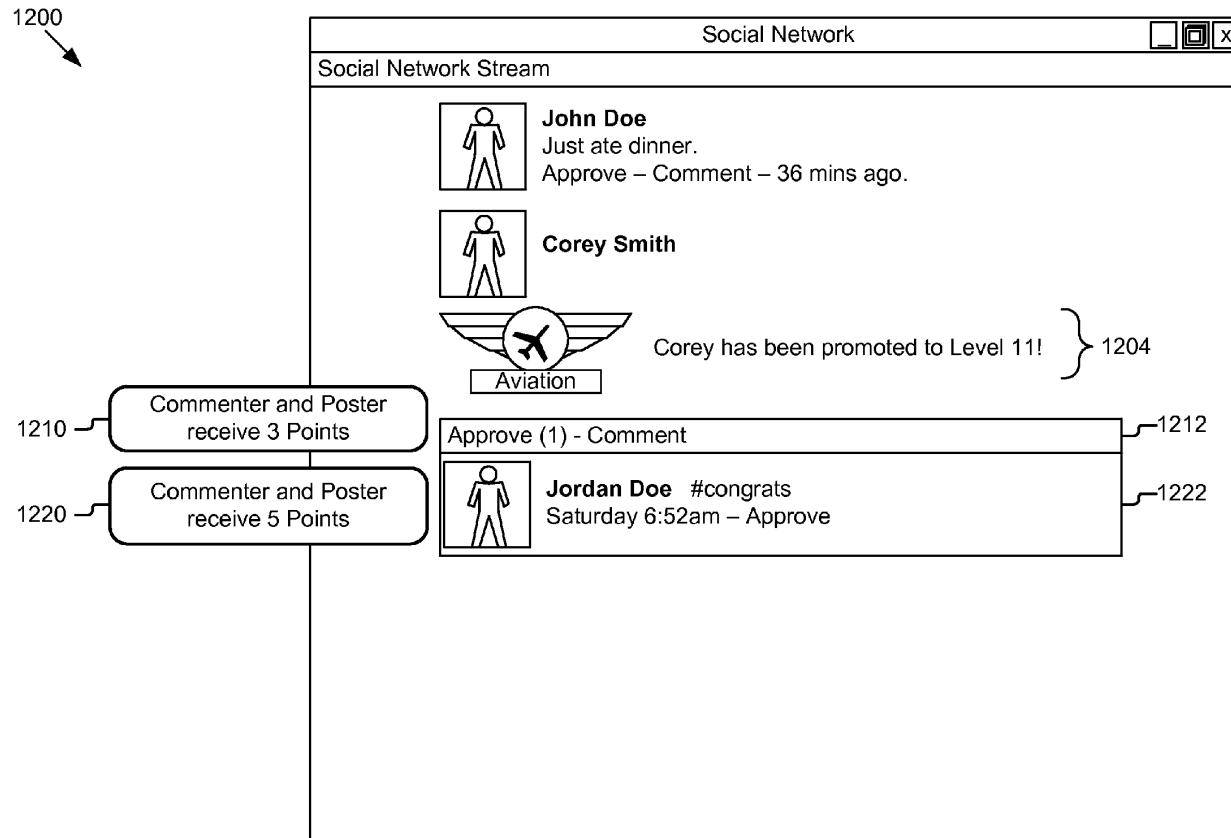


Figure 12A

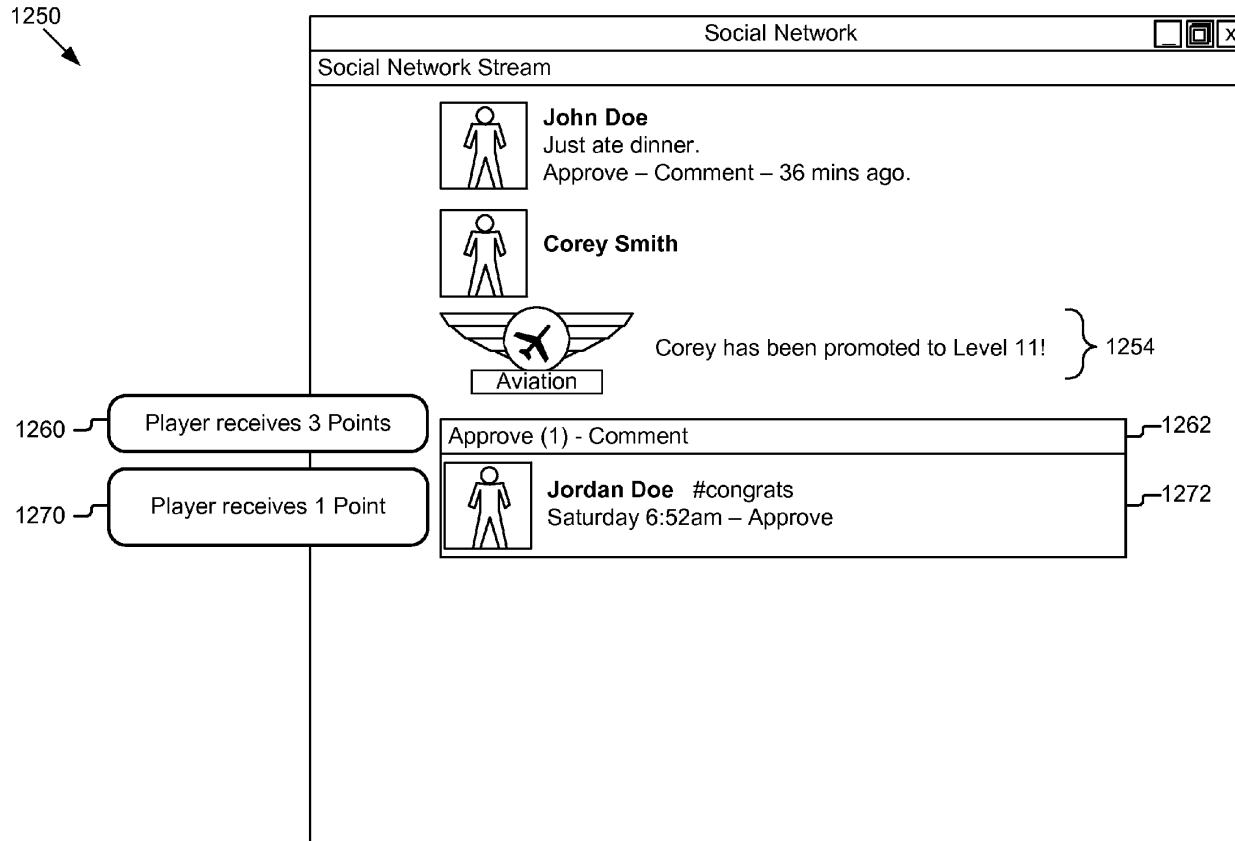


Figure 12B

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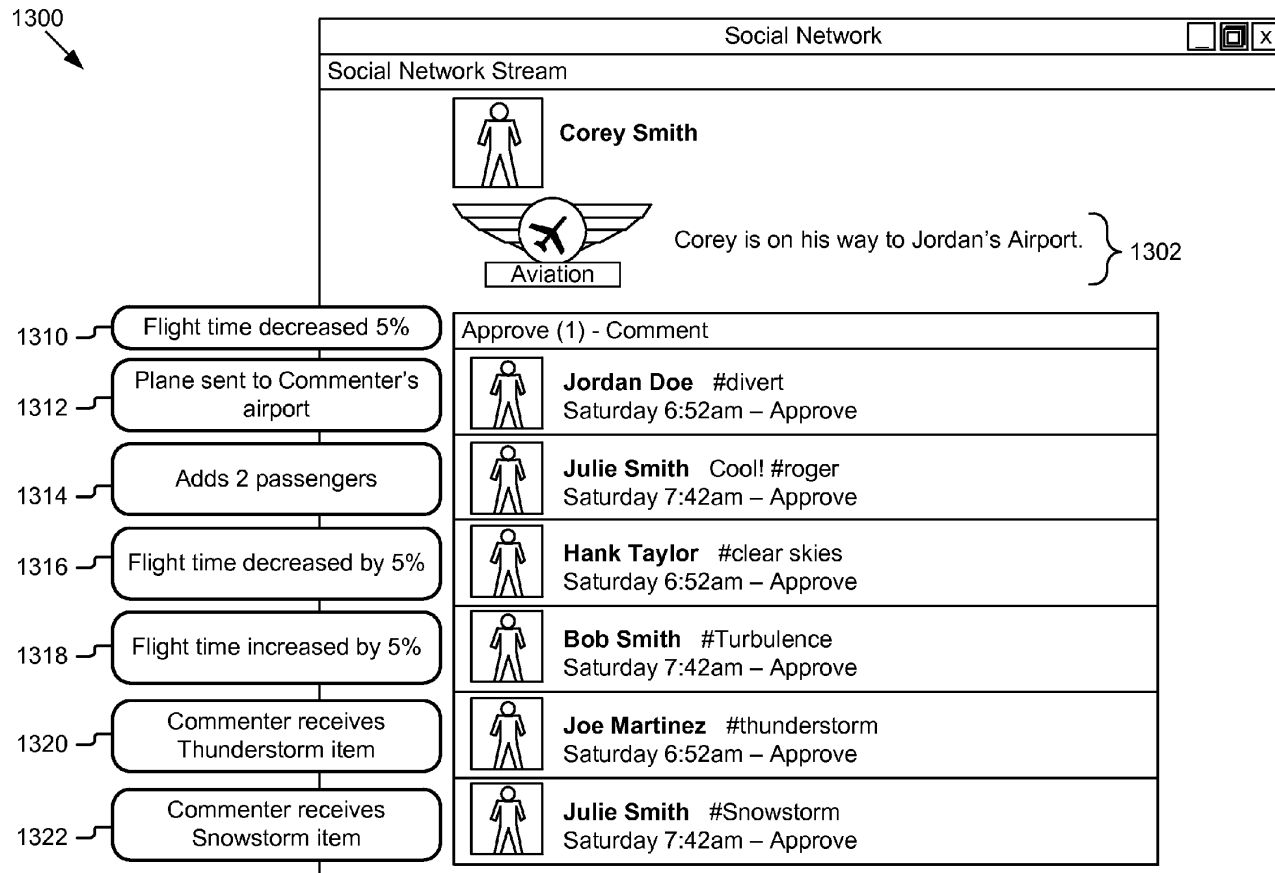


Figure 13A

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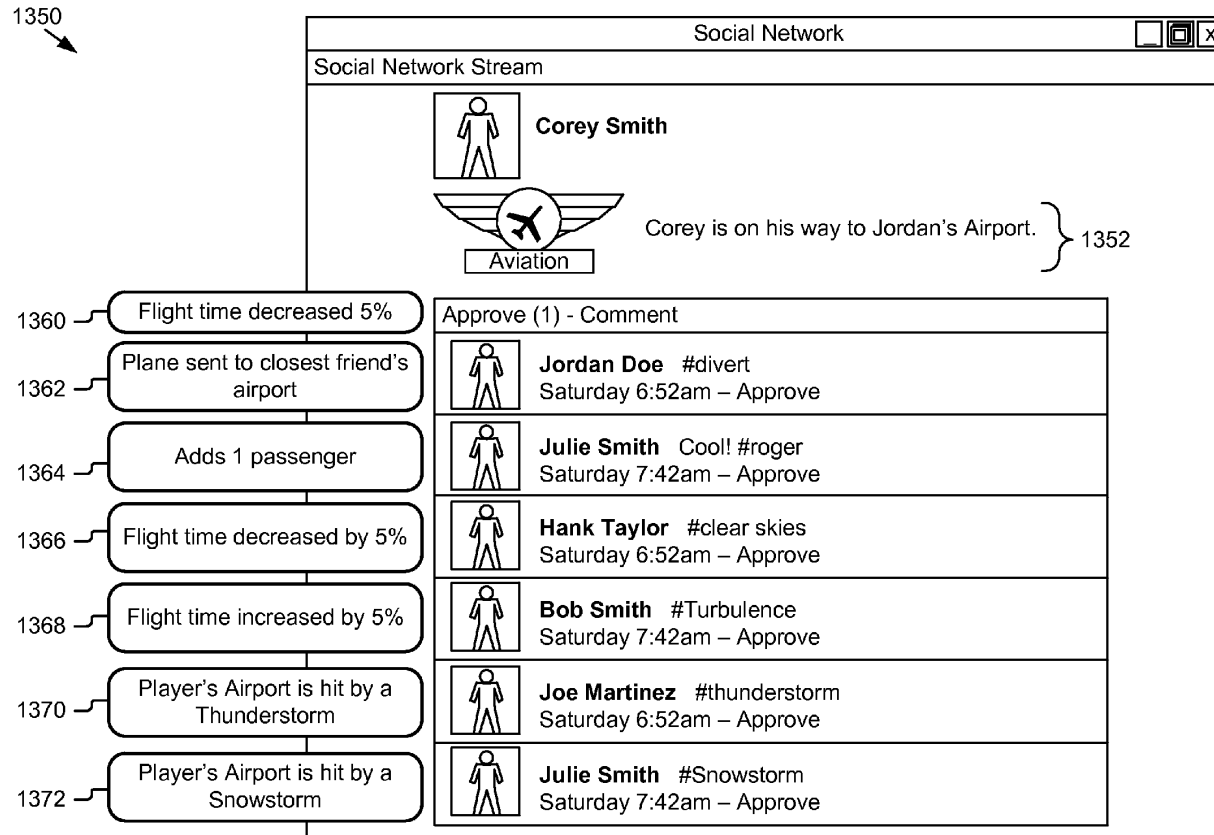


Figure 13B

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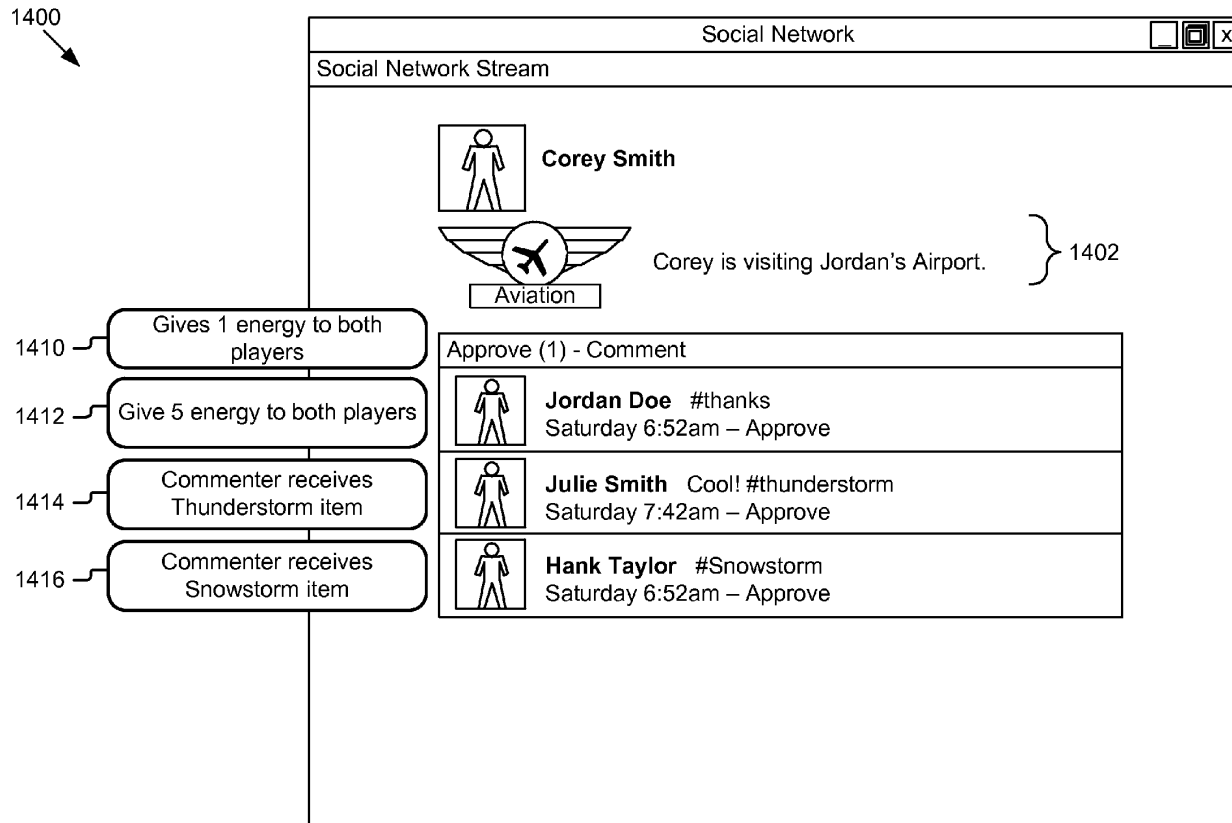


Figure 14A

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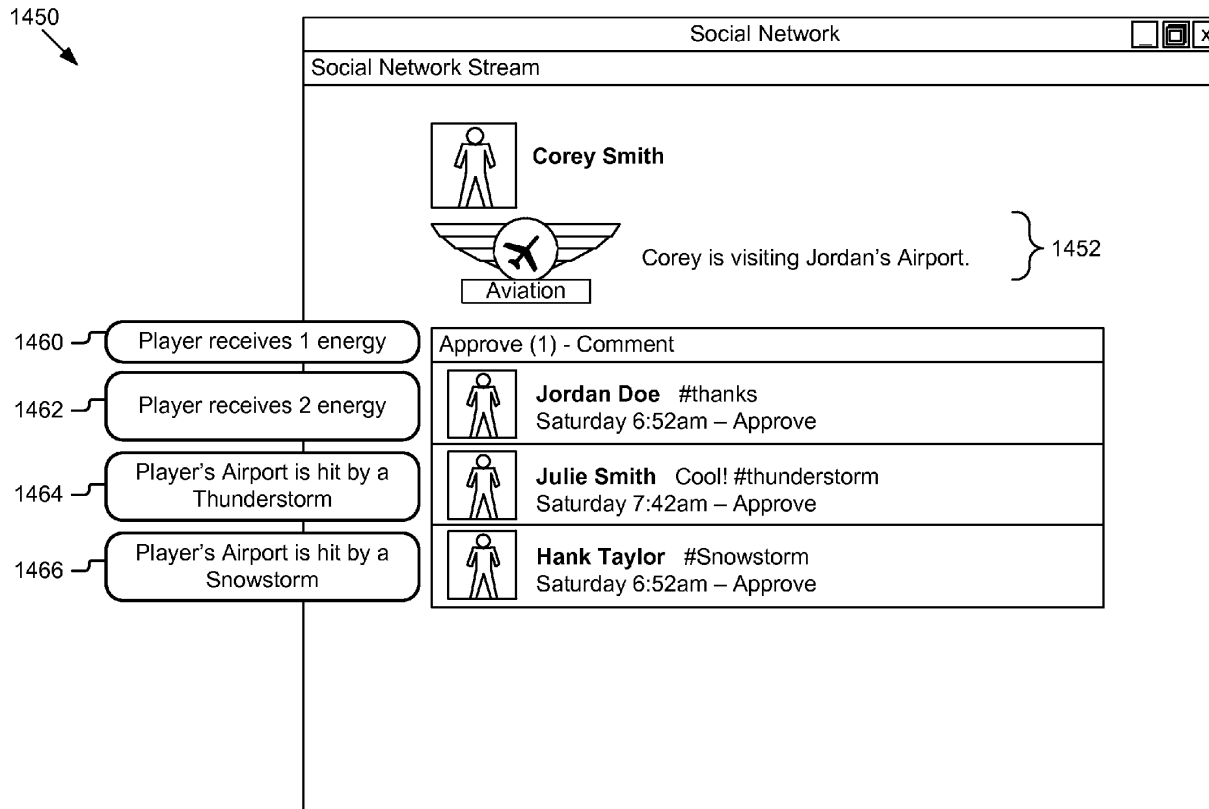


Figure 14B

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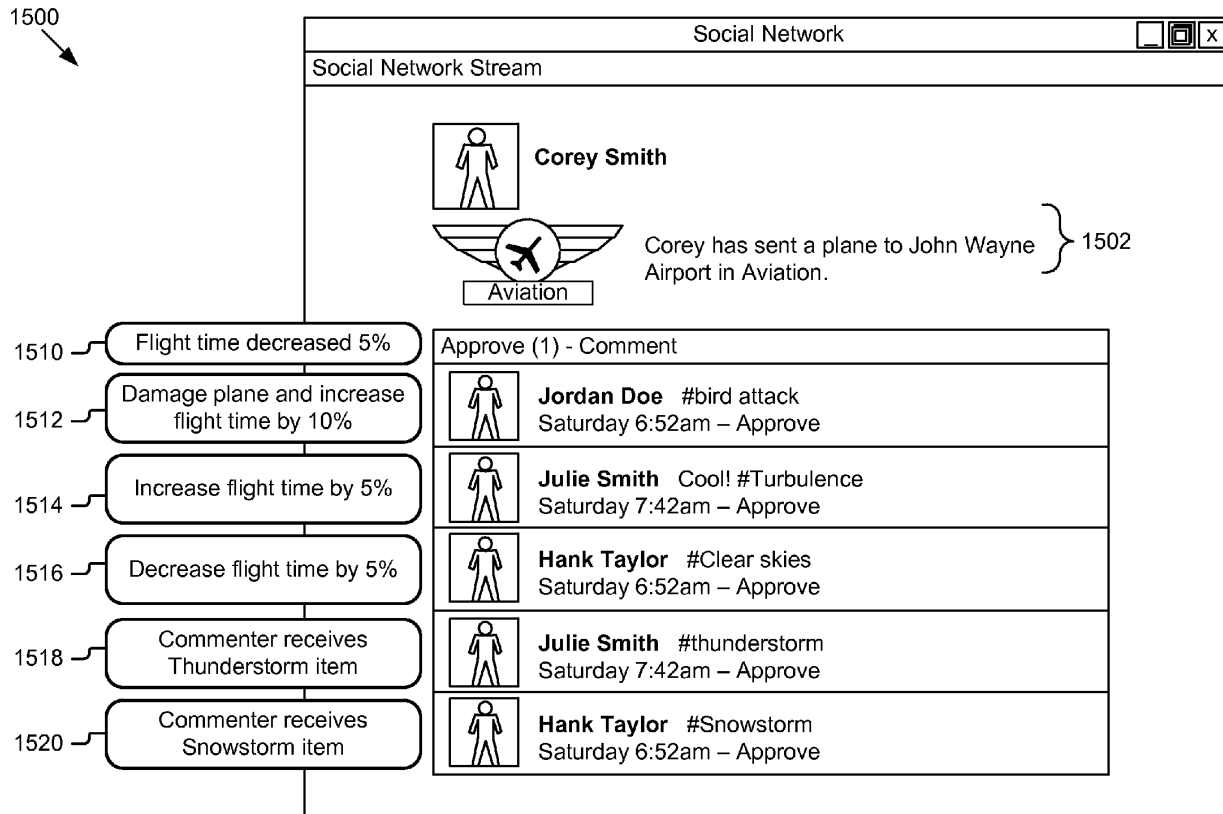


Figure 15A

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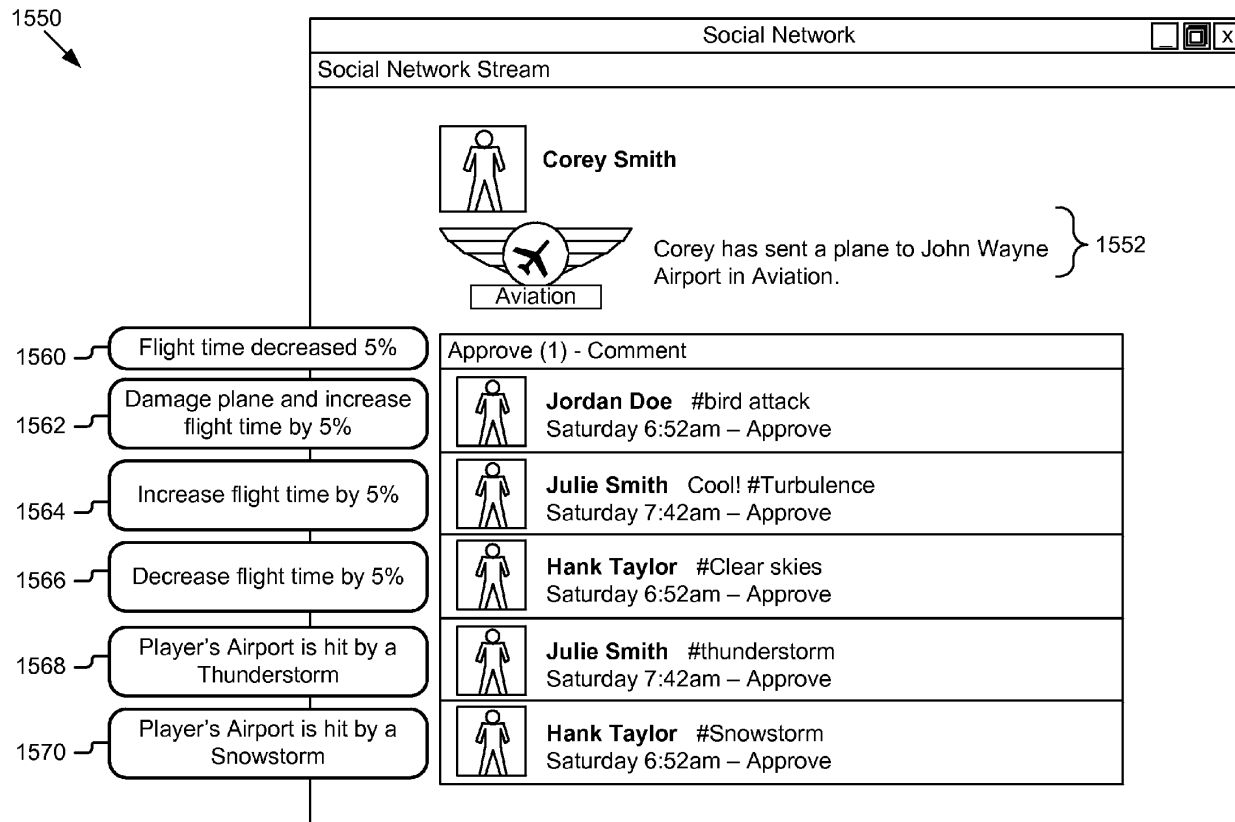


Figure 15B

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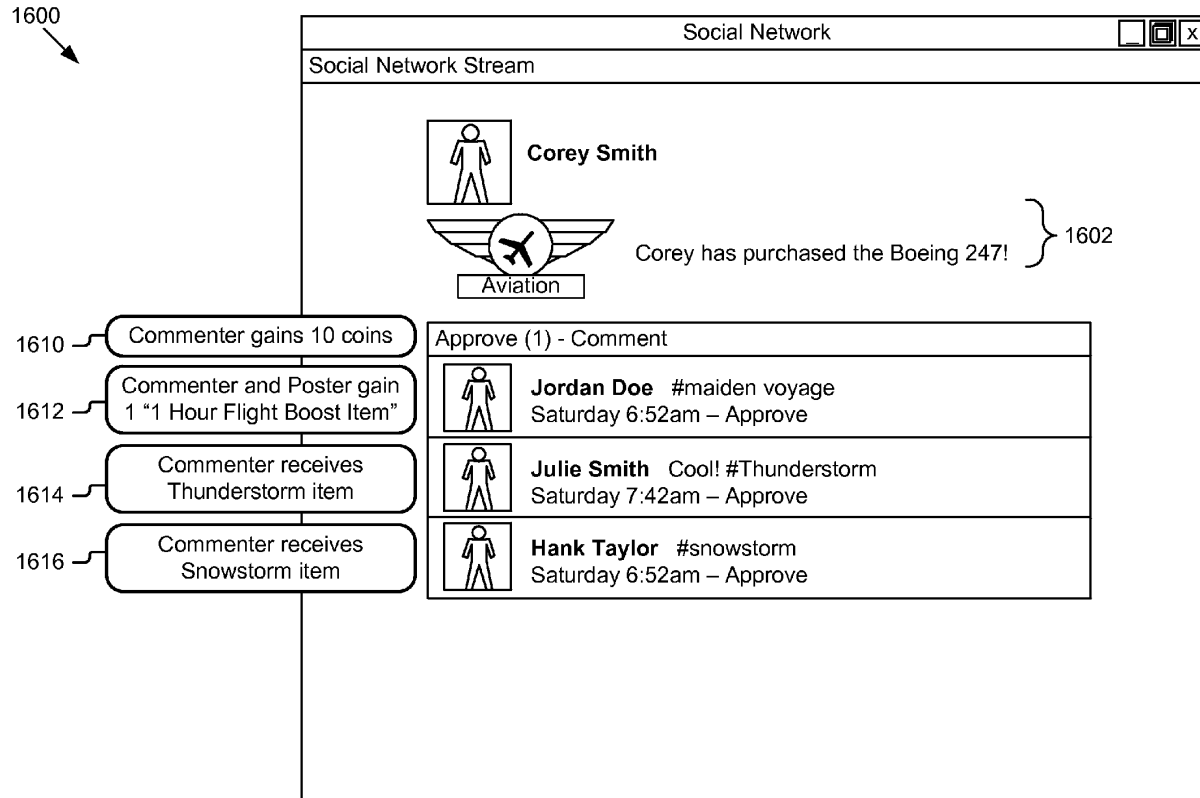


Figure 16A

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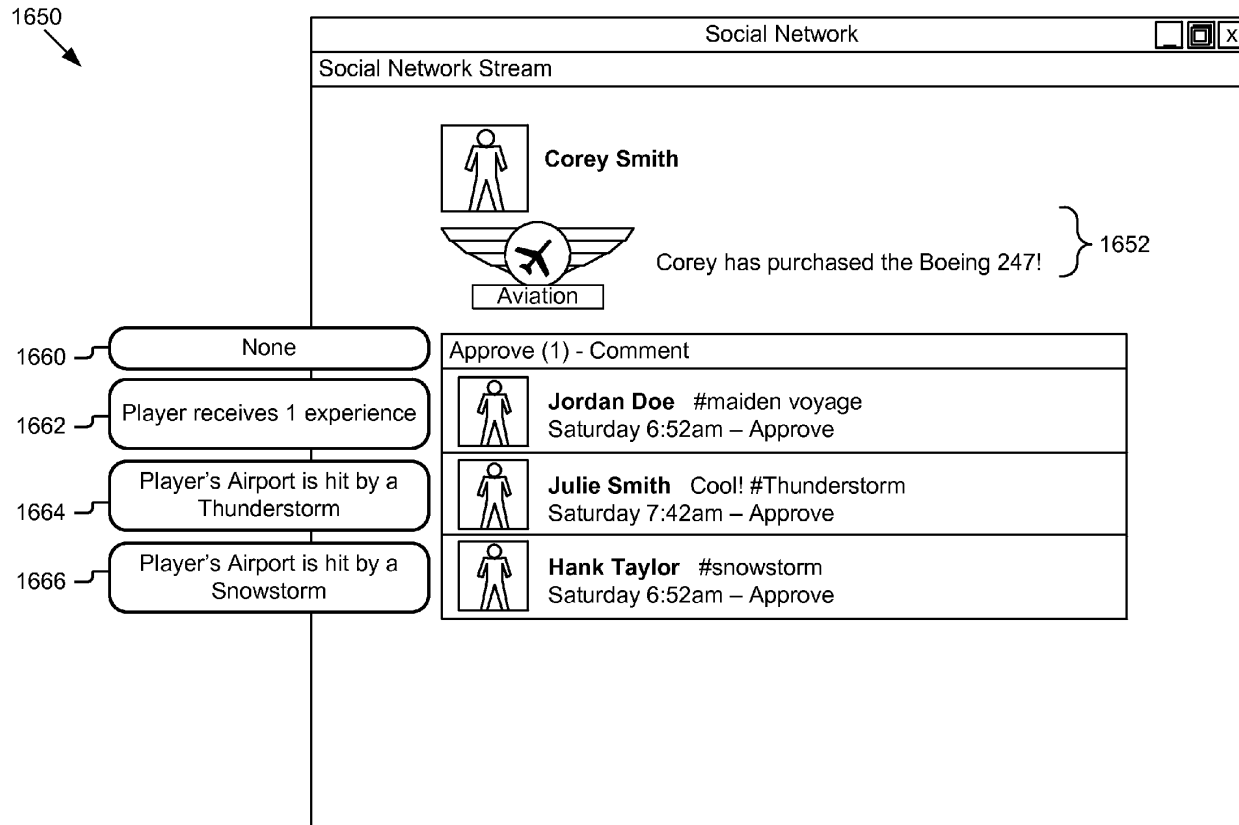


Figure 16B

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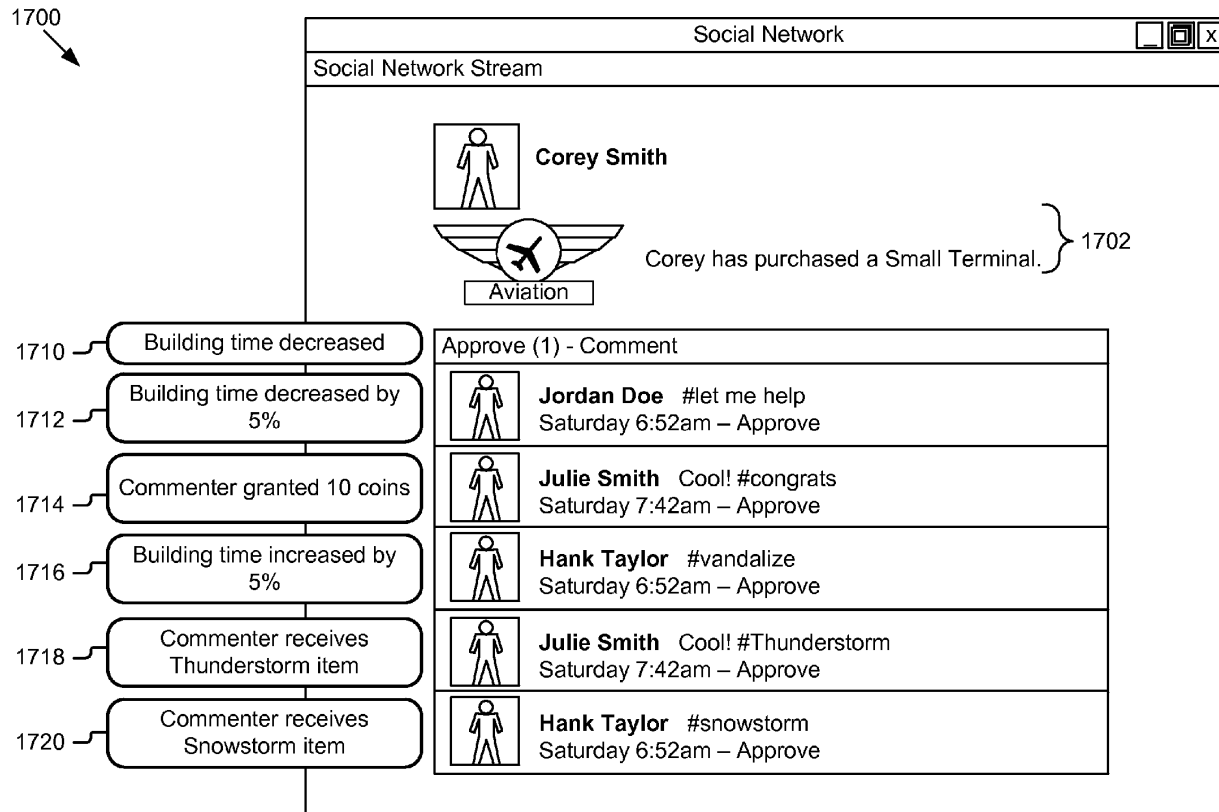


Figure 17A

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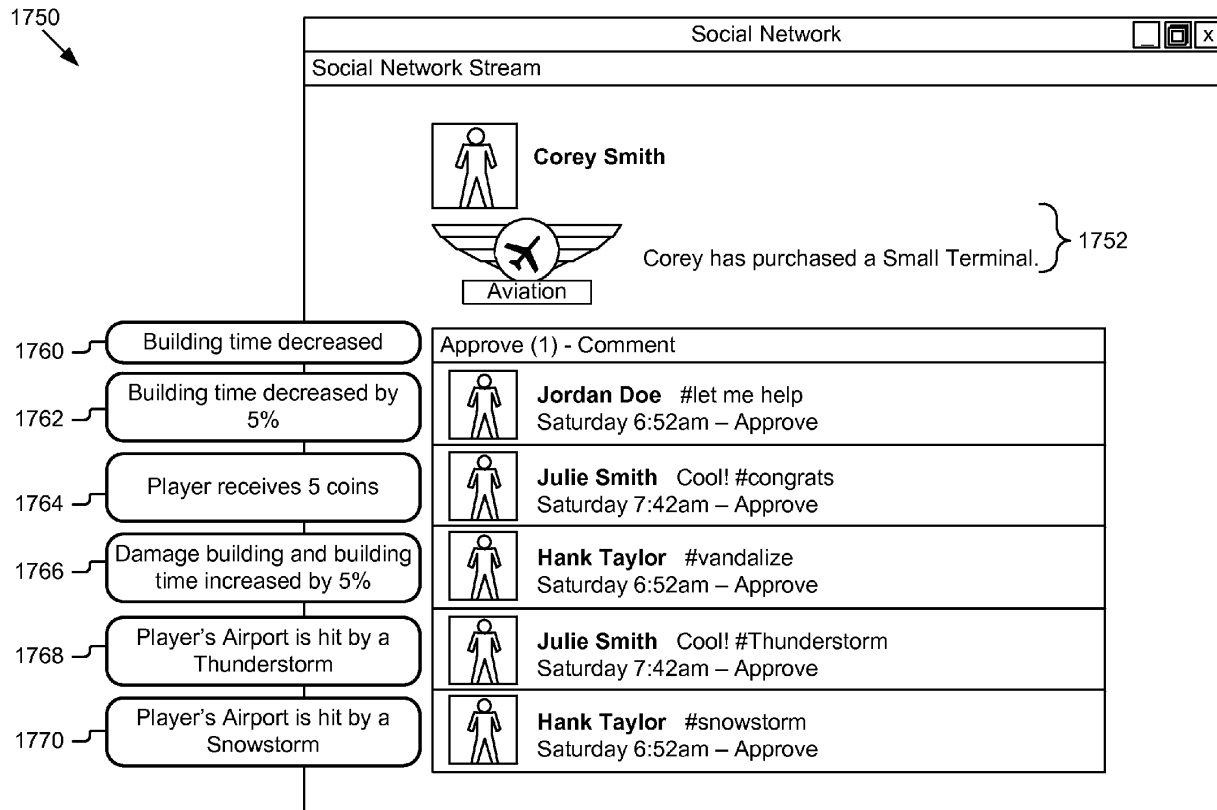


Figure 17B

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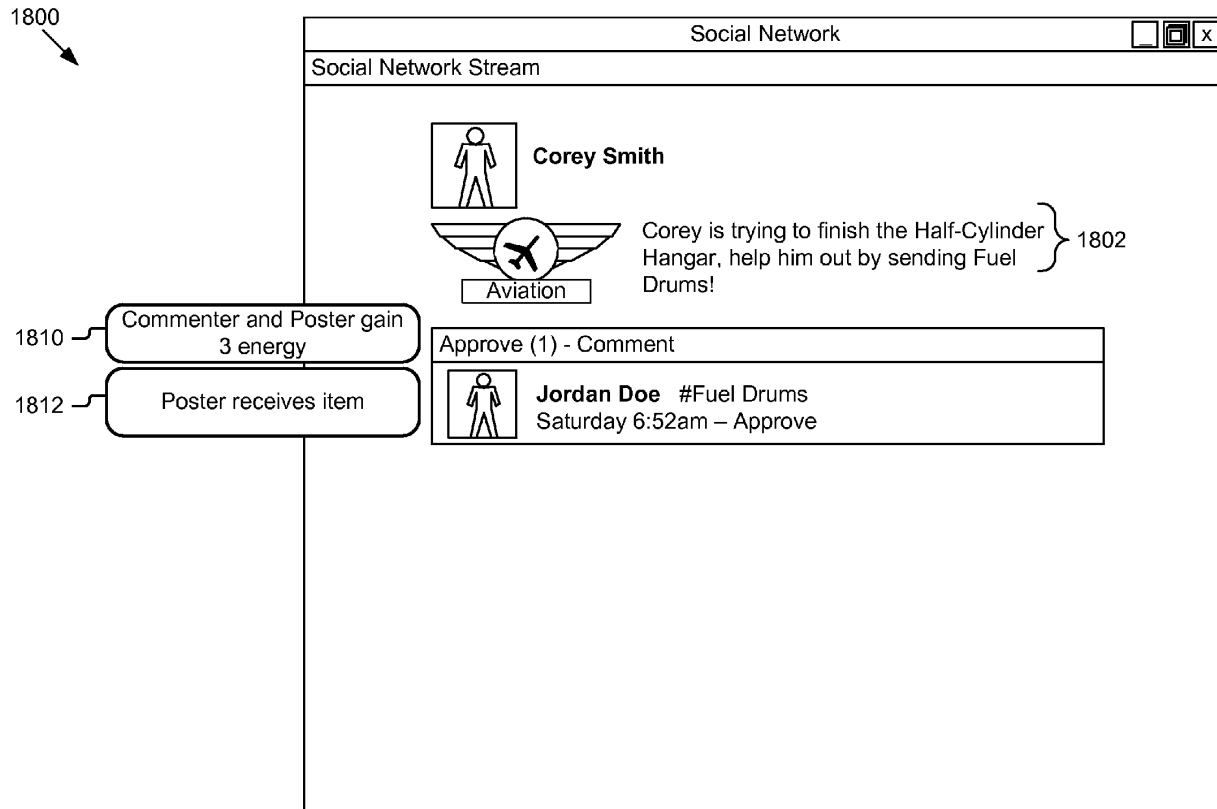


Figure 18A

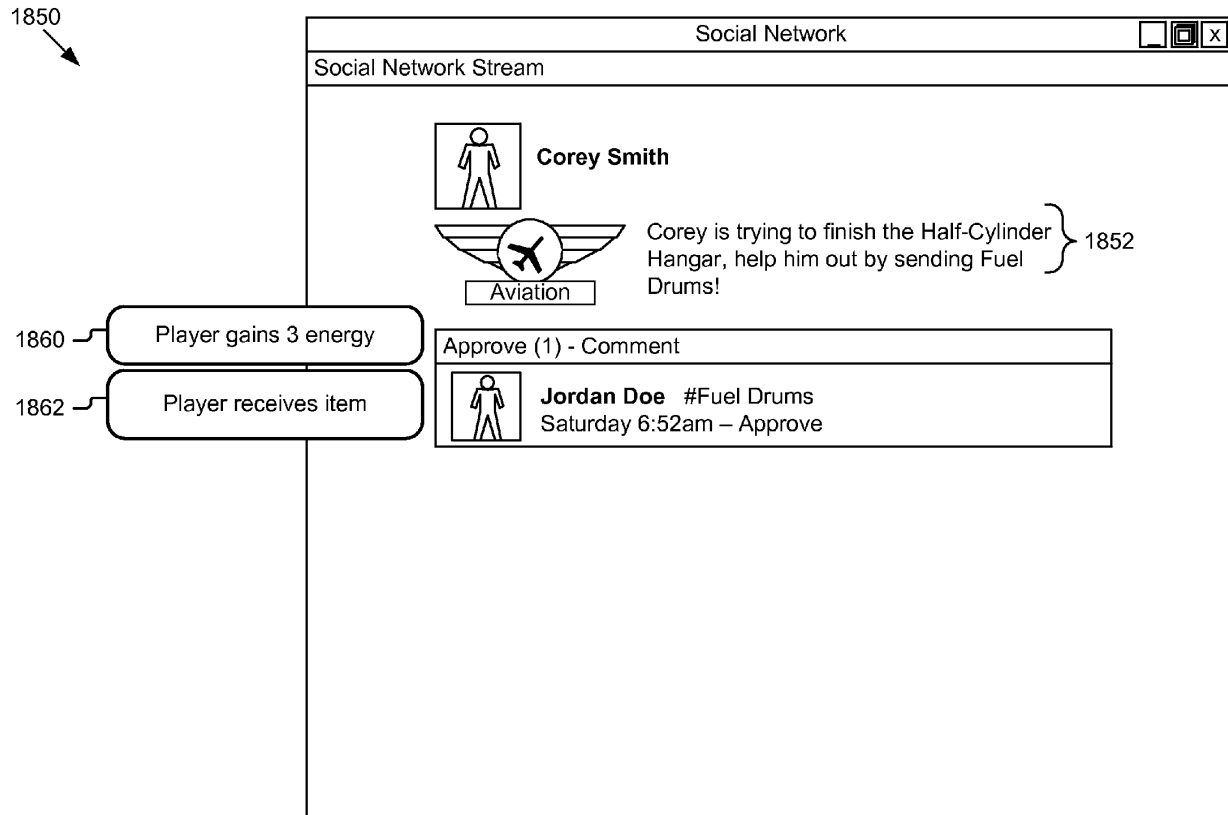


Figure 18B

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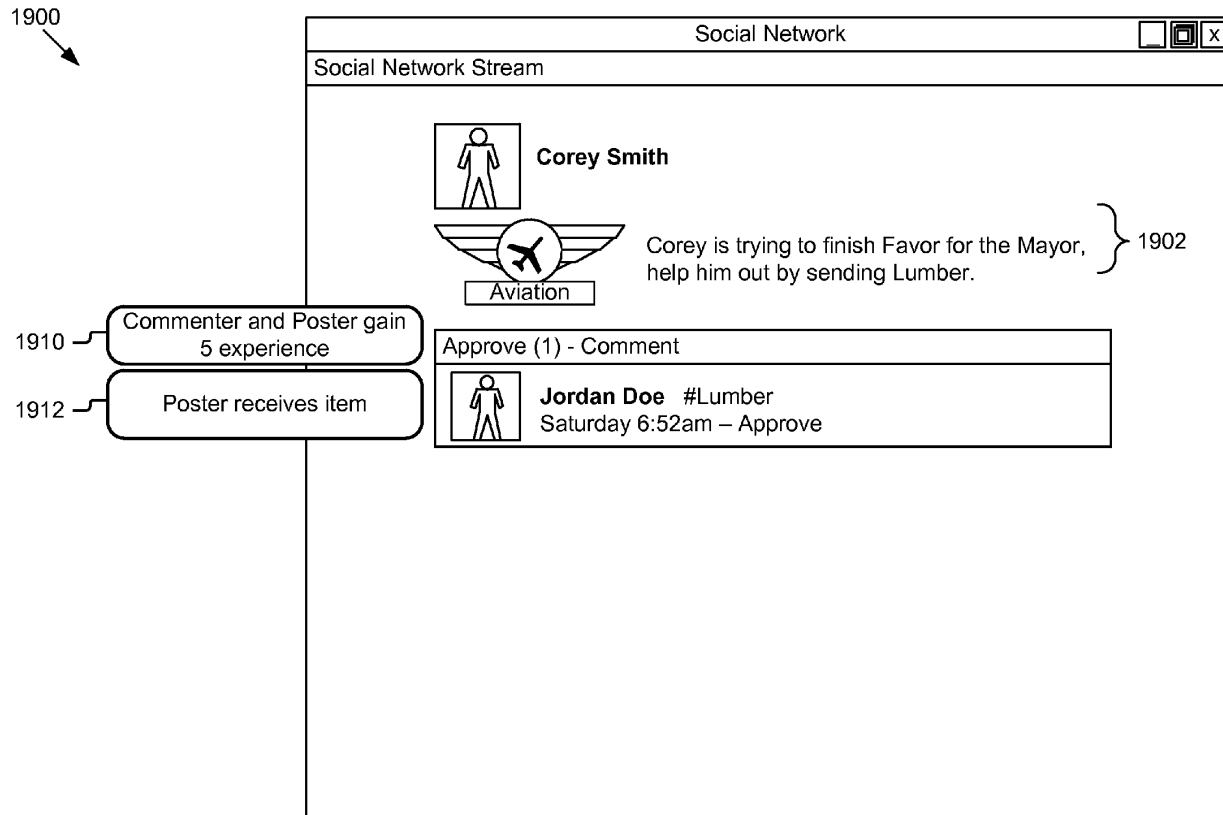


Figure 19A

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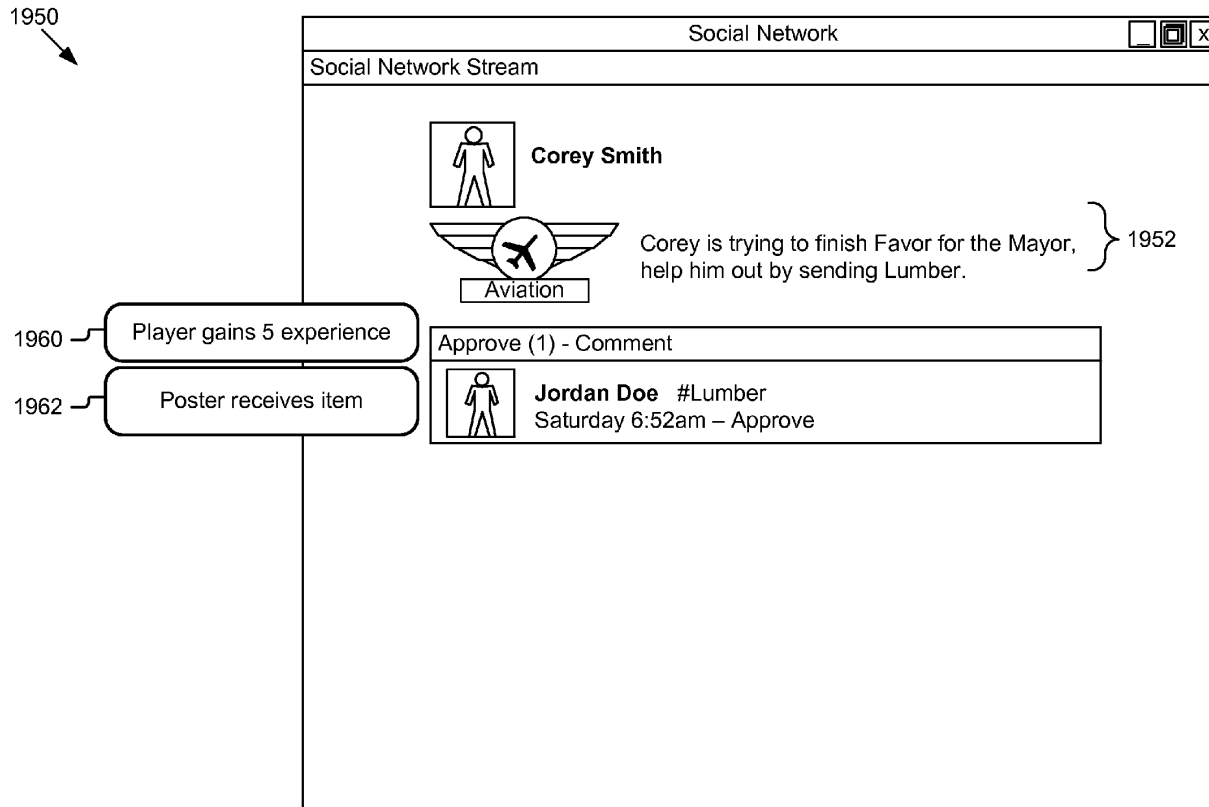


Figure 19B

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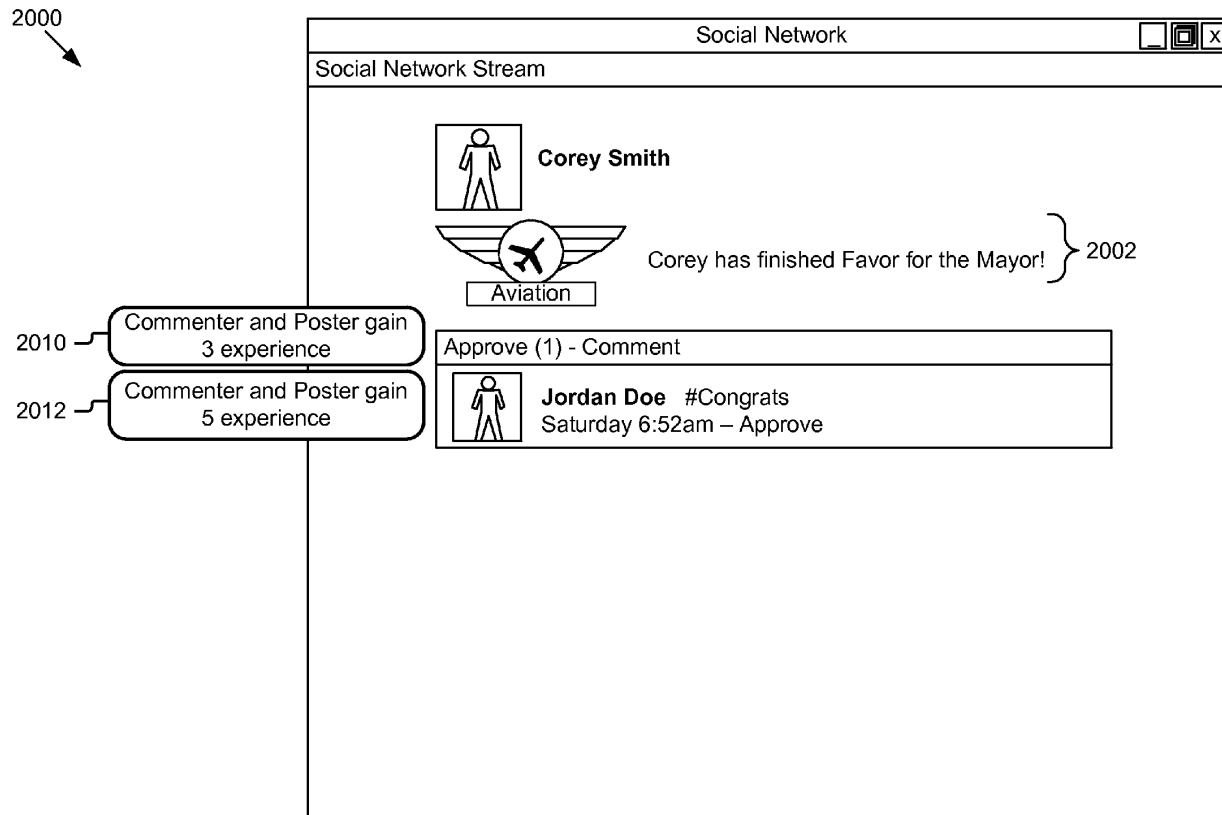


Figure 20A

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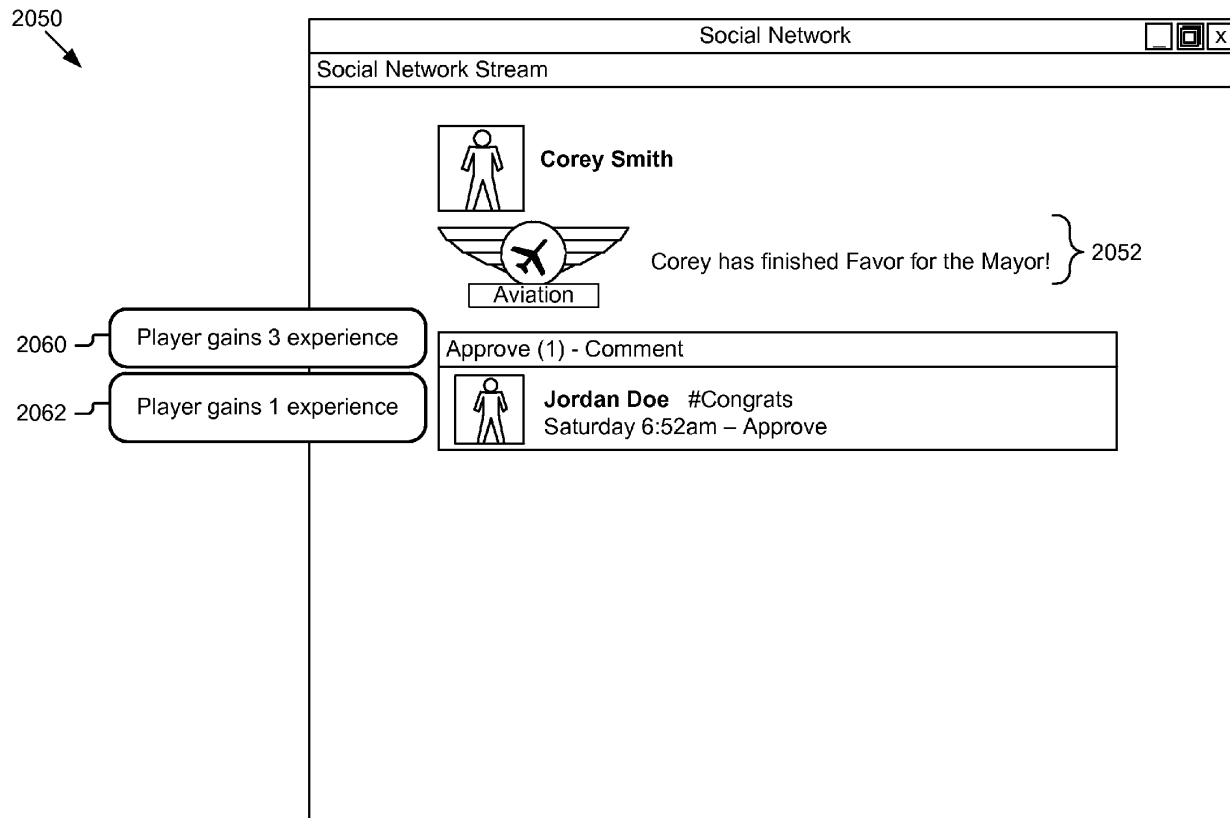


Figure 20B

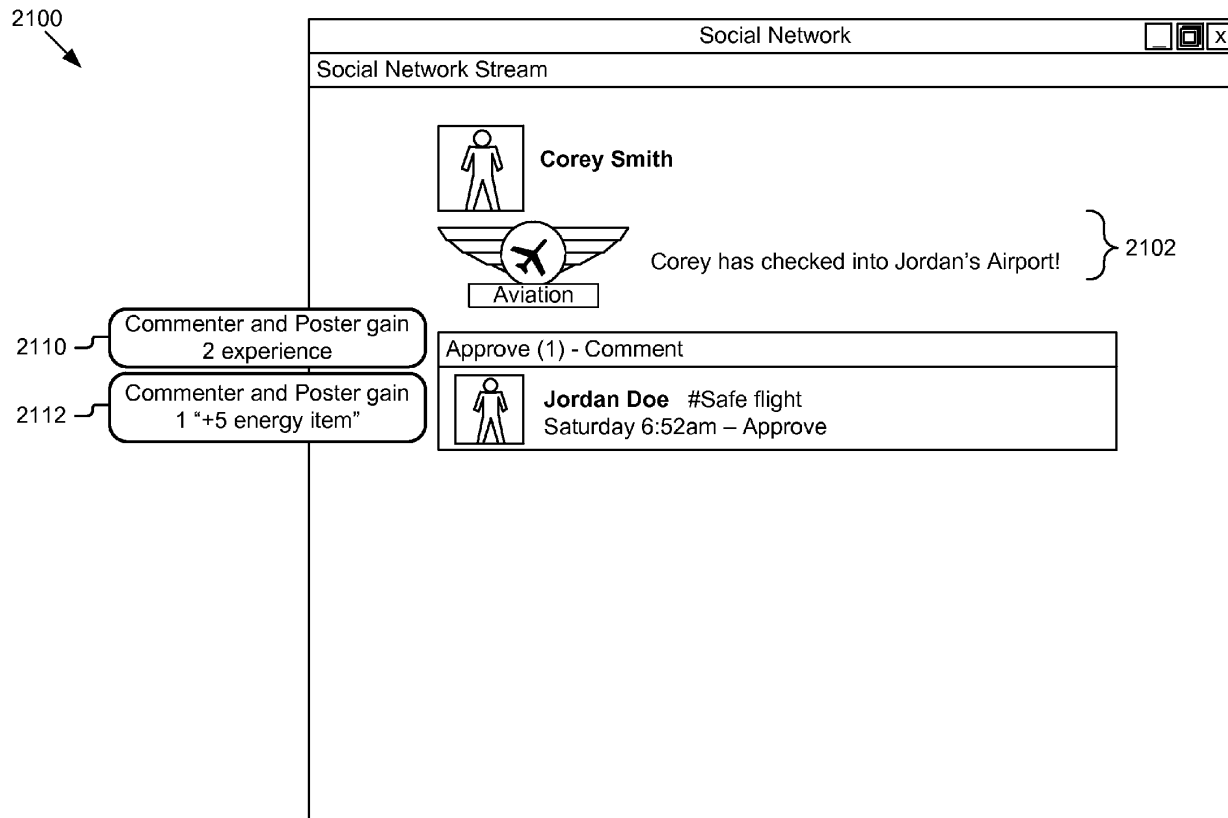


Figure 21A

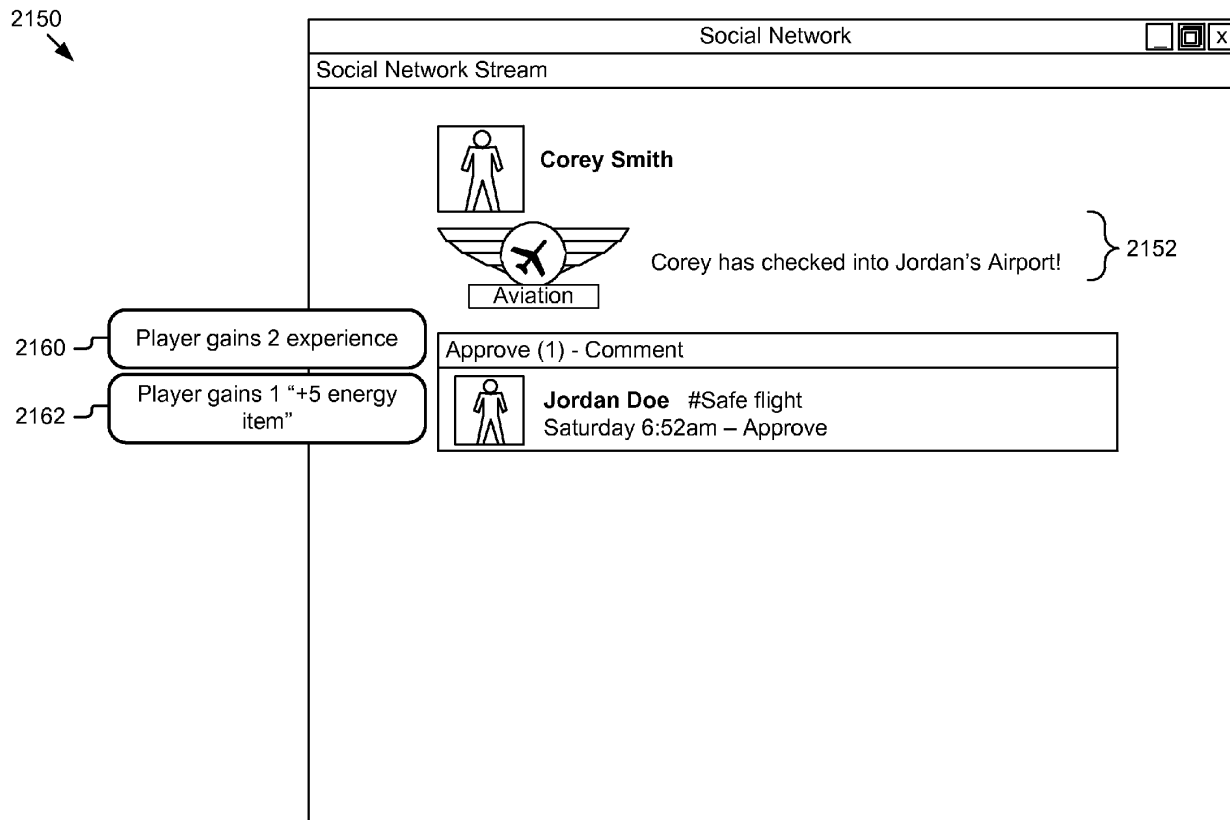


Figure 21B

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2200
↘

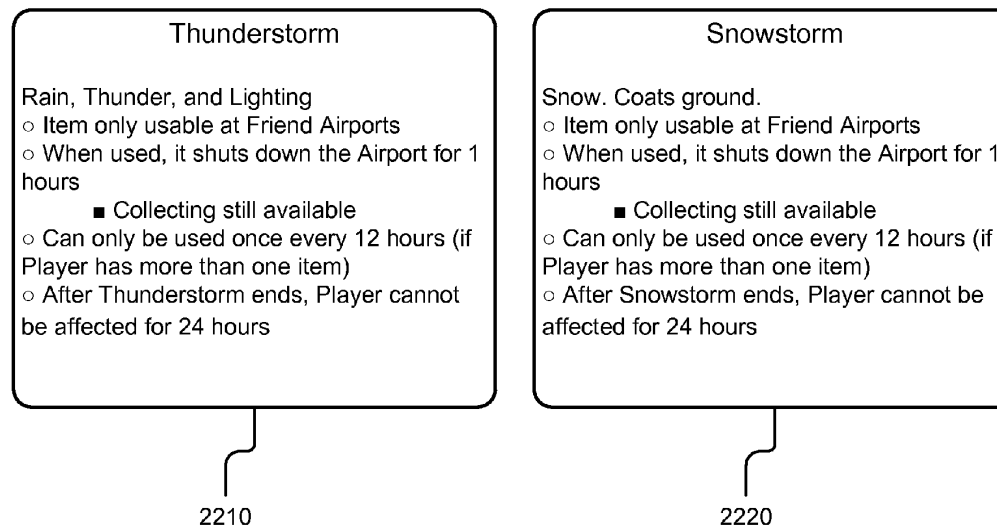


Figure 22

2300
↘

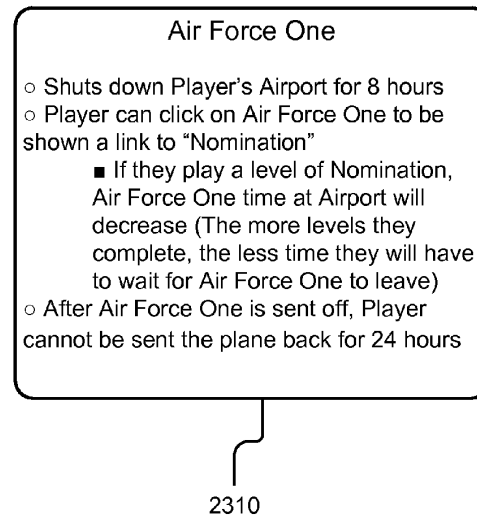


Figure 23

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VIDEO GAMING PLATFORM AND USER INTERFACE

CROSS REFERENCE TO RELATED APPLICATIONS

The present application claims the benefit of priority under 35 U.S.C. §119(e) from U.S. Provisional Application No. 61/643,352 entitled "MULTILAYER FRAMEWORK ARCHITECTURE AND USER INTERFACES FOR VIDEO GAMING APPLICATIONS," filed on May 7, 2012, by Brian Joseph Wiklem, Christopher Robert Masterton, and Carrie Ann Cowan. The entire contents of the provisional application are incorporated by reference herein. The present application also incorporates by reference the contents of utility applications entitled "MULTILAYER SYSTEM FRAMEWORK AND ARCHITECTURE WITH VARIABLE GAMING CAPABILITIES," "PROVIDING SYNCHRONIZED AND INTEGRATED VIDEO GAMING," AND "PROVIDING VIDEO GAMING ACTION VIA COMMUNICATIONS IN A SOCIAL NETWORK," which are concurrently submitted, and claim priority under 35 U.S.C. §119(e) from U.S. Provisional Application No. 61/643,352.

BACKGROUND

The present disclosure relates to video gaming platforms and applications, including those accessed via online or digital services or communities, for example, social networks, or directly via hosted websites, dedicated either wholly or partially for the purpose of implementing video gaming applications. In particular, the present disclosure relates to video gaming platforms and user interfaces associated with the video gaming platforms.

In recent years, video games have become extremely popular. Video games are used not only for entertainment, but also for instructional purposes. Players typically interact with a gaming application through computer or console peripherals such as keyboard, mouse, joysticks, a wide variety of game pads, and funny controllers such as the NES Zapper®. More recently, nontraditional controller technologies such as dance pads, the Wii-mote® or the Kinect®, offering new types of gaming experiences are beginning to emerge. These technologies are capable of enhancing games to incorporate movement, creating a new experience and attracting new audiences.

With the popularity of social networks reaching epic proportions, social games have also become very popular.

With the ongoing trends and growth in video gaming, it may be beneficial to find better platform architectures for gaming applications that continue to enhance the user experience.

SUMMARY

The present disclosure overcomes the deficiencies and limitations of the prior art by providing a technology with a flexible architecture for video gaming applications. In some embodiments, the flexible architecture provides a continuous visual experience for players across different platforms (platform agnostic) and engages them at different levels. Each of the players may have a unique and different visual experience, depending upon the gaming platform a player uses. The architecture facilitates access to video gaming applications in various ways, including 1) via social networks or sites, for example, accessed via personal computers

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or laptops; 2) via wall posts or via an online social networking service that enables its users to send and read text-based posts; 3) via mobile devices (iOS®, Android™, or Windows-based smart phones); and 4) via game consoles (for example, PS3®, Xbox 360®, or Wii®).

Video gaming applications may be purchased via platform application stores. These applications are supported by Android (Android is a Linux-based operating system for mobile devices such as smartphones and tablet computers—it is developed by the Open Handset Alliance), iOS (a mobile operating system developed by Apple Inc.) platforms, and phones operating windows. The user interface of an iOS platform is based on the concept of direct manipulation, using multi-touch gestures. Interface control elements consist of sliders, switches, and buttons. The response to user input is immediate and provides a fluid interface.

Video gaming applications may be hosted or accessed via social networks, other third-party services or on third-party servers, stand-alone platforms, tablets, smartphones or the like. Multiple players (hundreds, thousands, if not millions) may access gaming applications via any or all of these ways. In addition, the flexible architecture provides a scalable infrastructure with cross-platform pollination technology (achievements and rewards are transferred between platforms used by particular players) and secure collection of data. Video gaming applications may be based on universal themes that appeal to a broad range of demographics and provides a continuous flow of data analytics. They offer opportunities for configuring advertisements and promotions to accomplish strategic goals.

In some embodiments, the flexible architecture provides multiple levels of play, permitting players to engage in different ways. The different levels of play options include 1) a peer-to-peer competitive challenge level for core players, 2) a casual play option for play with friends with whom a player shares an affinity, for example, in a social network; and a 3) spectator mode that permits non-players in a network to assist friends. Feed-based triggers allow for greater rewards to players and ease of discovering games.

In yet other embodiments, which may include any or all of the aspects described above, the flexible architecture permits mobile play, extending the gaming arena or world to different platforms, so achievements in a particular game may be earned and shared more easily across platforms. In addition, a player may earn location-based rewards.

Moreover, the flexible architecture provides a system of rewards at check-in, to coax players by providing greater incentives. The flexible architecture permits concurrent "solo" play by a player or gamer, collaborative and competitive play by multiple players. The flexible architecture has user interfaces that are configured to provide different experiences for different players, including for example, a three-dimensional user experience. In some embodiments, the video gaming applications include story-driven quests and game play, giving players more than just tasks and chores. As one example, an aviation gaming application may utilize a collection of two hundred and fifty or more aircrafts and include transactions relating to the aircrafts and their environment, creation of the environment in which the aircrafts operate, etc. In this particular application, players may create and manage their experience (for example, build and manage an aviation empire), enjoy the thrill of history (aviation's past), and travel the globe and fly through an open network of friendly and rival airports.

In yet other embodiments, the system provides a plurality of features for player control of the virtual arena including control of "play" times, "gifts" and "rewards," "collect" and

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“decorate” features, monitor types of “play” (for example, acceleration progress), generate user content, etc.

In some embodiments, the video gaming applications may be free, when accessed via social-network platforms, in which instances revenue is generated via market place for products used during the game, direct advertising, etc. The flexible architecture permits for easy access through a particular player’s social network, allowing other players to discover a particular game and permit conversion as necessary.

In yet other embodiments, linking or connecting platforms creates a more interesting gaming world.

BRIEF DESCRIPTION OF THE DRAWINGS

The present disclosure is illustrated by way of example, and not by way of limitation, in the figures of the accompanying drawings, in which like reference numerals are used to refer to similar elements.

FIG. 1 is a high-level block diagram illustrating some embodiments of a system for providing a video gaming platform, accessed either via a social network (hosted on a social network server or a server associated with it), an online or digital live gaming server, or a third-party video gaming website (hosted by a third party on its server).

FIG. 2 is a block diagram illustrating some embodiments of a social network server or a third party server shown in FIG. 1, including its hardware components.

FIG. 3 is a block diagram illustrating some embodiments of a gaming platform shown in FIGS. 1 and 2, and its software components.

FIG. 4 is a flow chart illustrating an example method for game play, in this instance an aviation game.

FIG. 5 is a graphical representation of an example action via a user interface, by a user in a gaming application (e.g. aviation), for example, where a user creates or sets an aviation route.

FIG. 6 is a graphical representation illustrating a gaming applications operating on a third-party server, with concurrent play by users (gamers or players) from remote locations linked by an integrated user interface.

FIG. 7 is a graphical representation illustrating an example user interface display to one player with an in-game message related to another player’s activity.

FIG. 8 is a graphical representation illustrating an example user interface display to one player with an in-game message awarding items from another player.

FIG. 9 is a graphical representation illustrating several example in-game messages displayed to one player on another player’s activity.

FIG. 10 is a graphical representation illustrating an example user interface configured within a social network for accepting requests for user game play within a game.

FIG. 11 is a graphical representation illustrating an example user interface for interacting with a game via a social network including unlocking new content.

FIG. 12A is a graphical representation illustrating an example user interface display within a social network with a player’s notification about one player’s promotion within the game and other player comments on the player notification.

FIG. 12B is a graphical representation illustrating an example user interface display within a social network with a player notification about one player’s promotion within the game and other non-player comments on the player notification.

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FIG. 13A is a graphical representation illustrating an example use interface within a social network with a player notification on a particular player traveling to another player’s area within the game and posting of other player comments further to the player notification.

FIG. 13B is a graphical representation illustrating an example user interface for interacting with a game via a social network including non-players commenting on a player’s activity within the game.

FIG. 14A is a graphical representation illustrating an example user interface for interacting with a game via a social network including players commenting on a player visiting a player’s virtual area within the game.

FIG. 14B is a graphical representation illustrating an example user interface for interacting with a game via a social network including non-players commenting on a player visiting a player’s virtual area within the game.

FIG. 15A is a graphical representation illustrating an example user interface for interacting with a game via a social network including players commenting on a player sending items within the game.

FIG. 15B is a graphical representation illustrating an example user interface for interacting with a game via a social network including comments from non-players on a player sending items within the game.

FIG. 16A is a graphical representation illustrating an example user interface for interacting with a game via a social network including players commenting on an item purchase within the game.

FIG. 16B is a graphical representation illustrating an example user interface for interacting with a game via a social network including non-players commenting on an item purchase within the game.

FIG. 17A is a graphical representation illustrating an example user interface for interacting with a game via a social network including players commenting on an area purchase within the game.

FIG. 17B is a graphical representation illustrating an example user interface for interacting with a game via a social network including non-players commenting on an area purchase within the game.

FIG. 18A is a graphical representation illustrating an example user interface for interacting with a game via a social network including players commenting on building an item within the game.

FIG. 18B is a graphical representation illustrating an example user interface for interacting with a game via a social network including non-players commenting on building an item within the game.

FIG. 19A is a graphical representation illustrating an example user interface for interacting with a game via a social network including players commenting on a task within the game.

FIG. 19B is a graphical representation illustrating an example user interface for interacting with a game via a social network including non-players commenting on a task within the game.

FIG. 20A is a graphical representation illustrating an example user interface for interacting with a game via a social network including players commenting on completing a task within the game.

FIG. 20B is a graphical representation illustrating an example user interface for interacting with a game via a social network including non-players commenting on completing a task within the game.

FIG. 21A is a graphical representation illustrating an example user interface for interacting with a game via a

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social network including players commenting on arriving at another player's virtual area within the game.

FIG. 21B is a graphical representation illustrating an example user interface for interacting with a game via a social network including non-players commenting on arriving at another player's virtual area within the game.

FIG. 22 is a graphical representation illustrating an example user interface with displays of weather items and their descriptions.

FIG. 23 is a graphical representation illustrating an example user interface configured to provide a game state that affects game play.

DETAILED DESCRIPTION

The present technology is directed to a video gaming platform and user interface for video gaming applications with variable video gaming capabilities, for play by users (players or gamers), either via social networks, or on third party servers. The specification describes examples of the video gaming platform and user interfaces that facilitate a unique user experience and methods involved in the platform and user interface and for operating them to facilitate play by remotely located players or gamers. These video gaming applications referenced or described here may either be hosted by an online community, for example, one or more social networks, or alternatively, by third party servers that are wholly or partially dedicated to gaming applications.

In some embodiments, the flexible architecture provides a continuous visual experience for players across different platforms (platform agnostic) and engages them at different levels. Each of the players may have a unique and different visual experience, depending upon the gaming platform a player uses. This flexible architecture facilitates access to video gaming applications in various ways, including 1) via social networks or sites, for example, accessed via personal computers (desktops or laptops); 2) via wall posts or via an online social networking service that enables its users to send and read text-based posts; 3) via mobile devices (iOS, Android, or Windows-based smart phones); and 4) via game consoles (for example, PS3, Xbox 360, or Wii).

Video gaming applications may be purchased via platform application stores. These applications are supported by Android (Android is a Linux-based operating system for mobile devices such as smartphones and tablet computers—it is developed by the Open Handset Alliance), iOS (a mobile operating system developed by Apple Inc.) platforms, and phone operating windows. The user interface of iOS is based on the concept of direct manipulation, using multi-touch gestures. Interface control elements consist of sliders, switches, and buttons. The response to user input is immediate and provides a fluid interface.

Video gaming applications may be hosted or accessed via social networks, other third party services or on third party servers, stand-alone platforms, tablets, smartphones, or the like. Multiple players (hundreds, thousands, if not millions) may access gaming one or more applications via any or all of these ways. In addition, the flexible architecture provides a scalable infrastructure with cross-platform pollination technology (achievements and rewards are transferred between platforms for particular players) and secure data collection. Video gaming applications may be based on universal themes that appeal to a broad range of demographics and provides a continuous flow of data analytics. They offer opportunities for configuring advertisements and promotions to accomplish strategic goals.

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In yet other embodiments, which may include any or all of the aspects described above, the architecture permits mobile play, extending the gaming arena or world to different platforms, so achievements in a particular game may be earned and shared more easily across platforms. In addition, a player may earn location-based rewards.

Moreover, the system provides rewards at check-in, to coax players by providing greater incentives. The architecture permits for concurrent "solo" play by a player or gamer and collaborative and competitive play between multiple players. User interfaces are configured to provide different experiences for different players, including a three-dimensional user experience. In some embodiments, the video gaming applications include story-driven quests and game play, giving players more than just tasks and chores. By way of example, an aviation gaming application, may utilize a collection of 250 aircrafts and include transactions relating to the aircrafts and its environment, permitting players to create an environment in which the aircrafts operate, etc. In this particular application, players may create and manage their experience (for example, by creating an aviation empire), enjoy the thrill of history (aviation's past), and travel the globe and fly through an open network of friendly and rival airports.

The system provides features for player control of the virtual arena including control of "play" times, "gifts" and "rewards," "collect" and "decorate," monitor "play" (for example, acceleration progress), generate user content, etc.

The video gaming applications may be free, when accessed via social-network platforms, in which instances revenue is generated via market place for products used during the game, direct advertising, etc. The flexible architecture permits for easy access through a particular player's social network, allowing other players to discover a particular game and permit conversion as necessary. Linking or connecting platforms creates a more interesting and viable gaming world.

The architecture accords variable status to players who can opt for different levels of play. A "core" game play status enables players to be leaders and play the entire game. A leader has control of all aspects of a particular gaming application. A "casual" or "follower" game play status enables players to play from a different perspective, providing access to only a portion of the entire game. A "spectator" or "bystander" game play enables players to play from a reactive perspective. Players are accorded this status when they initiate play via a social network wall posting, a response to a social networking service facilitating exchange of text or via any other key word response, which has direct impact on game play. Players with this status can request permission to visit game play arenas of other players. This request may be in response to advertising or promotion displays.

Players (with any status described above) may access game play via mobile devices, at any location, and receive location-based rewards. They may access a virtual game arena, their own or that of other players, via several platforms and take up play where they left off. They may link up friends for collaborative play. Players may also participate in standalone game play, via tablets, mobile devices, console-based game play, target-based game play or the like. In addition, the system permits cross-pollination game play, sending game objects from one game world or arena to another.

In the following description, for purposes of explanation, numerous specific details are indicated in order to provide a thorough understanding of the technology described. This

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technology may be practiced without these specific details. In the instances illustrated, structures and devices are shown in block diagram form in order to avoid obscuring the technology. For example, the present technology is described with some implementations illustrated below with reference to user interfaces and particular hardware. However, the present technology applies to any type of computing device that can receive data and commands, and any devices providing services. Moreover, the present technology is described below primarily in the context of providing video game architecture; however, the present technology applies to any type of situation and may be used for other applications beyond video games. In particular, this technology may be used in other contexts besides video games.

Reference in the specification to “one embodiment,” “an embodiment,” or “some embodiments” means simply that one or more particular features, structures, or characteristics described in connection with the one or more embodiments is included in at least one or more embodiments that are described. The appearances of the phrase “in one embodiment or instance” in various places in the specification are not necessarily all referring to the same embodiment or instance.

Some portions of the detailed descriptions that follow are presented in terms of algorithms and symbolic representations of operations on data bits within a computer memory of either one or more computing devices. These algorithmic descriptions and representations are the means used to most effectively convey the substance of the technology. An algorithm as indicated here, and generally, is conceived to be a self-consistent sequence of steps leading to a desired result. The steps are those requiring physical manipulations of physical quantities. Usually, though not necessarily, these quantities take the form of electrical or magnetic signals capable of being stored, transferred, combined, compared, and otherwise manipulated. It has proven convenient at times, principally for reasons of common usage, to refer to these signals as bits, values, elements, symbols, characters, terms, numbers, or the like.

It should be understood, however, that all of these and similar terms are to be associated with the appropriate physical quantities and are merely convenient labels applied to these quantities. Unless specifically stated otherwise, as apparent from the following discussion, it should be appreciated that throughout the description, discussions utilizing terms, for example, “processing,” “computing,” “calculating,” “determining,” or “displaying” or the like, refer to the action and processes of a computer system, or similar electronic computing device, that manipulates and transforms data represented as physical (electronic) quantities within the computer system’s registers and memories into other data similarly represented as physical quantities within the computer system memories or registers or other such information storage, transmission, or display devices.

The present technology also relates to an apparatus for performing the operations described here. This apparatus may be specially constructed for the required purposes, or it may include a general-purpose computer selectively activated or reconfigured by a computer program stored in the computer. For example, a computer program may be stored in a computer-readable storage medium, for example, but not limited to, any type of disk including floppy disks, optical disks, CD-ROMs, magnetic disks, read-only memories (ROMs), random access memories (RAMs), EPROMs, EEPROMs, magnetic or optical cards, flash memories including USB keys with non-volatile memory or any type

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of media suitable for storing electronic instructions, each coupled to a computer system bus.

This technology may take the form of an entirely hardware implementation, an entirely software implementation, or an implementation including both hardware and software components. In some instances, this technology is implemented in software, which includes but is not limited to firmware, resident software, microcode, etc.

Furthermore, this technology may take the form of a computer program product accessible from a computer-usable or computer-readable medium providing program code for use by or in connection with a computer or any instruction execution system. For the purposes of this description, a computer-usable or computer-readable medium may be any apparatus that can include, store, communicate, propagate, or transport the program for use by or in connection with the instruction execution system, apparatus, or device.

A data processing system suitable for storing and/or executing program code includes at least one processor coupled directly or indirectly to memory elements through a system bus. The memory elements may include local memory employed during actual execution of the program code, bulk storage, and cache memories, which provide temporary storage of at least some program code in order to reduce the number of times code may be retrieved from bulk storage during execution.

Input/output or I/O devices (including but not limited to keyboards, displays, pointing devices, etc.) may be coupled to the system either directly or through intervening I/O controllers.

Communication units including network adapters may also be coupled to the systems to enable them to couple to other data processing systems, remote printers, or storage devices, through either intervening private or public networks. Modems, cable modems, and Ethernet cards are just a few examples of the currently available types of network adapters.

Finally, the algorithms and displays presented in this application are not inherently related to any particular computer or other apparatus. Various general-purpose systems may be used with programs in accordance with the teachings here, or it may prove convenient to construct more specialized apparatus to perform the required method steps. The required structure for a variety of these systems is outlined in the description below. In addition, the present technology is not described with reference to any particular programming language. It should be understood that a variety of programming languages may be used to implement the technology as described here.

Example Architecture Overview

FIG. 1 is a high-level block diagram illustrating some embodiments of systems for providing gaming applications, either via social networks, an online live gaming server, or on third party servers. The system 100 illustrated in FIG. 1 provides gaming platforms 106a or 106b so that participants (players or gamers) may access one or more gaming applications, initiate a play on one device or gaming platform and continue play at another device or gaming platform, making transitions between devices or platforms essentially seamless and enabling a continuous playing experience.

The system 100 includes one or more social network servers 102a through 102n that may be accessed via user devices 115a, 115b through 115n, which are used by users 125a, 125b, through 125n, to connect to any one of the social network servers 102a through 102n. The user devices 115a through 115n may be a desktop computer, a game system or

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a mobile phone. These entities (user devices **115a-115n** and social network servers **102a-102n**) are communicatively coupled via one or more networks **105a**, **105b**, and **105n**. Although only three user devices or platforms **115a**, **115b** through **115n** are illustrated, any numbers of user devices or platforms **115n** may be used by any number of users (players, gamers, or the like) **125n**. Moreover, those skilled in the art should recognize that while the present disclosure is described below primarily in the context of providing gaming applications, the present disclosure may be applicable to other types of applications, for entertainment or otherwise. As some examples, gaming applications may include operations for creating plays, participating in plays, etc.

The user devices **115a** through **115n** in FIG. 1 are illustrated by way of example. Although FIG. 1 illustrates only three devices, the present disclosure applies to any system architecture having one or more user devices **115a** through **115n** (with user-interface applications **117a** through **117n**), therefore, any number of user devices **115n** (hundreds, thousands, even millions or more) may be used.

Furthermore, while only three networks **105a**, **105b**, and **105n** are illustrated as coupled to the user devices **115a**, **115b** through **115n**, the social network servers **102a-102n**, the profile server **130**, the web server **132**, the online live gaming server **140**, the cross-platform server **142**, and one or more third party servers **134a** through **134n**, in practice, any number of networks **105n** may be connected, either directly or indirectly, to these entities. In addition, although only two third party servers **134a** through **134n** are shown, the system architecture **100** may include one or more third party servers **134n**, each with a gaming platform **106b** through **106n**, operating one or more gaming applications that are similar or different.

In some embodiments, the social network server **102a** is coupled to the network **105a**, via a signal line **110**. The social network server **102a** includes a social network application **104**, which comprises the software routines and instructions to operate the social network server **102a** and its functions and operations. Although only one social network server **102a** is described here, persons of ordinary skill in the art should recognize that multiple servers may be present, as illustrated by social network servers **102n**, each with functionality similar to social network server **102a** or different.

The term “social network” as used here encompasses its plain and ordinary meaning including, but not limited to, any type of social structure where the users are connected by a common feature or link. The common feature includes relationships/connections, e.g., friendship, family, work, a similar interest, etc. The common features are provided by one or more social networking systems, such as those included in the system architecture **100**, including explicitly-defined relationships and relationships implied by social connections with other online users, where the relationships form a social graph **108**.

The term “social graph” as used here encompasses its plain and ordinary meaning including, but not limited to, a set of online relationships between users (players and non-players), such as provided by one or more social networking systems, operating on social network servers **102a** through **102n**, including explicitly-defined relationships and relationships implied by social connections with other online users, where the relationships form a social graph. In some examples, the social graph **108** may reflect a mapping of these users and how they are related.

It should be understood that social network server **102a** and the social network software/application **104** are repre-

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sentative of a single social network. Each of the plurality of social networks **102a** through **102n** is coupled to any one of the networks **105a**, **105b**, and **105n**, each having its own server, application, and social graph. For example, a first social network system operated or hosted on a social network server may be directed to business networking, a second directed to or centered on academics, a third directed to local business, a fourth directed to dating or gaming, and yet others directed to other general interests or perhaps a specific focus. Yet, each may provide access to a gaming platform **106a** for operating or providing access to video gaming applications.

A profile server **130** is illustrated as a stand-alone server in FIG. 1. In other embodiments of the system architecture **100**, all or part of the profile server **130** may be part of the social network server **102a**. The profile server **130** is directly connected to the network **105a**, via a line **131**. The profile server **130** stores profiles for all the users that belong to a social network. A third party server **134a** is connected to the network **105b**, via a signal line **135**. A web server **132** is connected, via a line **133**, to the network **105n**. The web server **132** delivers access to content, via the internet, for example, by hosted websites or the like. Users may use the web browsers on their electronic devices or gaming platforms to browse for gaming applications and access websites hosting gaming applications.

An online live gaming server **140** is an online multiplayer gaming and digital media delivery service connected to the network **105a** through **105n** via signal line **141** for providing users (i.e., players) with online gaming capabilities. This allows users to interact (e.g., play games) with multiple players (hundreds, thousands, if not millions) via the online live gaming server **140** (e.g., Xbox Live, Playstation Network, etc.).

A cross-platform server **142** is an online server connected to the network **105a** through **105n** via signal line **143** that receives information from one or more clients (e.g., mobile device, social network, gaming server, etc.) and translates the data such that it becomes usable by the gaming platform **106a** through **106n**. The cross-platform server **142** also translates information from the gaming platform **106a** through **106n** such that it becomes usable by the one or more clients (e.g., mobile device, social network, gaming server, etc.).

The user devices or player gaming platforms **115a** through **115n** can be a computing device, for example, a laptop computer, a desktop computer, a tablet computer, a mobile telephone (iOS, Android, or windows-based phone, a personal digital assistant (PDA), a mobile email device, a portable game player, a game console (PS3, Xbox 360, Wii or the like) a portable music player, a television with one or more processors embedded in the television or coupled to it, or any other electronic device capable of accessing a network and participating in a gaming application.

The network **105a**, **105b**, or **105n**, is of conventional type, wired or wireless, and may have any number of configurations, such as a star configuration, token ring configuration, or other configurations known to those skilled in the art. Furthermore, the network **105** may comprise a local area network (LAN), a wide area network (WAN, e.g., the Internet), and/or any other interconnected data path across which one or more devices may communicate.

In another embodiment, the network **105a**, **105b**, or **105n** may be a peer-to-peer network. The network **105a**, **105b**, or **105n** may also be coupled to or include portions of one or more telecommunications networks for sending data in a variety of different communication protocols.

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In yet another embodiment, the network **105a**, **105b**, or **105n**, includes Bluetooth communication networks or a cellular communications network for sending and receiving data such as via short messaging service (SMS), multimedia messaging service (MMS), hypertext transfer protocol (HTTP), direct data connection, WAP, email, etc.

In some embodiments, the social network server **102a**, the profile server **130**, the web server **132**, online live gaming server **140**, cross-platform server **142**, and the third party servers **134a** through **134n** are hardware servers including a processor, memory, and network communication capabilities. One or more of the users (players or gamers) **125a** through **125n** access any of the social network servers **102a** through **102n**, or the third party servers **134a** through **134n**, via browsers in their user devices or gaming platforms and via the web server **132**. The user devices **115a** through **115n** have user interface applications **117a**, **117b**, through **117n**, that manage access by particular players to select gaming applications or their choice.

FIG. 2 is a block diagram illustrating some embodiments of the social network server **102** (a through n) or third party server **134** (a through n). In FIG. 2, like reference numerals have been used to reference like components with the same or similar functionality that has been described above with reference to FIG. 1. Since those components have been described above that description is not repeated here. The social network server **102a** generally comprises one or more processors, although only one processor **235** is illustrated in FIG. 2. The processor is coupled via a bus **220** to memory **237** and database storage **233**, which stores user account data **252**, game options data **254**, user rewards/points **256**, user play/save data **258**, game options/preferences **260**, promotion data **262** and advertising data **264**.

In some embodiments, the database storage **233** is a database organized by the hosting server and the user. For each user or player, the data storage **233** stores data on the user and user game plays, etc. For example, this data may include related social network activity such as posts, shares, invitations, status changes, etc., associated with each user engaged in a video gaming application.

A user or player **125a**, via a user or gaming device **115a**, communicates a request to initiate a gaming application or reacts to a keyword via communication unit **239**. The “set up” for a video gaming application is managed by the gaming platform **106a**. It should be recognized that the gaming platform **106a** (illustrated in the social network server **102a**) and **106b** (illustrated in the third party server **134a**) are shown separately, but include similar functionality, at least for purposes of operating the gaming applications. A user or player display **25** coupled to the user device **115a** through **n**, is configured to provide the video source of the gaming application in one of many formats, high definition graphics, three dimensional formats, etc.

Referring now to FIG. 3, like reference numerals have been used to reference like components with the same or similar functionality that has been described above with reference to FIG. 1. Since those components have been described above, that description is not repeated here. The gaming platform **106** (a orb) includes various modules that are programmed to perform the functionalities described here. These modules may be variously distributed or may be in a single unit. The gaming platform **106** includes a user interface module **301**, a permissions module **303**, a user/player account module **305**, a user/player status module **307**, a promotion/rewards module **309**, a game initiation/operation module **311**, and a social network module **313**. Each of these modules is coupled to a software communication

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mechanism **320** to communicate the other modules. Examples of a software communications mechanism **320** may be an object bus (such as COBRA), direct socket communication (such as TCP/IP sockets) among software modules, remote procedure calls, UDP broadcasts and receipts, HTTP connections, function or procedure calls, etc. Further, any or all of the communication could be secure (SSH, HTTPS, etc.). The software communication can be implemented on any underlying hardware, such as a network, the Internet, a bus **220** of FIG. 2, or a combination thereof, etc.

By way of example, a particular user **125a** communicates via a user device **115a**, to either initiate or react to a game play. The user interface module **301** facilitates a connection of the user device **115a** with the social network server **102a**, in the event the player wishes to engage or participate in a gaming application via the social network server **102a**. The permission module **303** ensures that the user device is compliant with protocols and any privacy concerns. Once a video gaming application has been set up, the user/player account module **305** makes a note of the user to determine if the user has an existing account or must create one. The user/player status module **307** considers the status of the various users (“leader,” “follower,” or “spectator”). A promotion/rewards module **309** operates the necessary promotions permitting players to earn rewards accorded by the promotions. The game initiation/operation module **311** initiates play and the social network module **313** tracks the applications engaged by a particular player and updates the player’s social profile accordingly.

Example Methods

FIG. 4 illustrates an example method for aviation game play. It should be understood that the order of the operations in FIG. 4 is merely by way of example and may be performed in different orders than those that are illustrated and some operations may be excluded, and different combinations of the operations may be performed. In the example method illustrated, one or more operations may include signing in/logging in to a select game (for example, an aviation game), as illustrated by block **402**. The method **400** then proceeds to the next block **404** and may include one or more operations to perform an action within the game (for example, displayed as a two-dimensional or three-dimensional display). The method **400** then proceeds to the next block **406** and may include one or more operations to post a description of the action in a social network feed. The method **400** then proceeds to the next block **408** and may include one or more operations to receive one or more rewards based on events from the social network feed and/or player interactions.

FIG. 5 illustrates an example of a graphical representation of a flight route that may be created in this gaming application (aviation game). Multiple players (Gamers **1** through **6**) may engage in this game, as illustrated by reference numeral **1610** in FIG. 6. Each of these gamers may be at remote locations and may access this game operated on a third party server. An action by gamer **1** impacting another gamer is indicated to any of the other gamers impacted, requiring acceptance or denial by the gamer impacted. The impacted gamer may “accept” the action, indicated by reference numeral **620** or may “decline” the action, indicated by reference numeral **630**.

As one example of a select game, an aviation video gaming application is described here in FIG. 7 through FIG. 23. FIG. 7 illustrates some embodiments of a user interface **700** for displaying an in-game message related to another player’s activity. A player may receive an in-game notification

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tion (indicated by reference numeral 710) describing certain activities relating to the player. For example the in-game notification (indicated by reference numeral 710) states that friends have visited the player's airport and allows the player to view the description (by pressing the button 720) of what the friends' did while at the player's airport.

FIG. 8 illustrates some embodiments of a user interface 800 for displaying an in-game message related to awarding items. A player may receive an in-game notification (indicated by reference numeral 810) describing an in-game item that was given to the player by a friend to assist the player in completing a quest (i.e., challenge). The in-game notification (indicated by reference numeral 810) may also allow the user (via the share button 820) to share this information and/or the in-game item with one or more additional players. The in-game notification (indicated by reference numeral 810) may also allow the user (via the close button 820) to hide the in-game notification.

FIG. 9 illustrates some embodiments 900 of example in-game messages related to another player's activity. For example, a player may give experience points to another player, as indicated by the in game notification 910. A player may sabotage another player's flight by damaging the airplane, as indicated by the in game notification 920. A player may sabotage another player's airport by damaging a construction site, as indicated by the in game notification 930. A player may improve another player's travel time by giving them clear skies, as indicated by the in game notification 940. A player may have their airport shut down due to in-game weather conditions, as indicated by the in game notification 950. A player may have their airport shut down due to a particular event, for example, the president visiting a player's airport, as indicated by the in game notification 960.

FIG. 10 illustrates an example of the user interface display 1000 to a user in the event a video gaming application is hosted or accessed by a social network. A user may accept a request via posting a comment (#accept in this example) to the social network post. User posts are indicated by 1010, user activities or operations during play are indicated by 1020, and user acceptances (indicated by reference numeral 1040) and approvals are indicated by reference numeral 1030.

FIG. 11 illustrates an example of a user interface 1100 for unlocking game play content within the game. A user may unlock in-game content by posting a comment on a player's social network post. A friend's activities and status during a game are indicated by 1120, and promotion approvals are indicated by 1130. Approvals may be by the user's friends 1140 and 1150.

FIG. 12A illustrates an example of a user interface 1200 within a social network with a player notification about one player's promotion within the game and other player comments on the player notification. For example, the post 1204 indicates that the player has been promoted within the game. The notification 1210 indicates that for the approval 1212 from a player, the commenter and the poster receive three points within the game. The notification 1220 indicates that for the comment 1222, the commenter and the poster receive five points within the game.

FIG. 12B illustrates an example of a user interface 1250 within a social network with a player notification about one player's promotion within the game and other non-player comments on the player notification. For example, the post 1254 indicates that the player has been promoted within the game. The notification 1260 indicates that for the approval 1262, the player (i.e., poster) receives three points within the

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game. The notification 1270 indicates that for the comment 1272 from a non-player, the player (i.e., poster) receives one point within the game.

FIG. 13A illustrates an example of a user interface 1300 within a social network with a player notification about one player traveling to another player's area within the game and other player comments on the player notification. For example, the post 1302 indicates that the player is traveling to another player's airport. The notification 1310 indicates that for the approval, the flight time is decreased by 5%. The notification 1312 indicates that for the comment "#divert" from a player, the airplane is sent to the commenter's airport. The notification 1314 indicates that for the comment "#roger" from a player, the airplane receives two passengers. The notification 1316 indicates that for the comment "#clear skies" from a player, the flight time is decreased by 5%. The notification 1318 indicates that for the comment "#turbulence" from a player, the flight time is increased by 5%. The notification 1320 indicates that for the comment "#thunderstorm" from a player, the commenter receives a thunderstorm item (in-game item). The notification 1322 indicates that for the comment "#snowstorm" from a player, the commenter receives a snowstorm item (in-game item).

FIG. 13B illustrates an example of a user interface 1350 within a social network with a player notification about one player traveling to another player's area within the game and other non-player comments on the player notification. For example, the post 1352 indicates that the player is traveling to another player's airport. The notification 1360 indicates that for the approval, the flight time is decreased by 5%. The notification 1362 indicates that for the comment "#divert" from a non-player, the airplane is sent to the closest friend's airport. The notification 1364 indicates that for the comment "#roger" from a non-player, the airplane receives one passenger. The notification 1366 indicates that for the comment "#clear skies" from a non-player, the flight time is decreased by 5%. The notification 1368 indicates that for the comment "#turbulence" from a non-player, the flight time is increased by 5%. The notification 1370 indicates that for the comment "#thunderstorm" from a non-player, the player's airport is hit by a thunderstorm. The notification 1372 indicates that for the comment "#snowstorm" from a non-player, the player's airport is hit by a snowstorm.

FIG. 14A illustrates an example of a user interface 1400 within a social network with a player notification about one player visiting another player's area within the game and other player comments on the player notification. For example, the post 1402 indicates that the player is visiting another player's airport. The notification 1410 indicates that for the approval, one energy point is given to both players. The notification 1412 indicates that for the comment "#thanks" from a player, five energy points are given to both players. The notification 1414 indicates that for the comment "#thunderstorm" from a player, the commenter receives a thunderstorm item (in-game item). The notification 1416 indicates that for the comment "#snowstorm" from a player, the commenter receives a snowstorm item (in-game item).

FIG. 14B illustrates an example of a user interface 1450 within a social network with a player notification about one player visiting another player's area within the game and other non-player comments on the player notification. For example, the post 1452 indicates that the player is visiting another player's airport. The notification 1460 indicates that for the approval, one energy point is given to the player (i.e., poster). The notification 1462 indicates that for the comment "#thanks" from a non-player, two energy points are given to the player (i.e., poster). The notification 1464 indicates that

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for the comment “#thunderstorm” from a non-player, the player’s (i.e., poster) airport is hit by a thunderstorm. The notification 1466 indicates that for the comment “#snowstorm” from a non-player, the player’s (i.e., poster) airport is hit by a snowstorm.

FIG. 15A illustrates an example of a user interface 1500 within a social network with a player notification about one player sending a game-play item within the game and other player comments on the player notification. For example, the post 1502 indicates that the player has sent an airplane to an in-game airport (in this example John Wayne Airport). The notification 1510 indicates that for the approval, the flight time is decreased by 5%. The notification 1512 indicates that for the comment “#bird attack” from a player, the airplane is damaged and the flight time is increased by 5%. The notification 1514 indicates that for the comment “#turbulence” from a player, the flight time is increased by 5%. The notification 1516 indicates that for the comment “#clear skies” from a player, the flight time is decreased by 5%. The notification 1518 indicates that for the comment “#thunderstorm” from a player, the commenter receives a thunderstorm item (in-game item). The notification 1520 indicates that for the comment “#snowstorm” from a player, the commenter receives a snowstorm item (in-game item).

FIG. 15B illustrates an example of a user interface 1550 within a social network with a player notification about one player sending a game-play item within the game and other non-player comments on the player notification. For example, the post 1552 indicates that the player has sent an airplane to an in-game airport (in this example John Wayne Airport). The notification 1560 indicates that for the approval, the flight time is decreased by 5%. The notification 1562 indicates that for the comment “#bird attack” from a non-player, the airplane is damaged and the flight time is increased by 5%. The notification 1564 indicates that for the comment “#turbulence” from a non-player, the flight time is increased by 5%. The notification 1566 indicates that for the comment “#clear skies” from a non-player, the flight time is decreased by 5%. The notification 1568 indicates that for the comment “#thunderstorm” from a non-player, the player’s (i.e., poster) airport is hit by a thunderstorm. The notification 1570 indicates that for the comment “#snowstorm” from a non-player, the player’s (i.e., poster) airport is hit by a snowstorm.

FIG. 16A illustrates an example of a user interface 1600 within a social network with a player notification about one player purchasing a game-play item within the game and other player comments on the player notification. For example, the post 1602 indicates that the player has purchased an in-game airplane. The notification 1610 indicates that for the approval, the commenter gains 10 coins. The notification 1612 indicates that for the comment “#maiden voyage” from a player, the commenter and the poster gain one “1 hour boost item”. The notification 1614 indicates that for the comment “#thunderstorm” from a player, the commenter receives a thunderstorm item (in-game item). The notification 1616 indicates that for the comment “#snowstorm” from a player, the commenter receives a snowstorm item (in-game item).

FIG. 16B illustrates an example of a user interface 1650 within a social network with a player notification about one player purchasing a game-play item within the game and other non-player comments on the player notification. For example, the post 1652 indicates that the player has purchased an in-game airplane. The notification 1660 indicates that for the approval, no award is given. The notification 1662 indicates that for the comment “#maiden voyage” from

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a non-player, the player (i.e., poster) receives one experience point. The notification 1664 indicates that for the comment “#thunderstorm” from a non-player, the player’s (i.e., poster) airport is hit by a thunderstorm. The notification 1666 indicates that for the comment “#snowstorm” from a non-player, the player’s (i.e., poster) airport is hit by a snowstorm.

FIG. 17A illustrates an example of a user interface 1700 within a social network with a player notification about one player purchasing a game-play area within the game and other player comments on the player notification. For example, the post 1702 indicates that the player has purchased a small terminal. The notification 1710 indicates that for the approval, the building time is decreased. The notification 1712 indicates that for the comment “#let me help” from a player, the building time is decreased by 5%. The notification 1714 indicates that for the comment “#congrats” from a player, the commenter is given 10 coins. The notification 1716 indicates that for the comment “#vandalize” from a player, the building time is increased by 5%. The notification 1718 indicates that for the comment “#thunderstorm” from a player, the commenter receives a thunderstorm item (in-game item). The notification 1720 indicates that for the comment “#snowstorm” from a player, the commenter receives a snowstorm item (in-game item).

FIG. 17B illustrates an example of a user interface 1750 within a social network with a player notification about one player purchasing a game-play area within the game and other non-player comments on the player notification. For example, the post 1752 indicates that the player has purchased a small terminal. The notification 1760 indicates that for the approval, the building time is decreased. The notification 1762 indicates that for the comment “#let me help” from a non-player, the building time is decreased by 5%. The notification 1764 indicates that for the comment “#congrats” from a non-player, the player (i.e., poster) is given 5 coins. The notification 1766 indicates that for the comment “#vandalize” from a non-player, the building is damaged and the building time is increased by 5%. The notification 1768 indicates that for the comment “#thunderstorm” from a non-player, the player’s (i.e., poster) airport is hit by a thunderstorm. The notification 1770 indicates that for the comment “#snowstorm” from a non-player, the player’s (i.e., poster) airport is hit by a snowstorm.

FIG. 18A illustrates an example of a user interface 1800 within a social network with a player notification about one player building a game-play item within the game and other player comments on the player notification. For example, the post 1802 indicates that the player is trying to finish building a hangar. The notification 1810 indicates that for the approval, the poster and commenter receive three energy points. The notification 1812 indicates that for the comment “#fuel drums” from a player, the poster receives an in-game item.

FIG. 18B illustrates an example of a user interface 1850 within a social network with a player notification about one player building a game-play item within the game and other non-player comments on the player notification. The notification 1860 indicates that for the approval, the player (i.e., poster) receives three energy points. The notification 1862 indicates that for the comment “#fuel drums” from a non-player, the player (i.e., poster) receives an in-game item.

FIG. 19A illustrates an example of a user interface 1900 within a social network with a player notification about one player performing a task within the game and other player comments on the player notification. For example, the post 1902 indicates that the player is trying to finish a task, in this

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example, “favor for the mayor.” The notification 1910 indicates that for the approval, the poster and commenter receive five experience points. The notification 1912 indicates that for the comment “#lumber” from a player, the poster receives an in-game item.

FIG. 19B illustrates an example of a user interface 1950 within a social network with a player notification about one player performing a task within the game and other non-player comments on the player notification. For example, the post 1952 indicates that the player is trying to finish a task, in this example, “favor for the mayor.” The notification 1960 indicates that for the approval, the player (i.e., poster) receives five experience points. The notification 1962 indicates that for the comment “#lumber” from a non-player, the player (i.e., poster) receives an in-game item.

FIG. 20A illustrates an example of a user interface 2000 within a social network with a player notification about one player finishing a task within the game and other player comments on the player notification. For example, the post 2002 indicates that the player has finished a task, in this example, “favor for the mayor.” The notification 2010 indicates that for the approval, the poster and commenter receive three experience points. The notification 2012 indicates that for the comment “#congrats” from a player, the poster and commenter receive five experience points.

FIG. 20B illustrates an example of a user interface 2050 within a social network with a player notification about one player finishing a task within the game and other non-player comments on the player notification. For example, the post 2052 indicates that the player has finished a task, in this example, “favor for the mayor.” The notification 2060 indicates that for the approval, the player (i.e., poster) receives three experience points. The notification 2062 indicates that for the comment “#congrats” from a non-player, the player (i.e., poster) receives one experience point.

FIG. 21A illustrates an example of a user interface 2100 within a social network with a player notification about one player arriving at another player’s area within the game and other player comments on the player notification. For example, the post 2102 indicates that the player has checked into a friend’s airport. The notification 2110 indicates that for the approval, the poster and commenter receive two experience points. The notification 2112 indicates that for the comment “#safe flight” from a player, the poster and commenter receive one “+5 energy item.”

FIG. 21B illustrates an example of a user interface 2150 within a social network with a player notification about one player arriving at another player’s area within the game and other non-player comments on the player notification. For example, the post 2152 indicates that the player has checked into a friend’s airport. The notification 2160 indicates that for the approval, the player (i.e., poster) receives two experience points. The notification 2162 indicates that for the comment “#safe flight” from a non-player, the player (i.e., poster) receives one “+5 energy item.”

FIG. 22 illustrates an example of a user interface 2200 including two examples of game states that affect game play. The first example 2210 is a thunderstorm game item that may be used at friend’s airports to add rain, thunder, lightning to the airport, and to shut down the airport for an hour. For example, this item can only be used once every 12 hours and after the thunderstorm ends the player cannot be affected for 24 hours. The second example 2220 is a snowstorm game item that may be used at friend’s airports to add snow to the airport, and to shut down the airport for an hour.

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For example, this item can only be used once every 12 hours and after the thunderstorm ends the player cannot be affected for 24 hours.

FIG. 23 illustrates an example of a user interface 2300 including one example of a game state that affects game play. The example 2310 is of Air Force One (i.e., the president) visiting the player’s airport. For example, this shuts down the player’s airport for 8 hours, the player can interact with Air Force One via a nomination link for decreasing the time Air Force One is at the airport, and after Air Force One is sent off, the player cannot be sent the airplane again for 24 hours.

The comments and game actions they invoke which are described in FIGS. 5-23 are used by way of example, one skilled in the art will recognize that other examples and configurations are possible.

The foregoing description of the implementations of the present technology has been presented for the purposes of illustration and description. It is not intended to be exhaustive or to limit the present technology to the precise form disclosed. Many modifications and variations are possible in light of the above teaching. It is intended that the scope of the present technology be limited not by this detailed description, but rather by the claims of this application. As should be understood by those familiar with the art, the present technology may be implemented in other specific forms, without departing from the spirit or essential characteristics thereof. Likewise, the particular naming and division of the modules, routines, features, attributes, methodologies, and other aspects are not mandatory or significant, and the mechanisms that implement the present disclosure or its features may have different names, divisions and/or formats. Furthermore, as should be apparent to one of ordinary skill in the relevant art, the modules, routines, features, attributes, methodologies and other aspects of the present technology can be implemented as software, hardware, firmware, or any combination of the three. Also, wherever a component, an example of which is a module, of the present technology is implemented as software, the component can be implemented as a standalone program, as part of a larger program, as a plurality of separate programs, as a statically or dynamically linked library, as a kernel loadable module, as a device driver, and/or in every and any other way known now or in the future to those of ordinary skill in the art of computer programming. Additionally, the present technology is in no way limited to implementation in any specific programming language, or for any specific operating system or environment. Accordingly, the disclosure of the present technology is intended to be illustrative, but not limiting, of the scope of the present disclosure, which is set forth in the following claims.

What is claimed is:

1. A computer-implemented method using one or more computing devices for implementing a video gaming application, comprising:
 - providing access by one or more user devices of one or more players to the video gaming application operated on at least one of a social network server, a third party server, and an application provided on electronic devices used by the one or more players;
 - providing an interface to the video gaming application via at least one of a social network interface, a mobile device interface, a gaming console interface, and a browser interface;
 - facilitating variable and distinct user experiences based on the one or more user devices that the one or more players use to access the video gaming application, the

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variable and distinct user experiences including at least one of a three-dimensional user interface and a two-dimensional user interface;

receiving, via the social network server, one or more social network interactions from one or more non-players, the one or more non-players being users with whom the one or more players share an affinity in a social network, the one or more social network interactions including a comment posted to the social network server by the one or more non-players, the comment being a comment on one or more events posted to the social network server; and

modifying play of the video gaming application based on the one or more social network interactions from the one or more non-players.

2. The computer-implemented method of claim 1, further comprising:

posting the one or more events from the video gaming application to the social network server.

3. The method of claim 2, wherein the one or more social network interactions include an indication of approval by the one or more non-players of the one or more events posted to the social network server.

4. The method of claim 2, wherein posting one or more events to the social network server includes posting an indication of effects certain comments have on the play of the video gaming application.

5. The computer-implemented method of claim 1, further comprising:

modifying play of the video gaming application based on social network interactions from the one or more players.

6. The method of claim 1, further comprising receiving a selection from the one or more players indicating a different level of play, and wherein modifying play of the video gaming application includes modifying play of the video gaming application based on the selection.

7. A computer program product comprising a computer useable medium including a computer readable program, wherein the computer readable program when executed on a computer causes the computer to:

provide access by one or more user devices of one or more players to the video gaming application operated on at least one of a social network server, a third party server, and an application provided on electronic devices used by the one or more players;

provide an interface to the video gaming application via at least one of a social network interface, a mobile device interface, a gaming console interface, and a browser interface;

facilitate variable and distinct user experiences based on the one or more user devices that the one or more players use to access the video gaming application, the variable and distinct user experiences including at least one of a three-dimensional user interface and a two-dimensional user interface;

receive, via the social network server, one or more social network interactions from one or more non-players, the one or more non-players being users with whom the one or more players share an affinity in a social network, the one or more social network interactions including a comment posted to the social network server by the one or more non-players, the comment being a comment on one or more events posted to the social network server; and

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modify play of the video gaming application based on social network interactions from the one or more non-players.

8. The computer program product of claim 7, wherein the computer readable program when executed on a computer further causes the computer to:

post the one or more events from the video gaming application to the social network server.

9. The computer program product of claim 8, wherein posting one or more events to the social network server includes posting an indication of effects certain comments have on the play of the video gaming application.

10. The computer program product of claim 7, wherein the computer readable program when executed on a computer further causes the computer to:

modify play of the video gaming application based on social network interactions from the one or more players.

11. The computer program product of claim 7, further comprising receiving a selection from the one or more players indicating a different level of play, and wherein modifying play of the video gaming application includes modifying play of the video gaming application based on the selection.

12. A system comprising:

a processor, and;

a memory storing instructions that, when executed, cause the system to:

provide access by one or more user devices of one or more players to a video gaming application operated on at least one of a social network server, a third party server, and an application provided on electronic devices used by the one or more players;

provide an interface to the video gaming application via at least one of a social network interface, a mobile device interface, a gaming console interface, and a browser interface;

facilitate variable and distinct user experiences based on the one or more user devices that the one or more players use to access the video gaming application, the variable and distinct user experiences including at least one of a three-dimensional user interface and a two-dimensional user interface, wherein both the three-dimensional and two-dimensional user interface are configured to operate concurrently;

receive, via the social network server, one or more social network interactions from one or more non-players, the one or more non-players being users with whom the one or more players share an affinity in a social network, the one or more social network interactions including a comment posted to the social network server by the one or more non-players, the comment being a comment on one or more events posted to the social network server; and

modify play of the video gaming application based on social network interactions from the one or more non-players.

13. A system as claimed in claim 12, wherein the video gaming application posts the one or more events to the social network server.

14. The system of claim 13, wherein the one or more social network interactions include a comment on the one or more events posted to the social network server.

15. The system of claim 13, wherein the one or more social network interactions include an indication of approval by the one or more non-players of the one or more events posted to the social network server.

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16. The system of claim 13, wherein posting one or more events to the social network server includes posting an indication of effects certain comments have on the play of the video gaming application.

17. A system as claimed in claim 12, wherein the video gaming application modifies play based on social network interactions from the one or more players.

18. The system of claim 12, further comprising receiving a selection from the one or more players indicating a different level of play, and wherein modifying play of the video gaming application includes modifying play of the video gaming application based on the selection.

* * * * *

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US009597586B1

**(12) United States Patent
Wiklem et al.****(10) Patent No.: US 9,597,586 B1
(45) Date of Patent: Mar. 21, 2017****(54) PROVIDING VIDEO GAMING ACTION VIA
COMMUNICATIONS IN A SOCIAL
NETWORK****(71) Applicant: CP Studios LLC**, Salt Lake City, UT
(US)**(72) Inventors: Brian Joseph Wiklem**, Salt Lake City,
UT (US); **Carrie Ann Cowan**, Salt
Lake City, UT (US)**(73) Assignee: CP Studios Inc.**, Salt Lake City**(*) Notice:** Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 385 days.**(21) Appl. No.: 13/889,284****(22) Filed: May 7, 2013****Related U.S. Application Data****(60)** Provisional application No. 61/643,352, filed on May
7, 2012.**(51) Int. Cl.**
A63F 13/00 (2014.01)
A63F 13/30 (2014.01)**(52) U.S. Cl.**
CPC **A63F 13/12** (2013.01)**(58) Field of Classification Search**
CPC A63F 13/12; G07F 17/3225
USPC 705/7, 14; 463/42
See application file for complete search history.**(56) References Cited****U.S. PATENT DOCUMENTS**6,386,980 B1 5/2002 Nishino et al.
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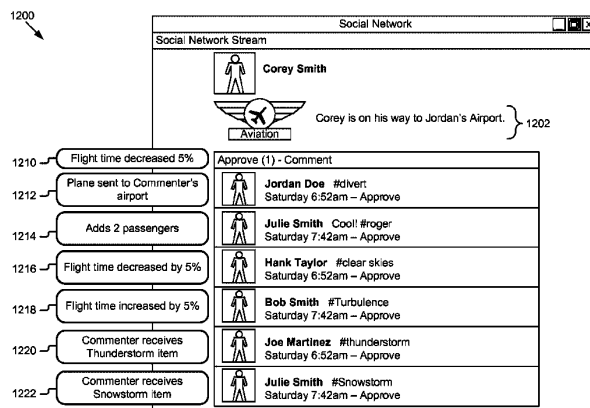
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Primary Examiner — David L Lewis*Assistant Examiner* — Eric M Thomas**(74) Attorney, Agent, or Firm** — Patent Law Works LLP**(57) ABSTRACT**

The present technology is directed to a flexible gaming architecture associated or linked with social networks. In some implementations, the flexible architecture facilitates play in a virtual gaming environment associated or linked with a social network, based on actions by users within the social network. The architecture facilitates access to video gaming applications either associated with or linked with social networks in various ways, including 1) directly via social networks or sites, for example, accessed via personal computers; 2) via wall posts or via an online social networking service that enables its users to send and read text-based posts; 3) via mobile devices used to access gaming sites associated with or linked to social networks; and 4) via game consoles configured to access gaming sites either associates with or linked to social networks.

18 Claims, 30 Drawing Sheets

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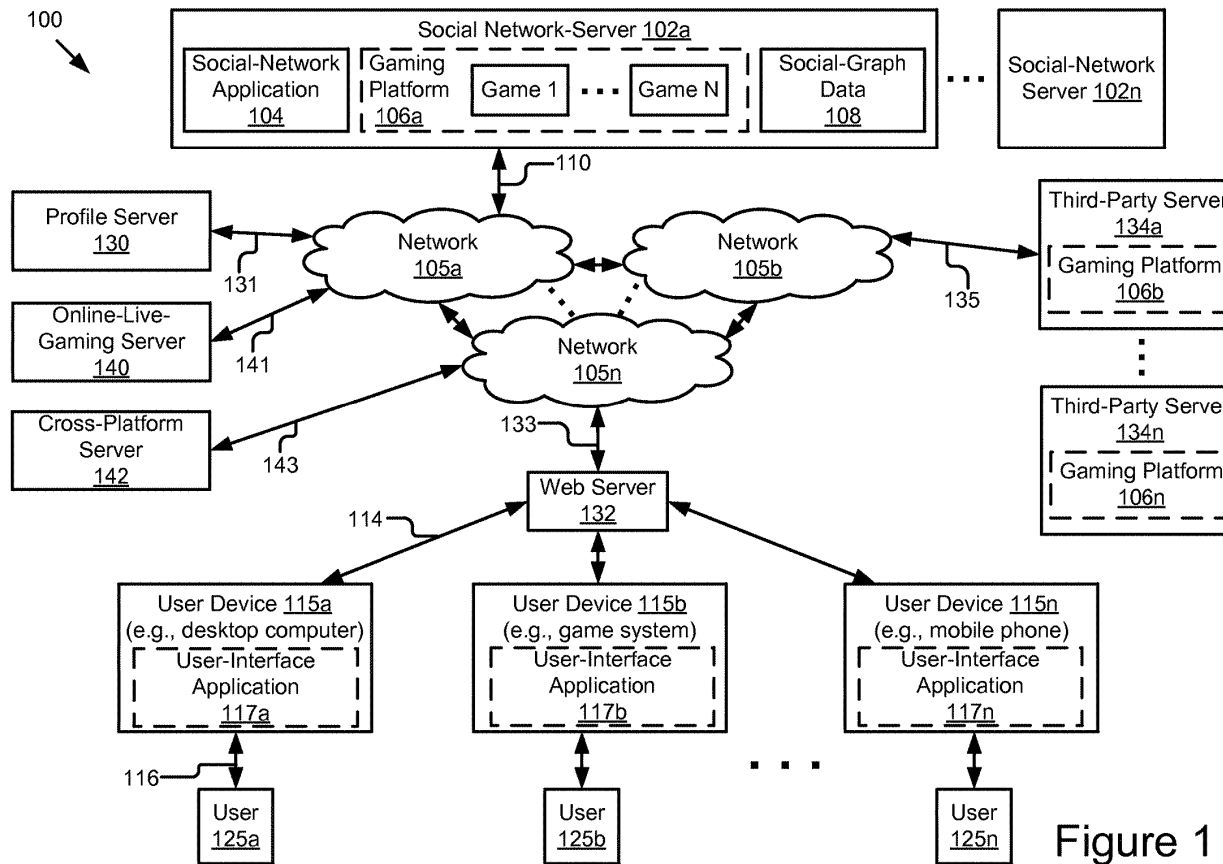


Figure 1

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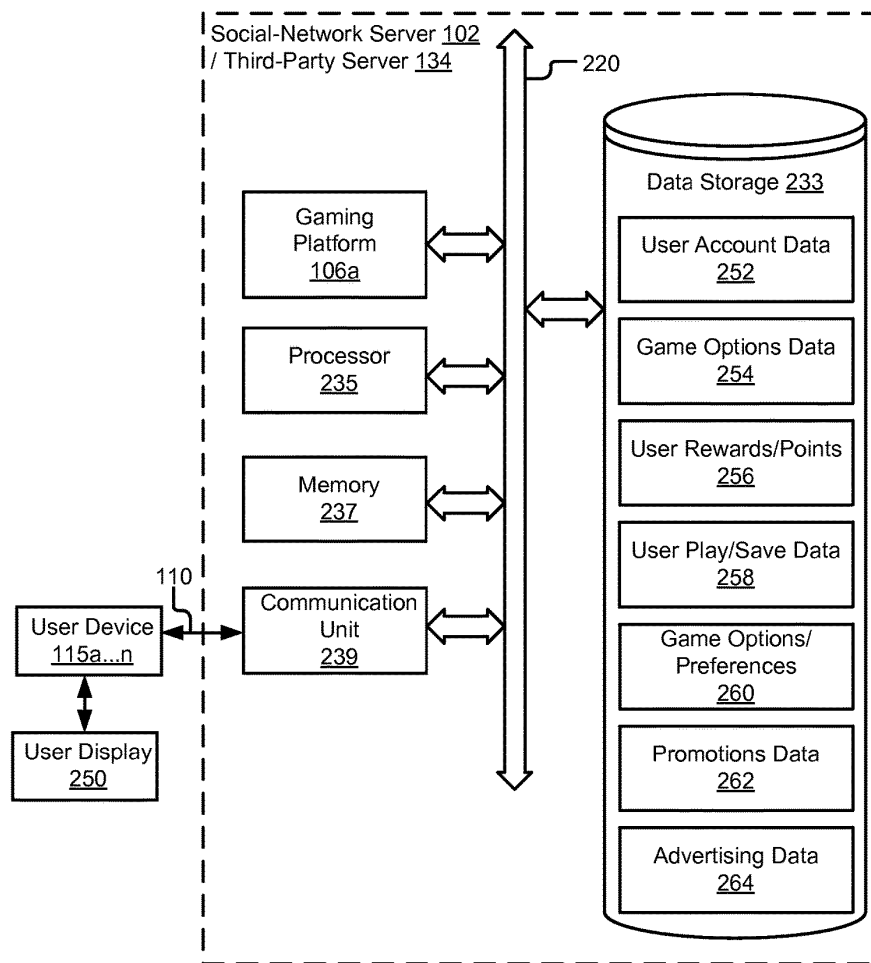


Figure 2

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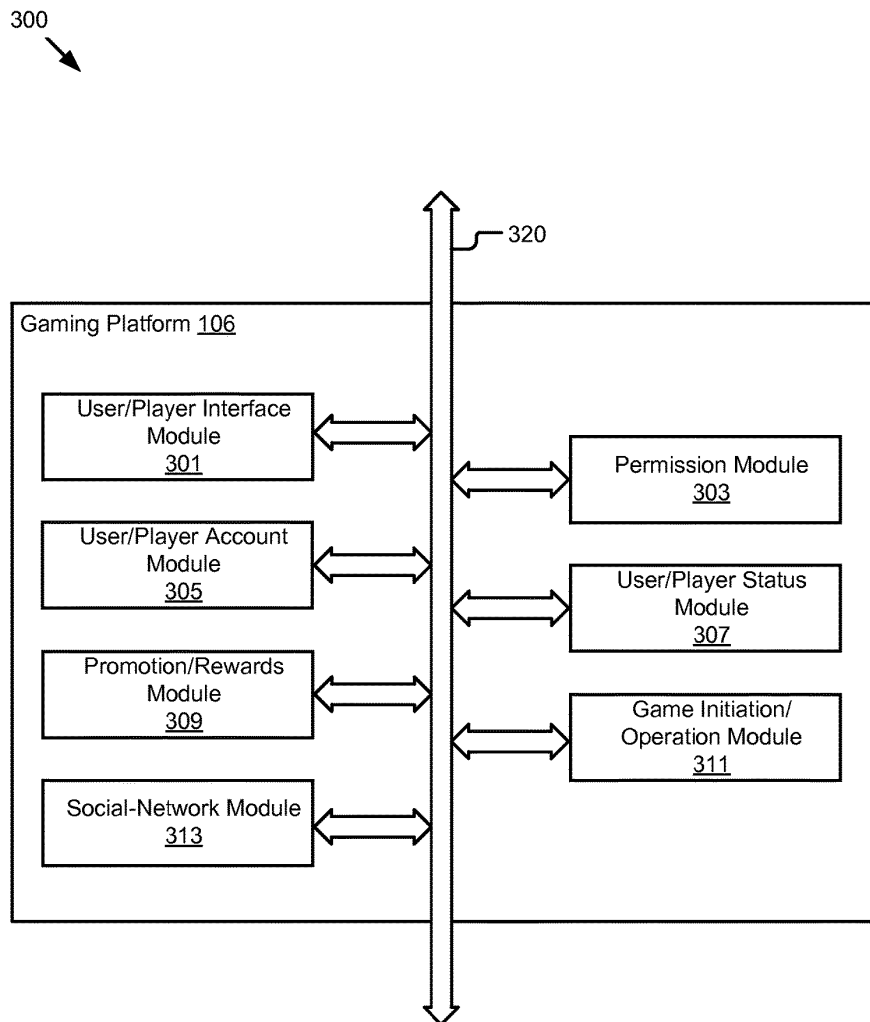


Figure 3

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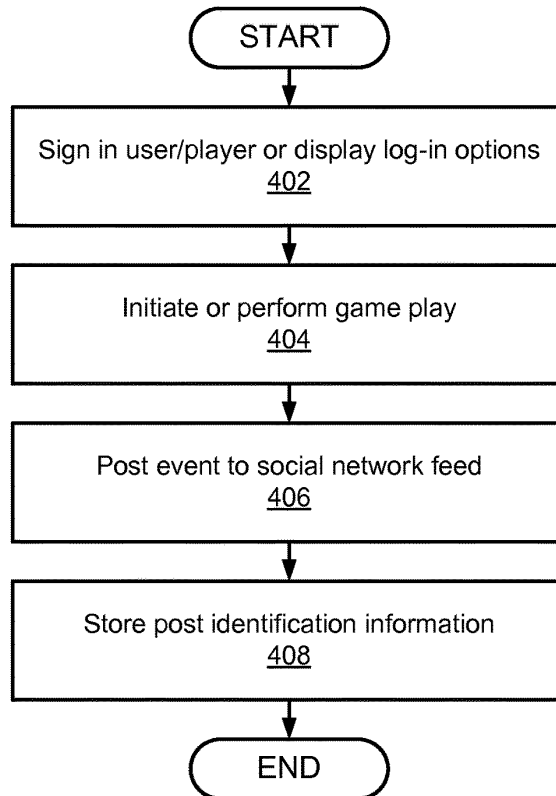


Figure 4

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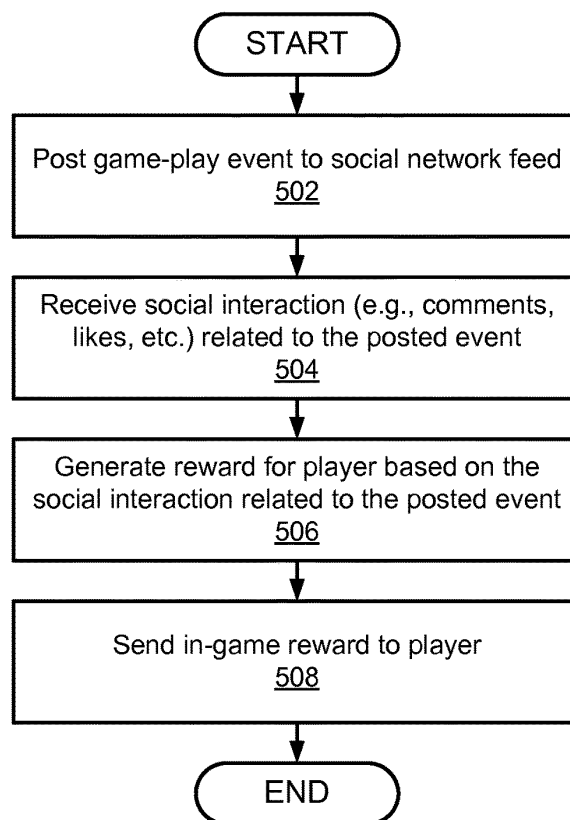


Figure 5

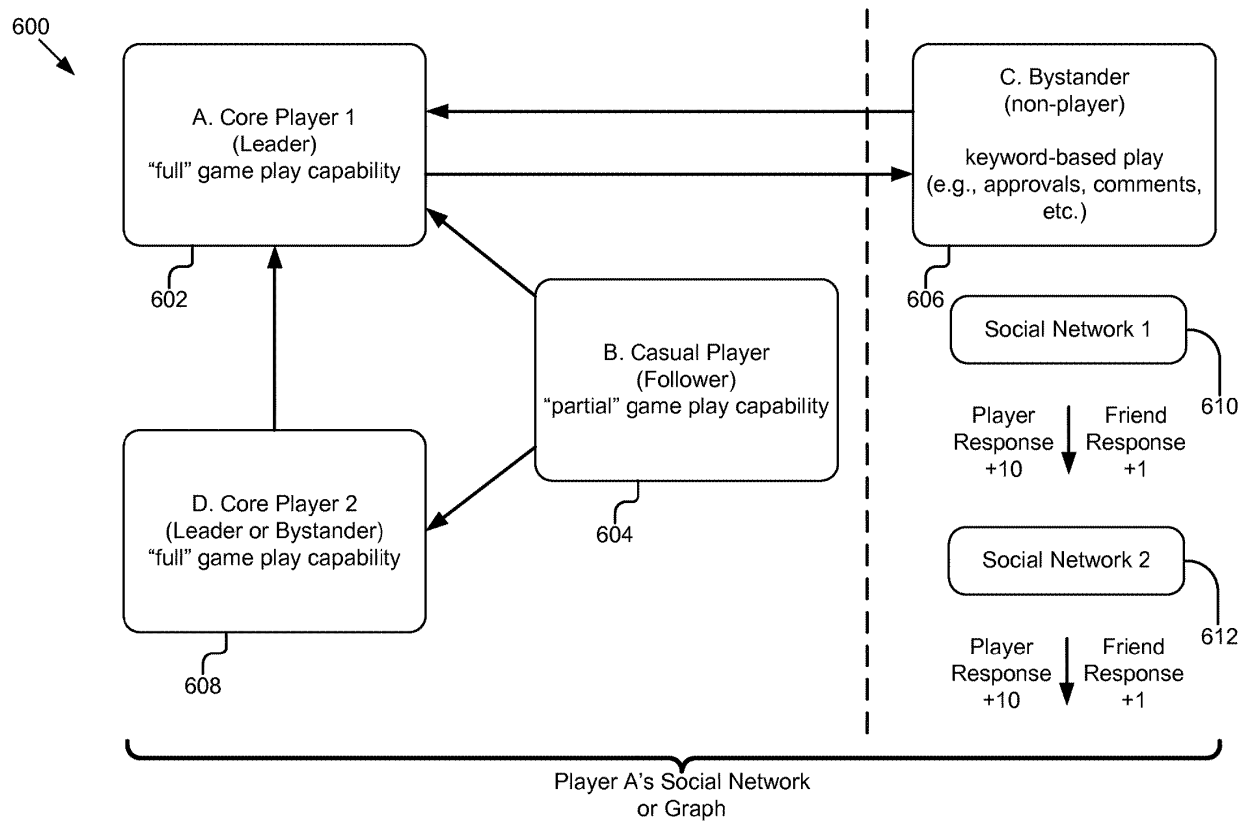


Figure 6

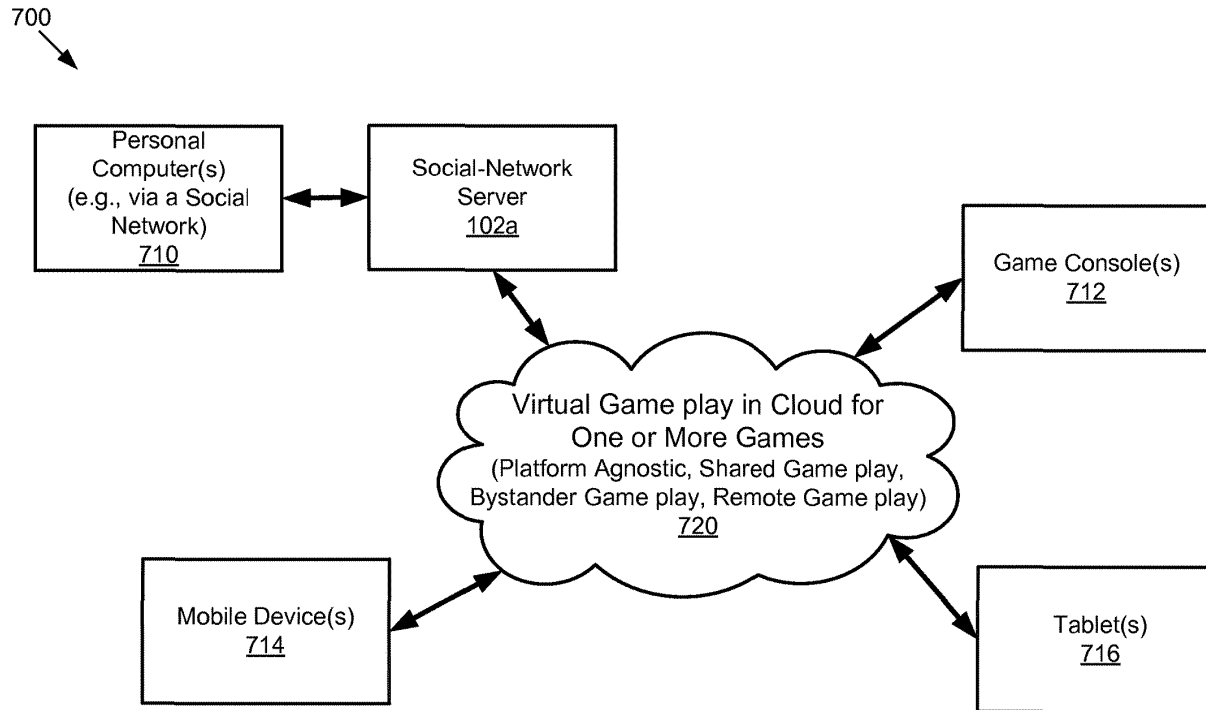


Figure 7

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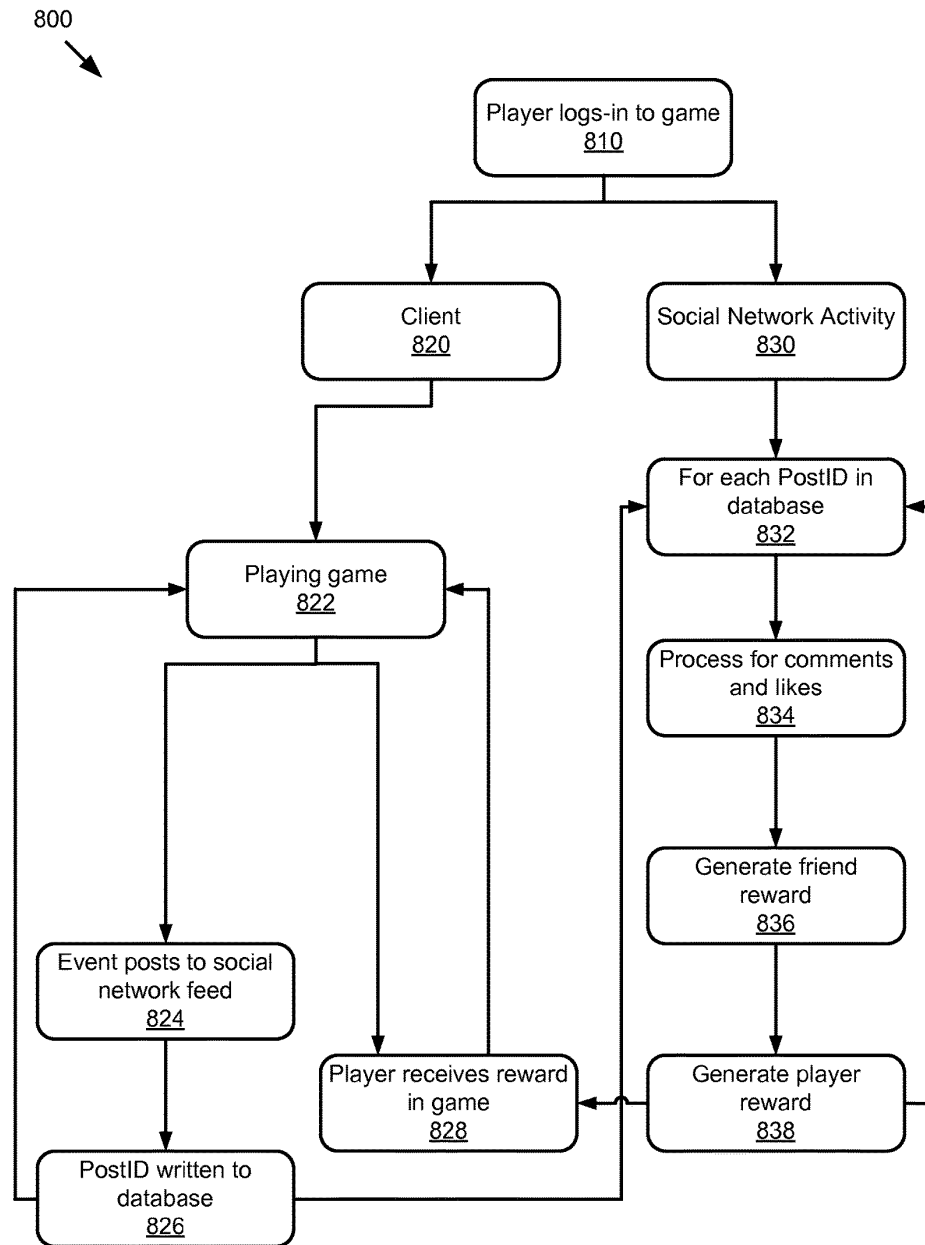


Figure 8

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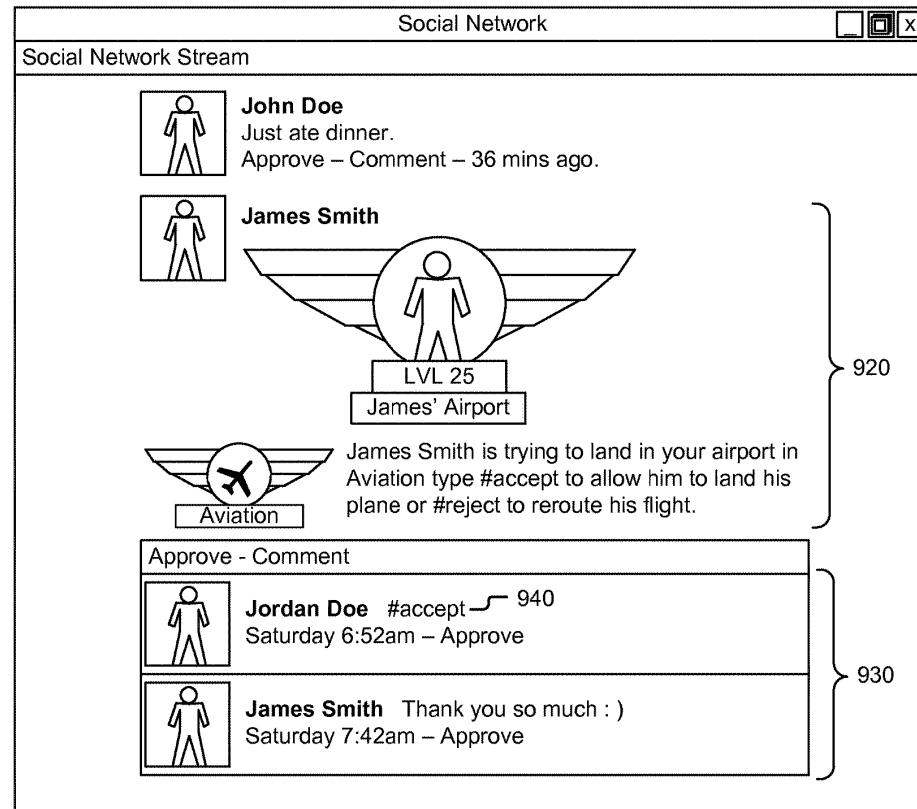


Figure 9

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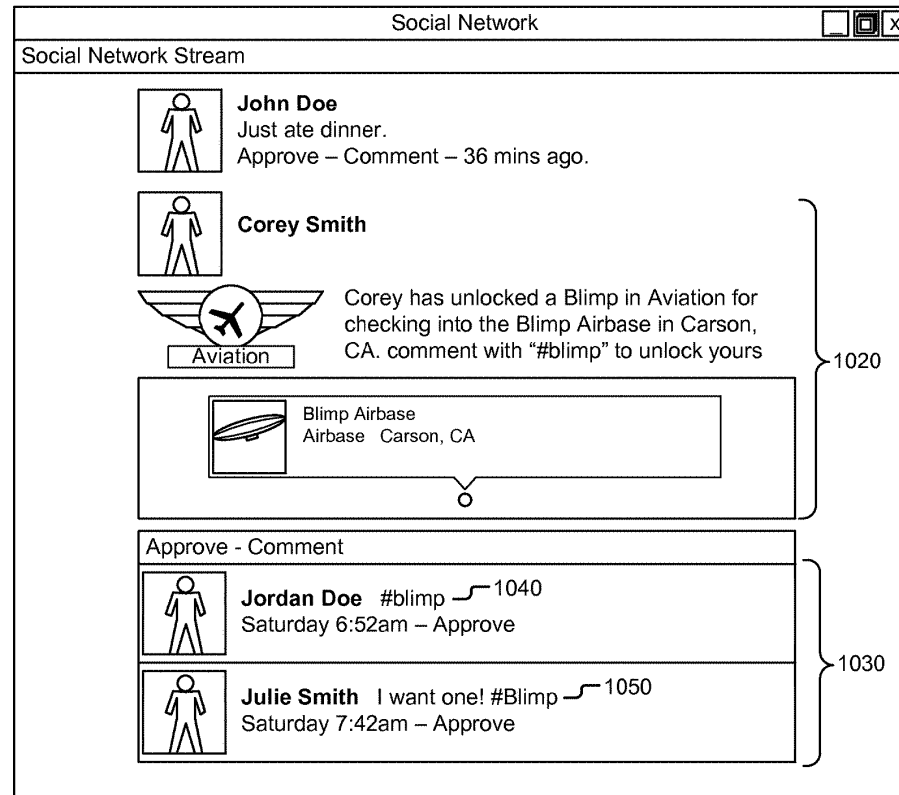


Figure 10

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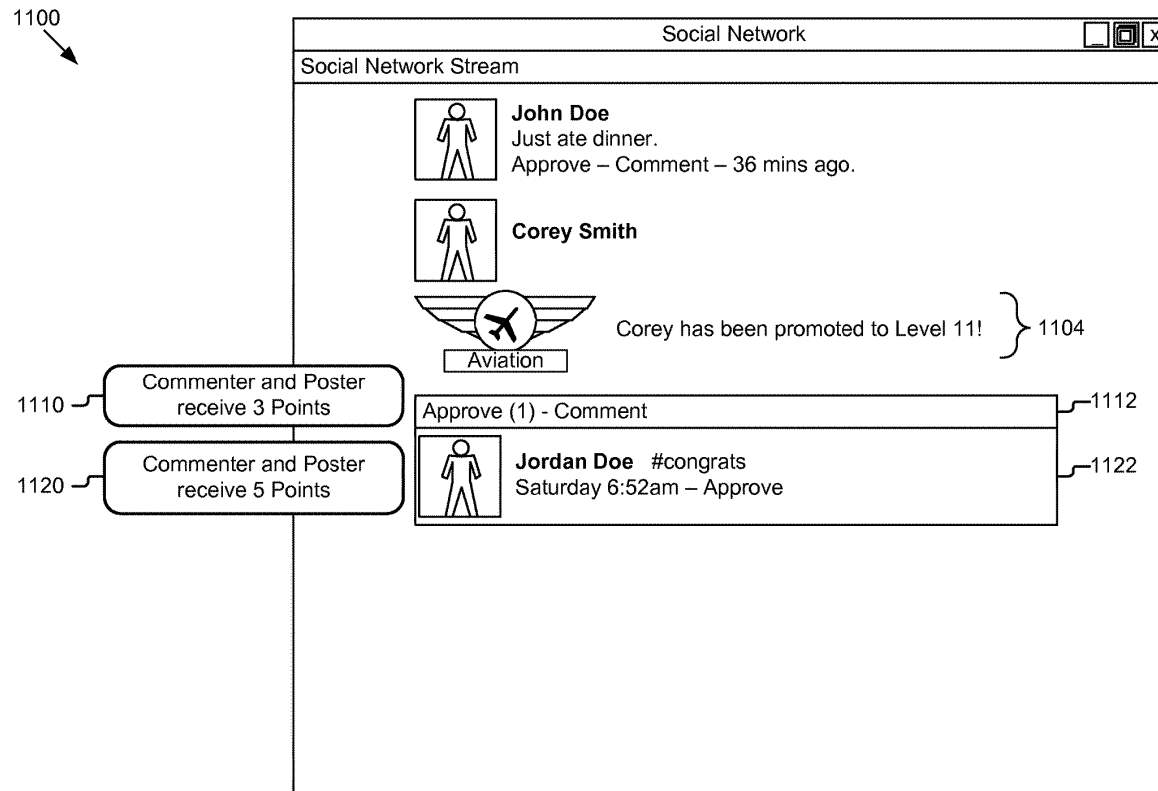


Figure 11A

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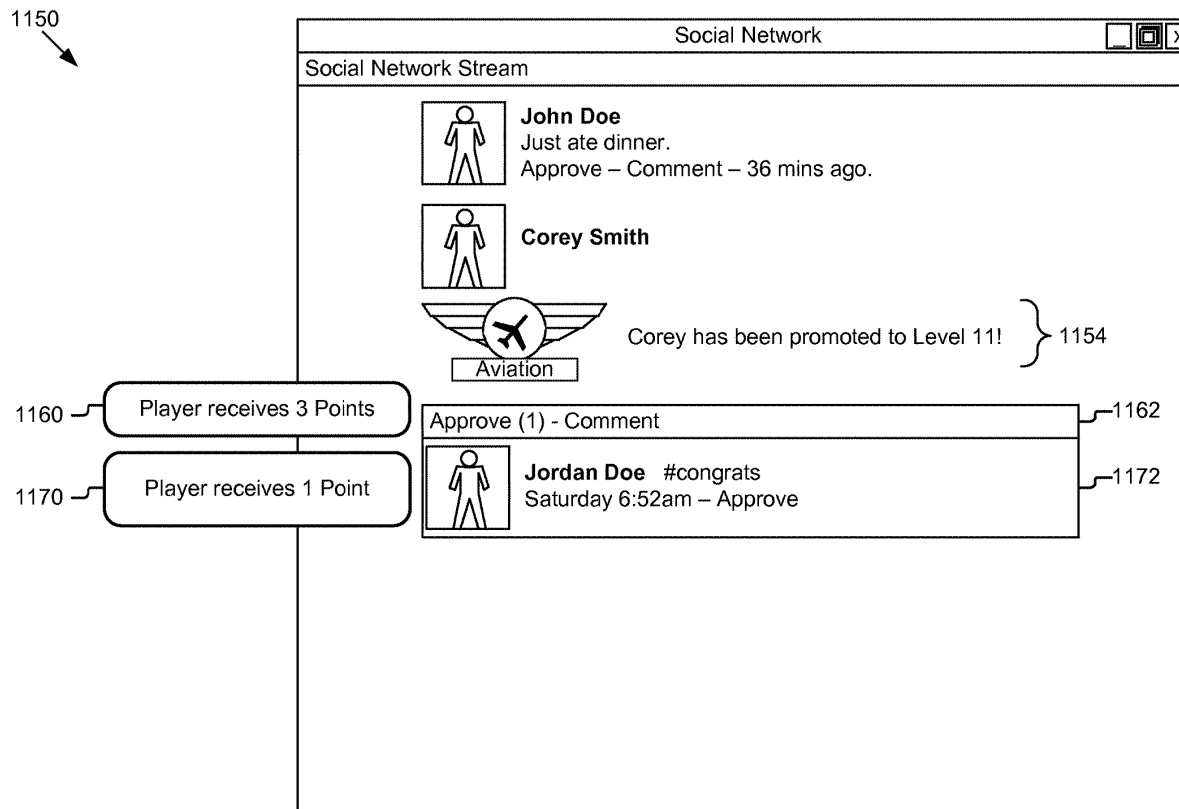


Figure 11B

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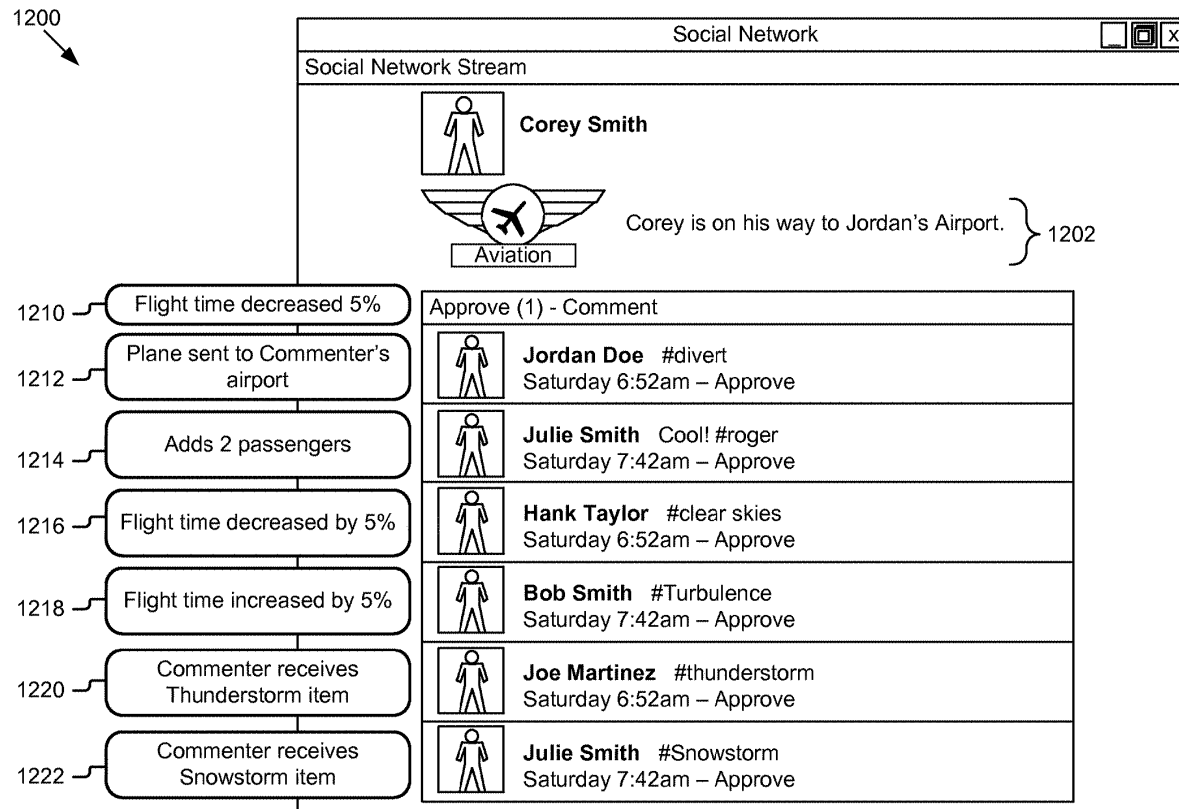


Figure 12A

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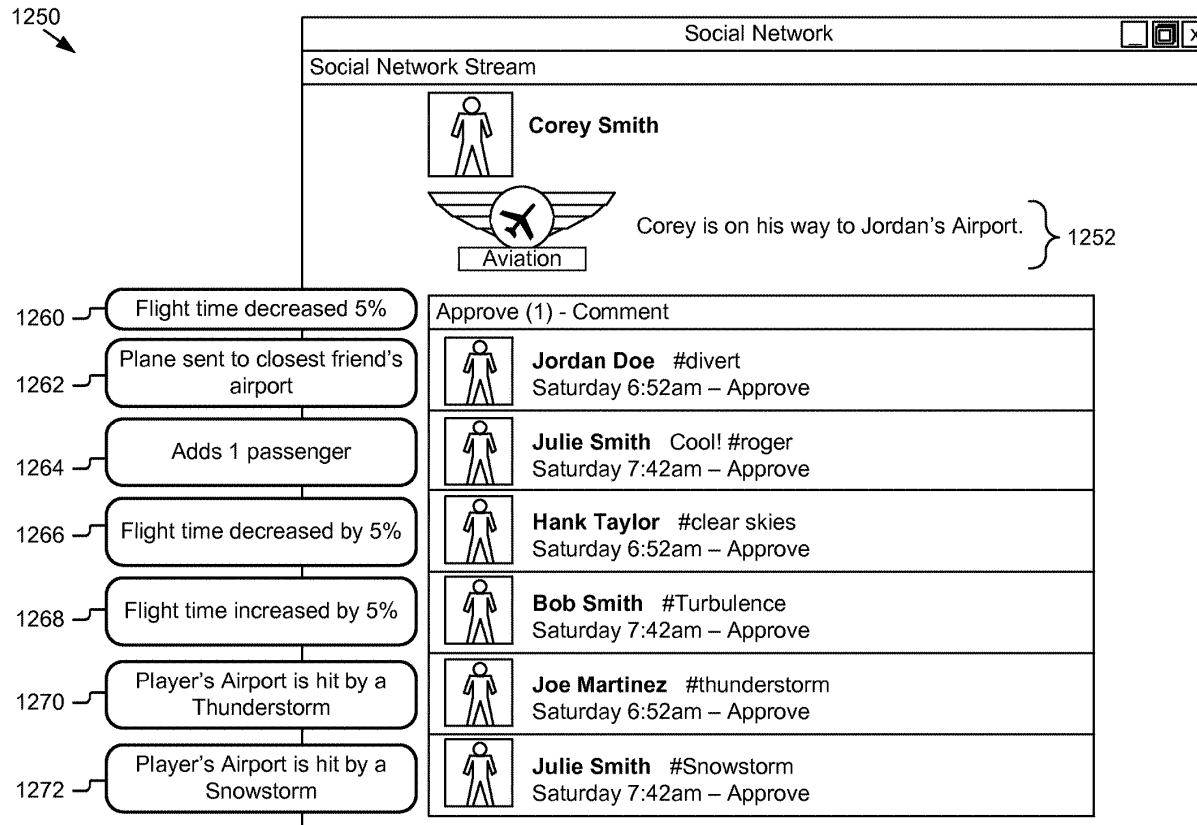


Figure 12B

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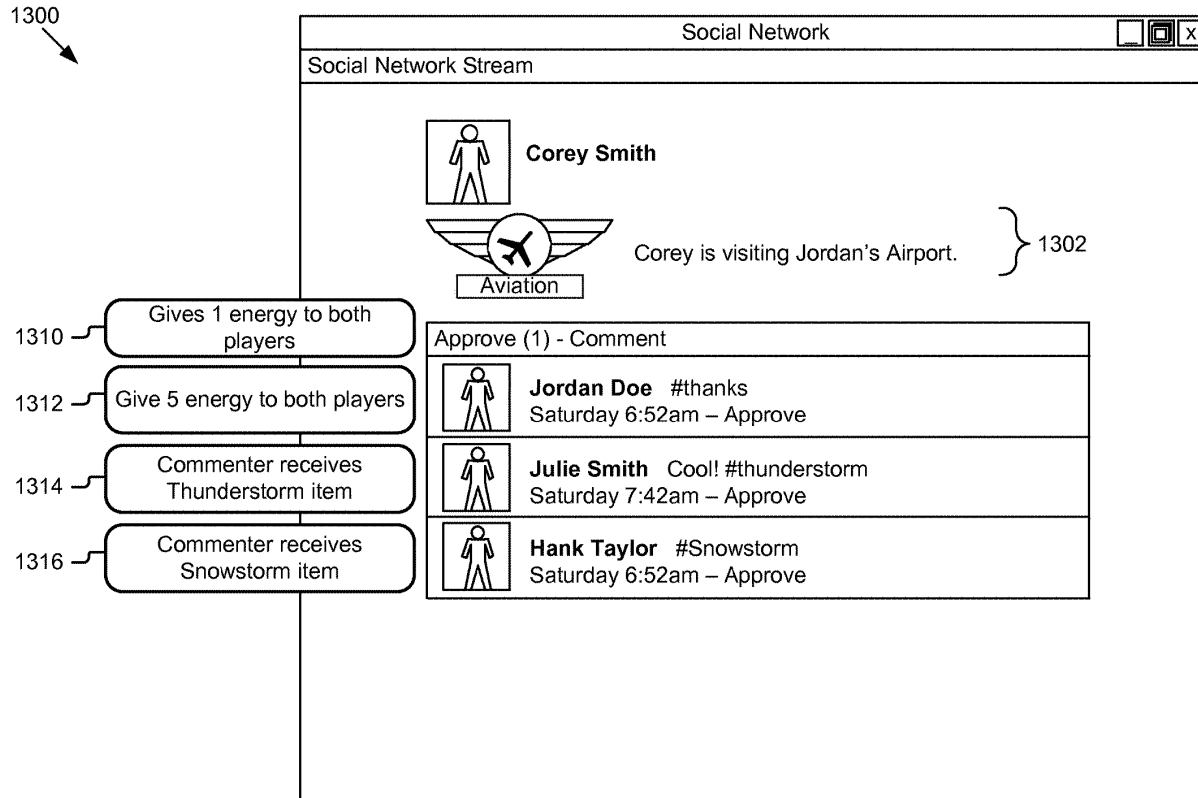


Figure 13A

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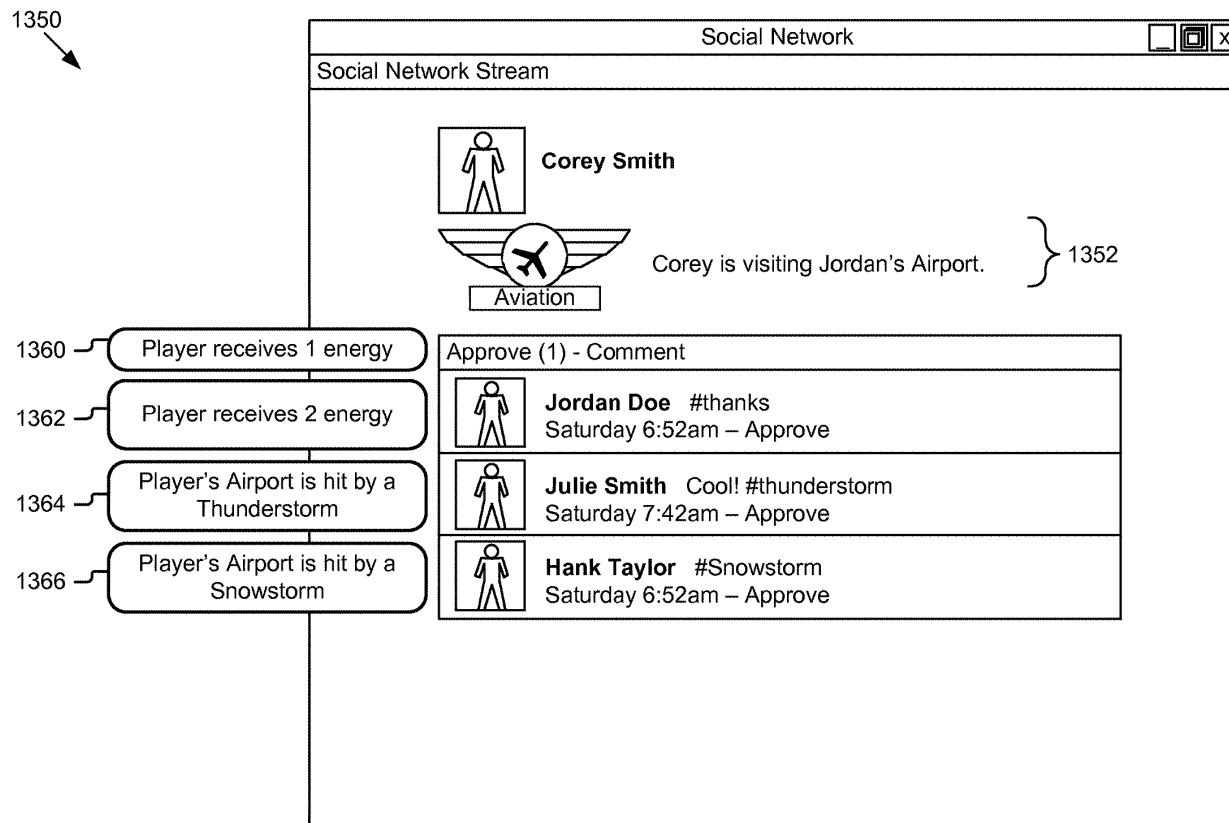


Figure 13B

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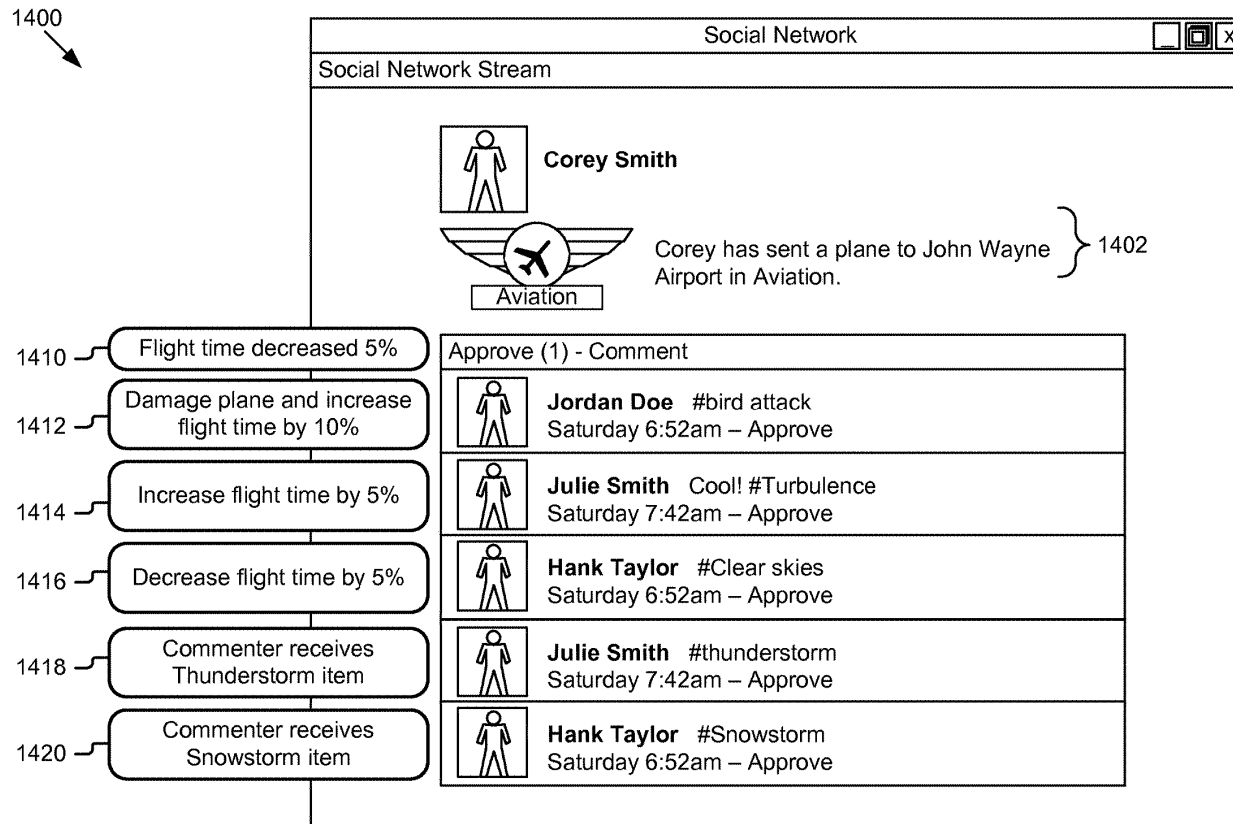


Figure 14A

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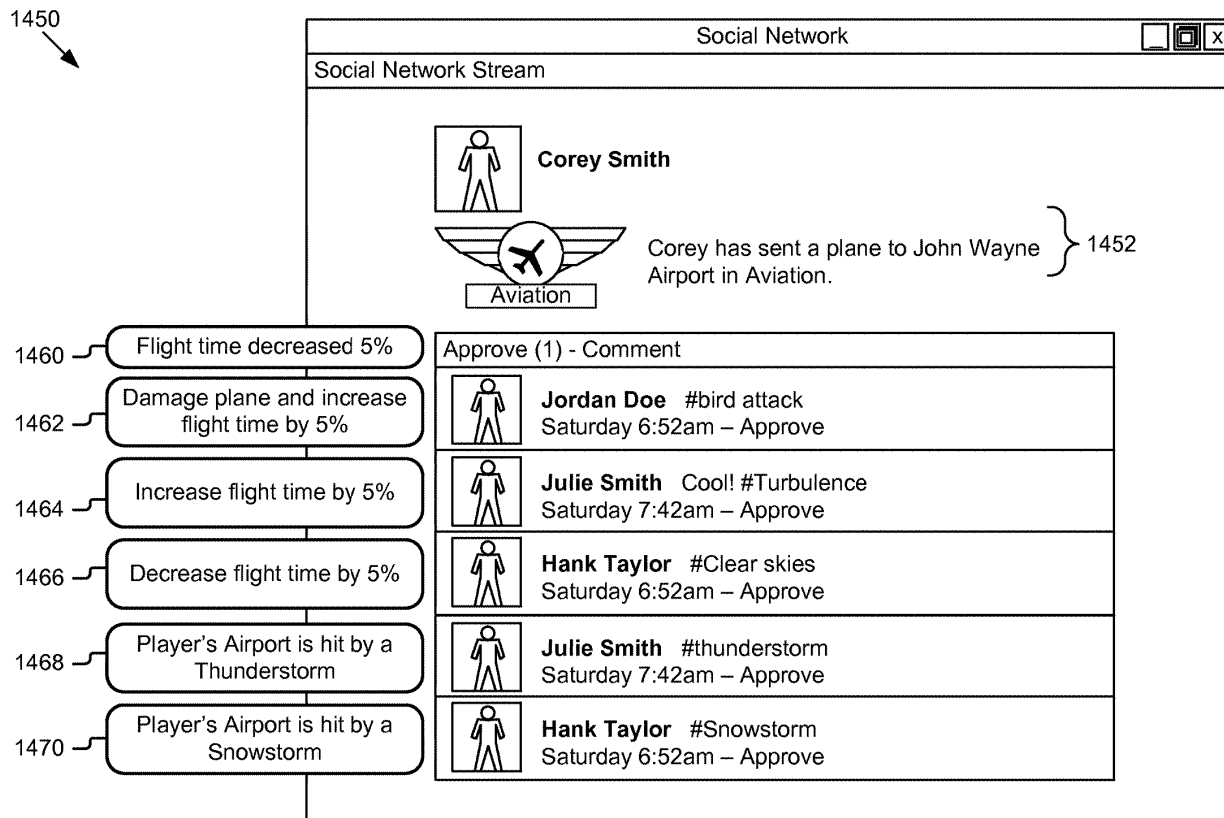


Figure 14B

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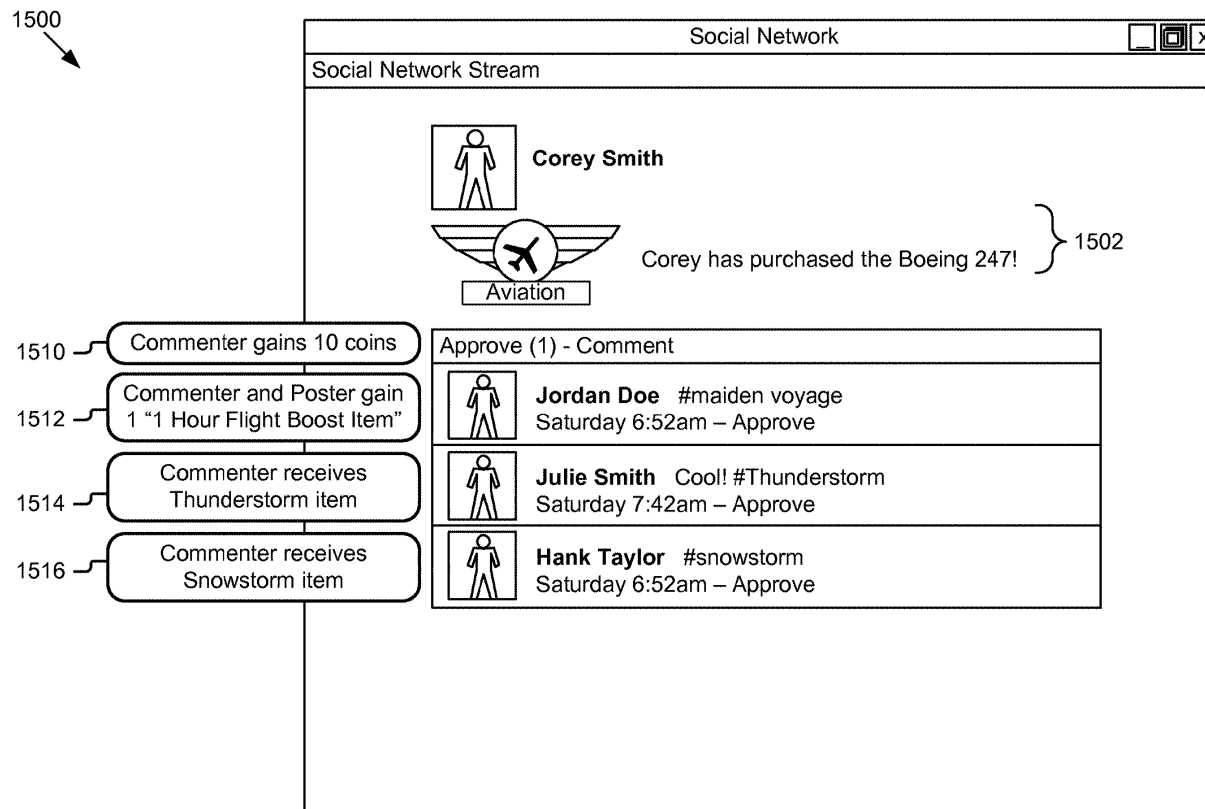


Figure 15A

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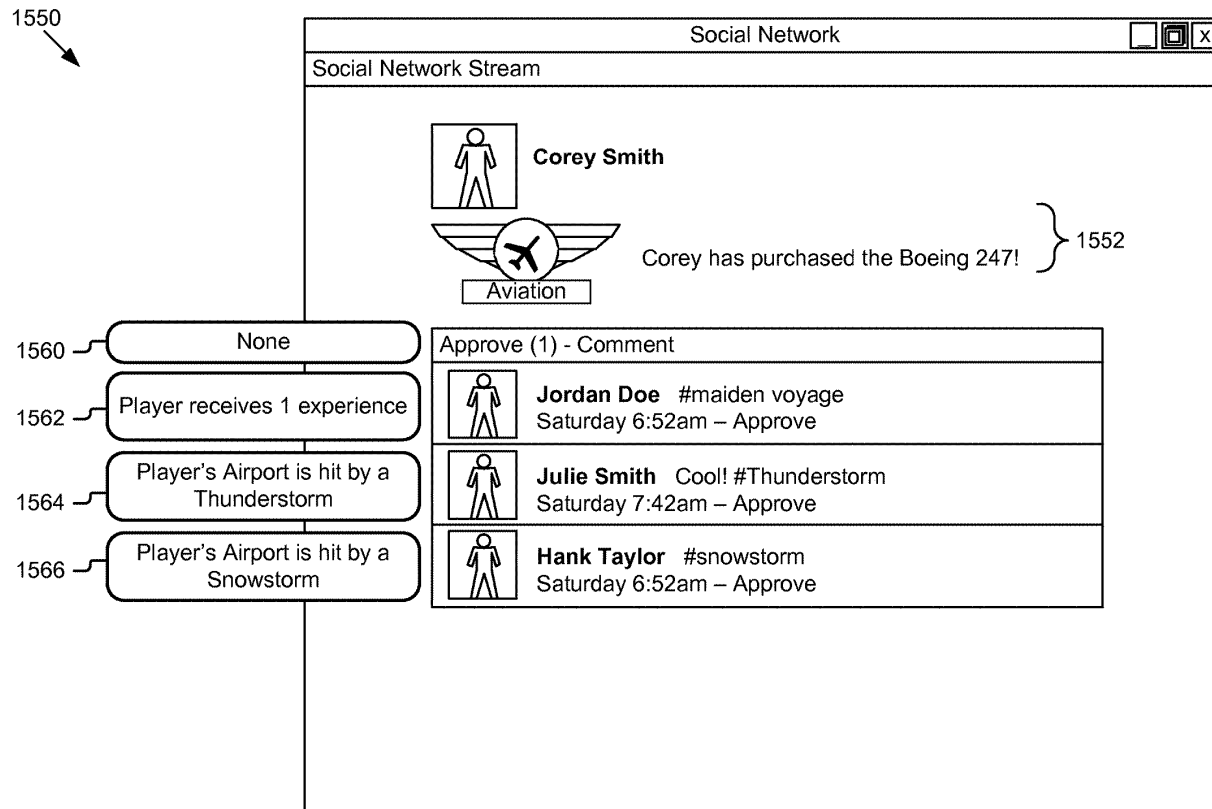


Figure 15B

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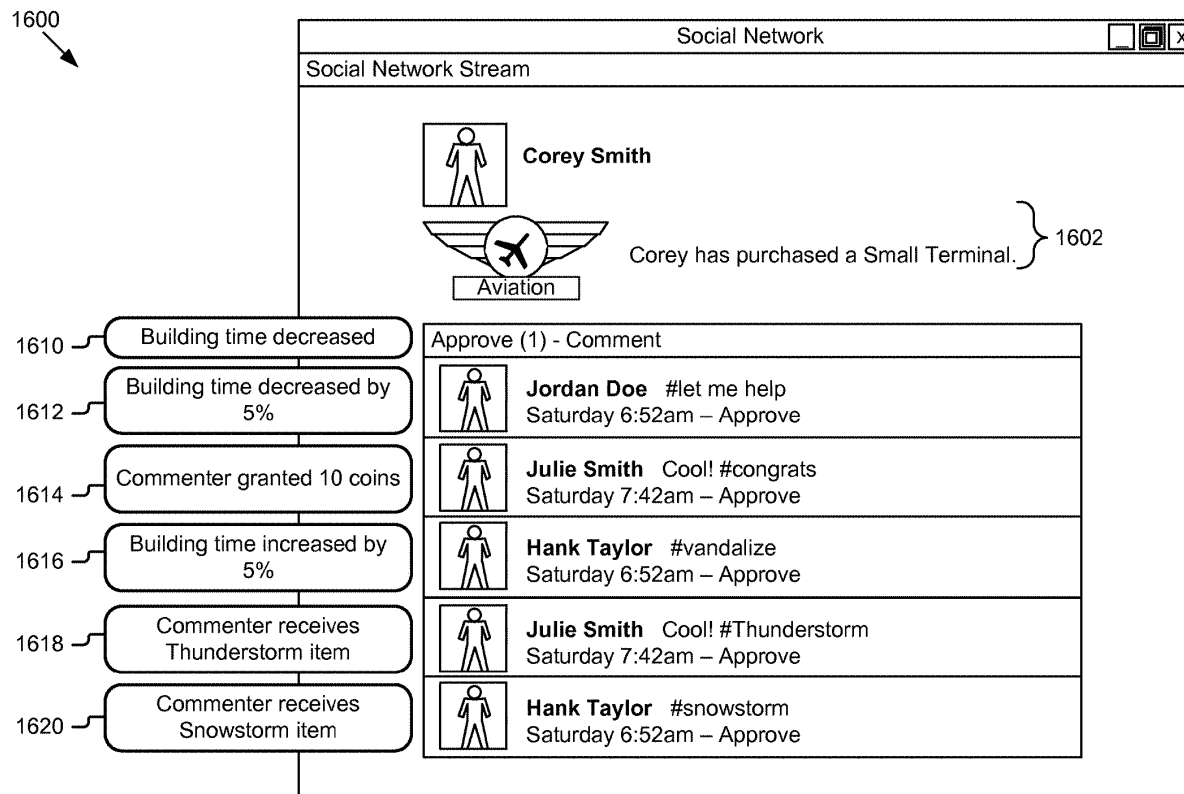


Figure 16A

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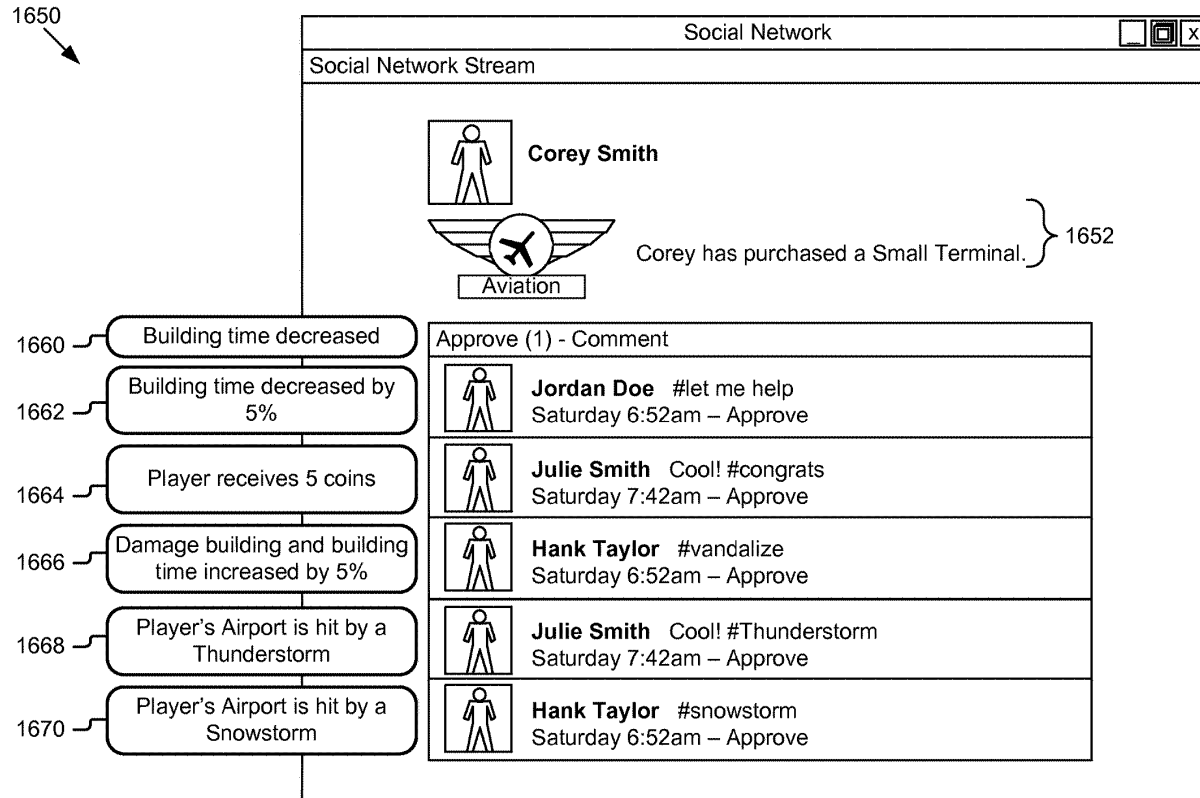


Figure 16B

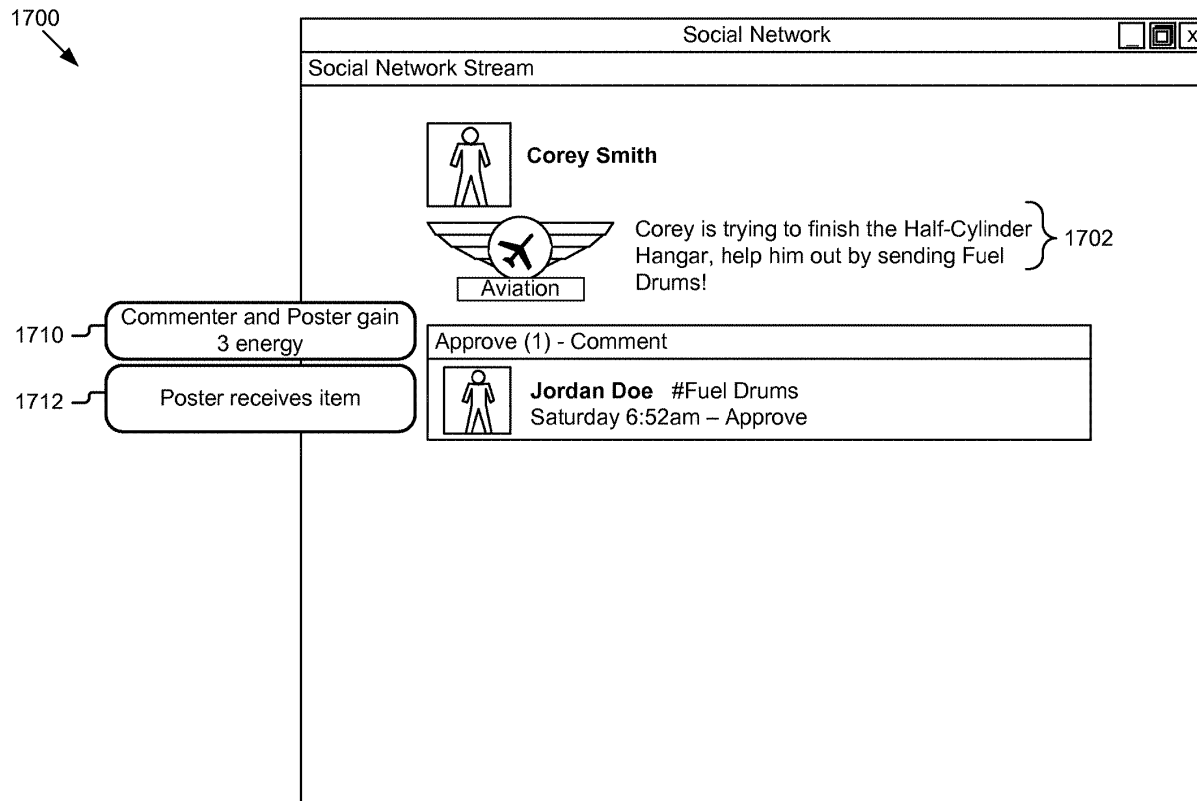


Figure 17A

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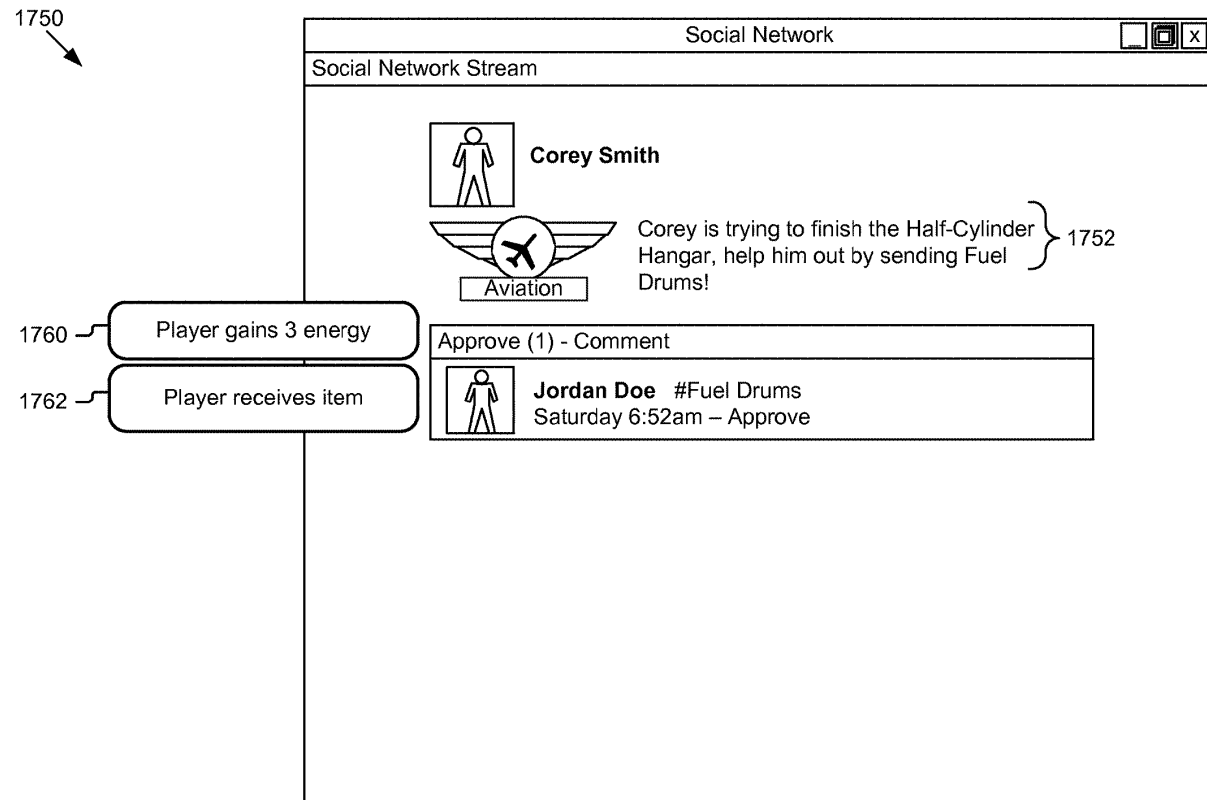


Figure 17B

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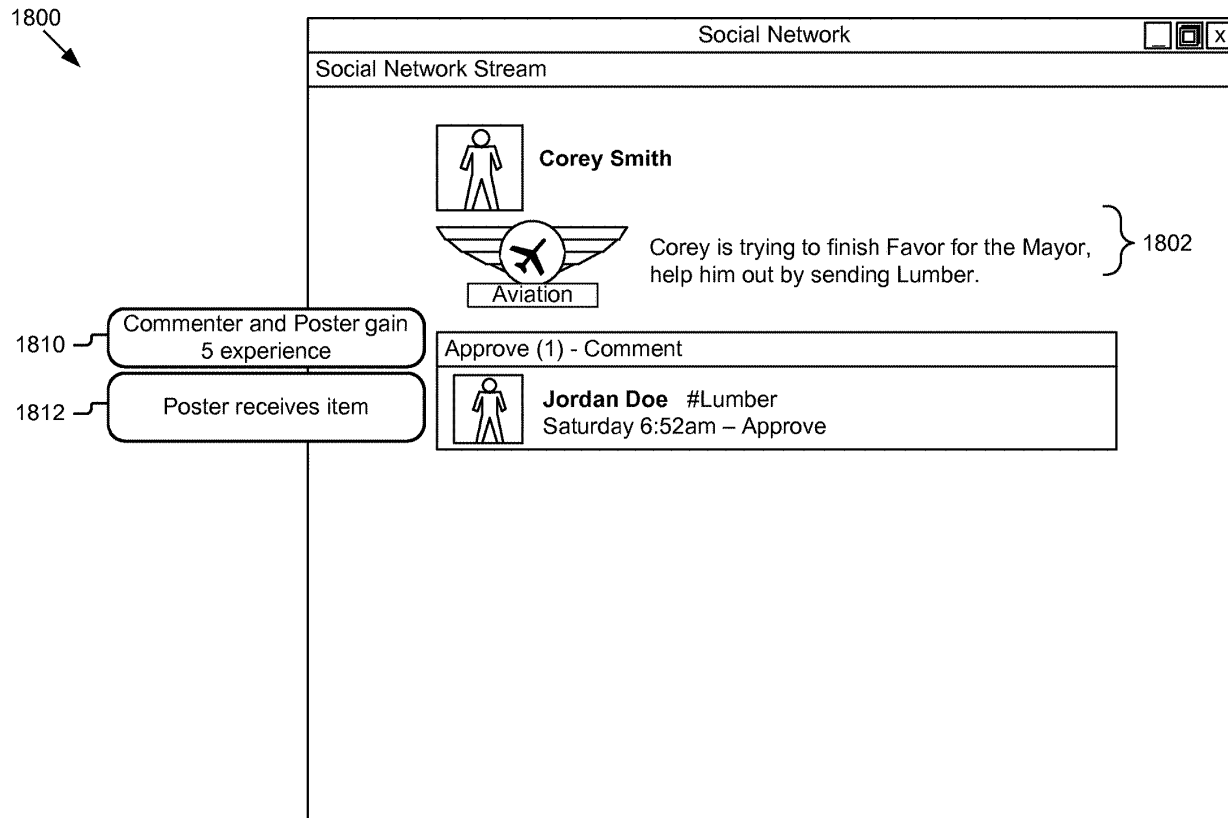


Figure 18A

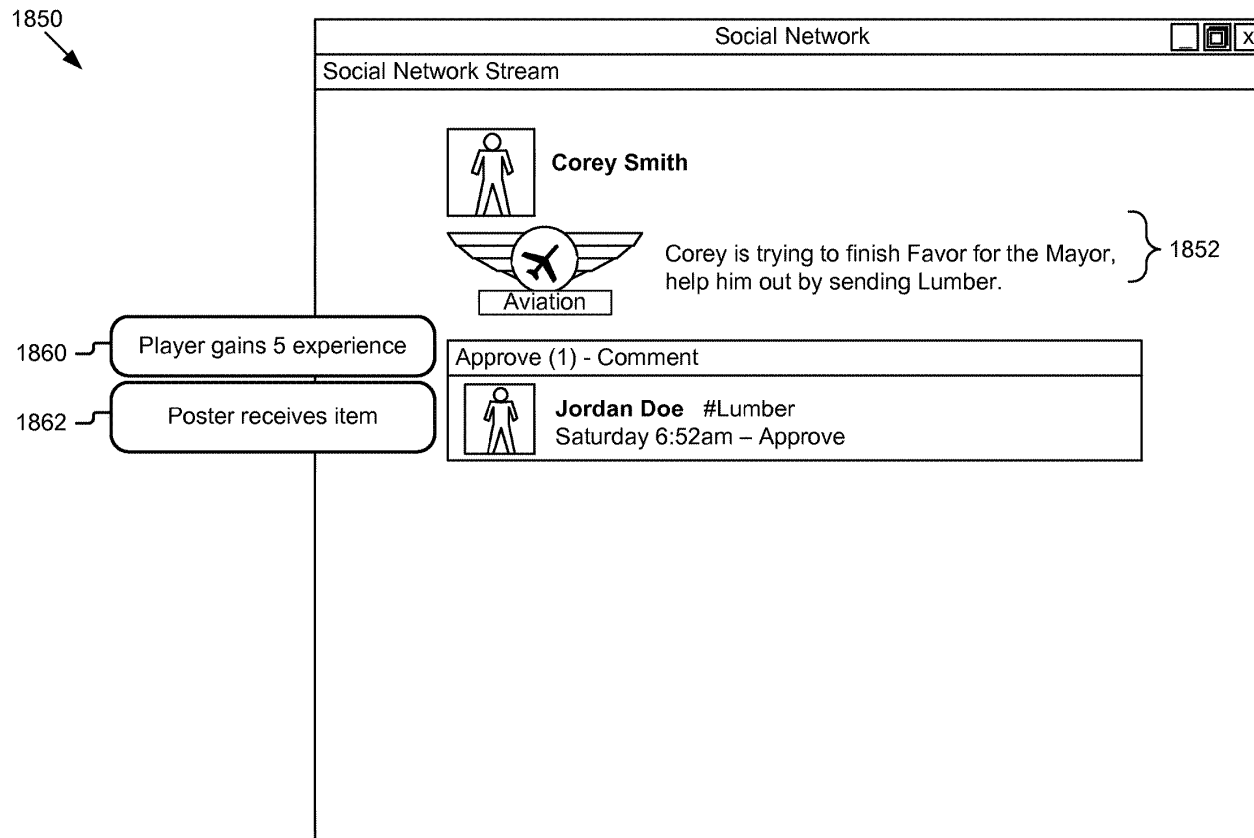


Figure 18B

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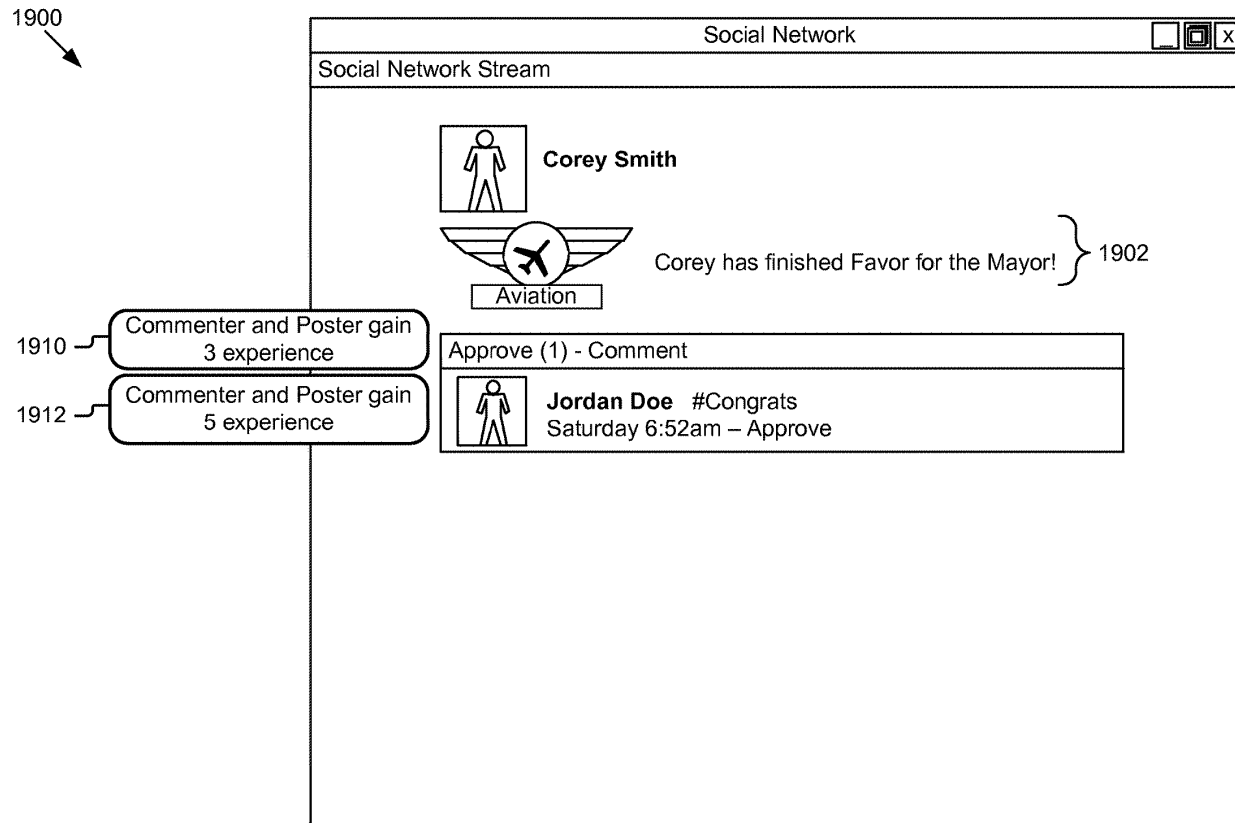


Figure 19A

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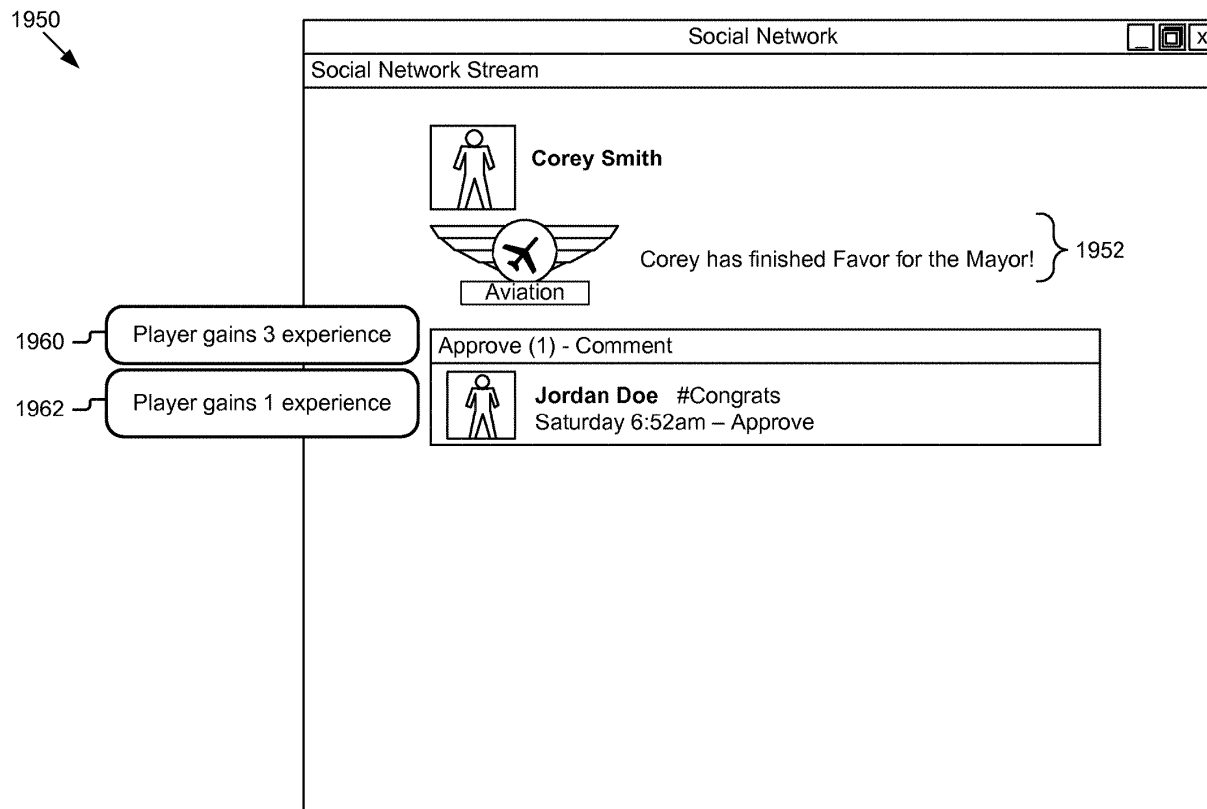


Figure 19B

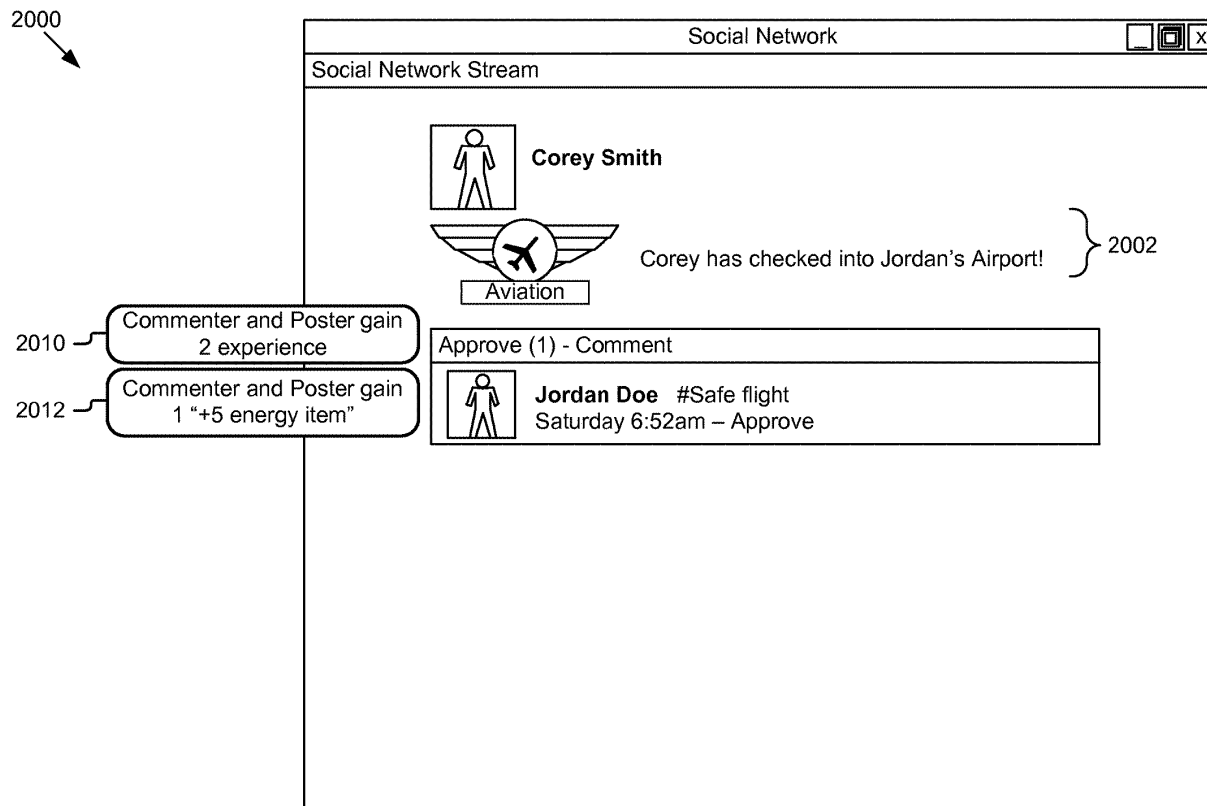


Figure 20A

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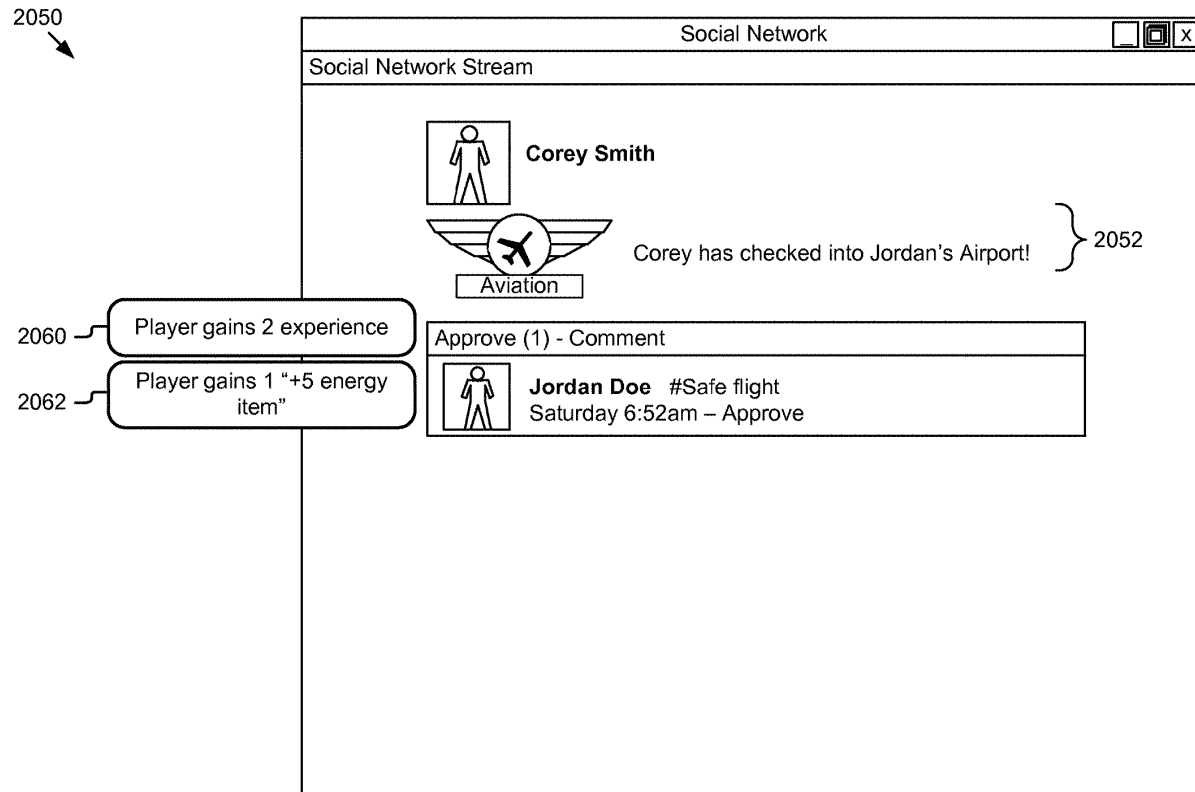


Figure 20B

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**PROVIDING VIDEO GAMING ACTION VIA
COMMUNICATIONS IN A SOCIAL
NETWORK**

**CROSS REFERENCE TO RELATED
APPLICATIONS**

The present application claims the benefit of priority under 35 U.S.C. §119(e) from U.S. Provisional Application No. 61/643,352 entitled “MULTILAYER FRAMEWORK ARCHITECTURE AND USER INTERFACES FOR VIDEO GAMING APPLICATIONS,” filed on May 7, 2012, by Brian Joseph Wiklem, Christopher Robert Masterton, and Carrie Ann Cowan. The entire contents of the provisional application are incorporated by reference herein. The present application also incorporates by reference the contents of utility applications entitled “MULTILAYER SYSTEM FRAMEWORK AND ARCHITECTURE WITH VARIABLE GAMING CAPABILITIES,” “PROVIDING SYNCHRONIZED AND INTEGRATED VIDEO GAMING,” AND “VIDEO GAMING PLATFORM AND USER INTERFACE,” all of which are concurrently submitted and also claim priority under 35 U.S.C. §119(e) from U.S. Provisional Application No. 61/643,352.

BACKGROUND

The present disclosure relates to video gaming applications and platforms, including those accessed via online services or communities, for example, social networks, or directly via hosted websites, dedicated either wholly or partially to them. In particular, the present disclosure relates to providing video gaming action or play via communications in a social network.

In recent years, video games have become extremely popular. Video games are used not only for entertainment, but also for instructional purposes. Players typically interact with a gaming application through computer or console peripherals such as keyboard, mouse, joysticks, a wide variety of game pads, and funny controllers such as the NES Zapper®. More recently, nontraditional controller technologies such as dance pads, the Wii-mote® or the Kinect®, offering new types of gaming experiences are beginning to emerge. These technologies are capable of enhancing games to incorporate movement, creating a new experience and attracting new audiences.

With the popularity of social networks reaching epic proportions, social games have also become very popular. Yet, these social games have a rigid and restricted architecture.

With the ongoing trends and exponential growth in video gaming, it would certainly be beneficial to find better architectures for gaming applications associated with social networks that continue to enhance the user experience.

SUMMARY

The present disclosure overcomes the deficiencies and limitations of the prior art by providing a technology with a flexible architecture for video gaming applications in social networks. In some embodiments, the flexible architecture provides a continuous visual experience for players across different platforms (platform agnostic) and engages them at different levels in social games. Each of the players may have a unique and different visual experience, depending upon the gaming platform a player uses. The architecture facilitates access to video gaming applications in various

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ways, including 1) via social networks or sites, for example, accessed directly via personal computers; 2) via wall posts or via an online social networking service that enables its users to send and read text-based posts; 3) via mobile devices (iOS, Android, or Windows-based smart phones) that may be used to access digital games in association with social networks; and 4) via game consoles (for example, PS3, Xbox 360, or Wii) configured to access games in association with social networks.

Video gaming applications offered or operated in association with social networks may be purchased via platform application stores. These applications are supported by Android (Android is a Linux-based operating system for mobile devices such as smartphones and tablet computers—it is developed by the Open Handset Alliance), iOS (a mobile operating system developed by Apple Inc.) platforms, and phones operating windows. The user interface of an iOS platform is based on the concept of direct manipulation, using multi-touch gestures. Interface control elements consist of sliders, switches, and buttons. The response to user input is immediate and provides a fluid interface.

Video gaming applications in association with social networks may be hosted or accessed via social networks, other third party services or on third party servers, stand-alone platforms, tablets, smartphones or the like. Multiple players (hundreds, thousands, if not millions) may access gaming applications (in association with social networks) via any or all of these ways. In addition, the flexible architecture provides a scalable infrastructure with cross-platform pollination technology (achievements and rewards are transferred between platforms used by particular players) and secure collection of data. Video gaming applications may be based on universal themes that appeal to a broad range of demographics and provides a continuous flow of data analytics. They offer opportunities for configuring advertisements and promotions to accomplish strategic goals.

In some embodiments, the flexible architecture provides multiple levels of play, permitting players to engage in different ways. The different levels of play options include 1) a peer-to-peer competitive challenge level for core players, 2) a casual play option for play with friends with whom a player shares an affinity, for example, in a social network; and a 3) spectator mode that permits non-players in a network to assist friends. Feed-based triggers allow for greater rewards to players and ease of discovering games.

In yet other embodiments, which may include any or all of the aspects described above, the flexible architecture permits mobile play, extending the gaming arena or world to different platforms, so achievements in a particular game (in association with social networks) may be earned and shared more easily across platforms. In addition, a player may earn location-based rewards.

Moreover, the flexible architecture provides a system of rewards at check-in, to coax players by providing greater incentives. The flexible architecture permits concurrent “solo” play by a player or gamer, collaborative and competitive play by multiple players. The flexible architecture has user interfaces that are configured to provide different experiences for different players, including for example, a three-dimensional user experience. In some embodiments, the video gaming applications include story-driven quests and game play, giving players more than just tasks and chores. As one example, an aviation gaming application (operated in association with a social network) may utilize a collection of 250 or more aircrafts and include transactions relating to the aircrafts and their environment, creation of the

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environment in which the aircrafts operate, etc. In this particular application, players may create and manage their experience (for example, build and manage an aviation empire), enjoy the thrill of history (aviation's past), and travel the globe and fly through an open network of friendly and rival airports.

In yet other embodiments, the system provides a plurality of features for player control of the virtual arena relating to the social network including control of "play" times, "gifts" and "rewards," "collect" and "decorate" features, monitor types of "play" (for example, acceleration progress), generate user content, etc.

In some embodiments, the video gaming applications in association with the social networks may be free, when typically accessed via social-network platforms, in which instances revenue is generated via market place for products used during the game, direct advertising, etc. The flexible architecture permits for easy access through a particular player's social network, allowing other players to discover a particular game and permit conversion as necessary.

In yet other embodiments, linking or connecting gaming platforms creates a more interesting gaming world.

BRIEF DESCRIPTION OF THE DRAWINGS

The present disclosure is illustrated by way of example, and not by way of limitation, in the figures of the accompanying drawings, in which like reference numerals are used to refer to similar elements.

FIG. 1 is a high-level block diagram illustrating some embodiments of a system for providing a video gaming platform, accessed either directly via a social network (hosted on a social network server or a server associated with it), an online live gaming server, or a third party video gaming website (hosted by a third party on its server), which may be associated with social networks.

FIG. 2 is a block diagram illustrating some embodiments of a social network server or a third party server (associated with a social network) shown in FIG. 1, including its hardware components.

FIG. 3 is a block diagram illustrating some embodiments of a gaming platform shown in FIGS. 1 and 2, and its software components.

FIG. 4 is a flow chart illustrating an example general method for posting game-play activity on a social network.

FIG. 5 is a flow chart illustrating an example general method for interacting with a game based on social network activity.

FIG. 6 is a graphical representation of a particular user's (Player A) social network or social graph.

FIG. 7 is a graphical representation illustrating some embodiments of multiple devices connected for centralized game play.

FIG. 8 is a graphical representation illustrating some embodiments of receiving an in-game reward based on social network activity.

FIG. 9 is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including accepting a virtual request.

FIG. 10 is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including unlocking new content.

FIG. 11A is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including players commenting on a player promotion within the game.

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FIG. 11B is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including non-players commenting on a player promotion within the game.

FIG. 12A is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including players commenting on a player's activity within the game.

FIG. 12B is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including non-players commenting on a player's activity within the game.

FIG. 13A is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including players commenting on a player visiting another player's virtual area within the game.

FIG. 13B is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including non-players commenting on a player visiting another player's virtual area within the game.

FIG. 14A is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including players commenting on a player sending items within the game.

FIG. 14B is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including non-players commenting on a player sending items within the game.

FIG. 15A is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including players commenting on an item purchase within the game.

FIG. 15B is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including non-players commenting on an item purchase within the game.

FIG. 16A is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including players commenting on an area purchase within the game.

FIG. 16B is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including non-players commenting on an area purchase within the game.

FIG. 17A is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including players commenting on building an item within the game.

FIG. 17B is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including non-players commenting on building an item within the game.

FIG. 18A is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including players commenting on a task within the game.

FIG. 18B is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including non-players commenting on a task within the game.

FIG. 19A is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including players commenting on completing a task within the game.

FIG. 19B is a graphical representation illustrating some embodiments of a user interface for interacting with a game

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via a social network including non-players commenting on completing a task within the game.

FIG. 20A is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including players commenting on arriving at another player's virtual area within the game.

FIG. 20B is a graphical representation illustrating some embodiments of a user interface for interacting with a game via a social network including non-players commenting on arriving at another player's virtual area within the game.

DETAILED DESCRIPTION

The present technology is directed to a multilayer or multi-tier, flexible architecture for video gaming applications with variable video gaming capabilities, for play by users (players or gamers), either via social networks, or on third party servers associated with social networks. The specification describes examples of systems and methods for providing this multilayer architecture, video gaming platforms, and user interfaces to facilitate a unique user experience. These video gaming applications may either be hosted by an online community, for example, one or more social networks, or alternatively, by third party servers that are wholly or partially dedicated to gaming applications and associated or linked to social networks.

In some embodiments, the flexible architecture provides a continuous visual experience for players across different platforms (platform agnostic) and engages them at different levels of play. Each of the players may have a unique and different visual experience, depending upon the gaming platform a player uses. This flexible architecture facilitates access to video gaming applications either implemented in social networks or linked to social networks, in various ways, including 1) directly via accessing social networks or sites, for example, accessed via personal computers (desktops or laptops); 2) via wall posts or via an online social networking service that enables its users to send and read text-based posts; 3) via mobile devices (iOS, Android, or Windows-based smart phones) that may be used to access social networks or sites linked to the social networks; and 4) via game consoles (for example, PS3, Xbox 360, or Wii) configured to access social networks or sites linked to social networks.

Video gaming applications linked with social networks may be purchased via platform application stores. These applications are supported by Android (Android is a Linux-based operating system for mobile devices such as smartphones and tablet computers—it is developed by the Open Handset Alliance), iOS (a mobile operating system developed by Apple Inc.) platforms, and phone operating windows. The user interface of iOS is based on the concept of direct manipulation, using multi-touch gestures. Interface control elements consist of sliders, switches, and buttons. The response to user input is immediate and provides a fluid interface.

Video gaming applications may be hosted or accessed via social networks, other third party services or on third party servers linked with the social networks, stand-alone platforms, tablets, smartphones, or the like, configured to access social networks. Multiple players (hundreds, thousands, if not millions) may access one or more gaming applications via any or all of these ways. In addition, the flexible architecture provides a scalable infrastructure with cross-platform pollination technology (achievements and rewards are transferred between platforms for particular players) and secure data collection. Video gaming applications linked

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with social networks may be based on universal themes that appeal to a broad range of demographics and provides a continuous flow of data analytics. They offer opportunities for configuring advertisements and promotions to accomplish strategic goals.

In yet other embodiments, which may include any or all of the aspects described above, the gaming architecture permits mobile play, extending the gaming arena or world to different platforms and/or networks, so achievements in a particular game may be earned and shared more easily across platforms. In addition, a player may earn location-based rewards.

Moreover, the system architecture provides rewards at check-in, to coax players by providing greater incentives. The architecture permits for concurrent "solo" play by a player or gamer and collaborative and competitive play between multiple players. User interfaces are configured to provide different experiences for different players, including a three-dimensional user experience. In some embodiments, the video gaming applications include story-driven quests and game play, giving players more than just tasks and chores. As one example, an aviation gaming application, may utilize a collection of 250 aircrafts and include transactions relating to the aircrafts and its environment, permitting players to create an environment in which the aircrafts operate, etc. In this particular application, players may create and manage their experience (for example, by creating an aviation empire), enjoy the thrill of history (aviation's past), and travel the globe and fly through an open network of friendly and rival airports.

The system provides features for player control of the virtual arena associated with a social network including control of "play" times, "gifts" and "rewards," "collect" and "decorate," monitor "play" (for example, acceleration progress), generate user content, etc.

The video gaming applications may be free, when directly accessed via social-network platforms, in which instances revenue is generated via market place for products used during the game, direct advertising, etc. The flexible architecture permits for easy access through a particular player's social network, allowing other players to discover a particular game and permit conversion as necessary. Linking or connecting platforms creates a more interesting and viable gaming world.

The architecture accords variable status to players who can opt for different levels of play. A "core" game play status enables players to be leaders and play the entire game. A leader has control of all aspects of a particular gaming application. A "casual" or "follower" game play status enables players to play from a different perspective, providing access to only a portion of the entire game. A "spectator" or "bystander" game play enables players to play from a reactive perspective. Players are accorded this status when they initiate play via a social network wall posting, a response to a social networking service facilitating exchange of text or via any other key word response, which has direct impact on game play. Players with this status can request permission to visit game play arenas of other players. This request may be in response to advertising or promotion displays.

Players (with any status described above) may access game play via mobile devices, at any location, and receive location-based rewards. They may access a virtual game arena, their own or that of other players, via several platforms and take up play where they left off. They may link up friends for collaborative play. Players may also participate in standalone game play, via tablets, mobile devices, console-

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based game play, target-based game play or the like. In addition, the system permits cross-pollination game play, sending game objects from one game world or arena to another.

In the following description, for purposes of explanation, numerous specific details are indicated in order to provide a thorough understanding of the technology described. This technology may be practiced without these specific details. In the instances illustrated, structures and devices are shown in block diagram form in order to avoid obscuring the technology. For example, the present technology is described with some implementations illustrated below with reference to user interfaces and particular hardware. However, the present technology applies to any type of computing device that can receive data and commands, and any devices providing services. Moreover, the present technology is described below primarily in the context of providing video game architecture; however, the present technology applies to any type of situation and may be used for other applications beyond video games. In particular, this technology may be used in other contexts besides video games.

Reference in the specification to “one embodiment,” “an embodiment,” or “some embodiments” means simply that one or more particular features, structures, or characteristics described in connection with the one or more embodiments is included in at least one or more embodiments that are described. The appearances of the phrase “in one embodiment or instance” in various places in the specification are not necessarily all referring to the same embodiment or instance.

Some portions of the detailed descriptions that follow are presented in terms of algorithms and symbolic representations of operations on data bits within a computer memory of either one or more computing devices. These algorithmic descriptions and representations are the means used to most effectively convey the substance of the technology. An algorithm as indicated here, and generally, is conceived to be a self-consistent sequence of steps leading to a desired result. The steps are those requiring physical manipulations of physical quantities. Usually, though not necessarily, these quantities take the form of electrical or magnetic signals capable of being stored, transferred, combined, compared, and otherwise manipulated. It has proven convenient at times, principally for reasons of common usage, to refer to these signals as bits, values, elements, symbols, characters, terms, numbers, or the like.

It should be understood, however, that all of these and similar terms are to be associated with the appropriate physical quantities and are merely convenient labels applied to these quantities. Unless specifically stated otherwise, as apparent from the following discussion, it should be appreciated that throughout the description, discussions utilizing terms, for example, “processing,” “computing,” “calculating,” “determining,” or “displaying” or the like, refer to the action and processes of a computer system, or similar electronic computing device, that manipulates and transforms data represented as physical (electronic) quantities within the computer system’s registers and memories into other data similarly represented as physical quantities within the computer system memories or registers or other such information storage, transmission, or display devices.

The present technology also relates to an apparatus for performing the operations described here. This apparatus may be specially constructed for the required purposes, or it may include a general-purpose computer selectively activated or reconfigured by a computer program stored in the computer. For example, a computer program may be stored

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in a computer-readable storage medium, for example, but not limited to, any type of disk including floppy disks, optical disks, CD-ROMs, magnetic disks, read-only memories (ROMs), random access memories (RAMs), EPROMs, EEPROMs, magnetic or optical cards, flash memories including USB keys with non-volatile memory or any type of media suitable for storing electronic instructions, each coupled to a computer system bus.

This technology may take the form of an entirely hardware implementation, an entirely software implementation, or an implementation including both hardware and software components. In some instances, this technology is implemented in software, which includes but is not limited to firmware, resident software, microcode, etc.

Furthermore, this technology may take the form of a computer program product accessible from a computer-usable or computer-readable medium providing program code for use by or in connection with a computer or any instruction execution system. For the purposes of this description, a computer-usable or computer-readable medium may be any apparatus that can include, store, communicate, propagate, or transport the program for use by or in connection with the instruction execution system, apparatus, or device.

A data processing system suitable for storing and/or executing program code includes at least one processor coupled directly or indirectly to memory elements through a system bus. The memory elements may include local memory employed during actual execution of the program code, bulk storage, and cache memories, which provide temporary storage of at least some program code in order to reduce the number of times code may be retrieved from bulk storage during execution.

Input/output or I/O devices (including but not limited to keyboards, displays, pointing devices, etc.) may be coupled to the system either directly or through intervening I/O controllers.

Communication units including network adapters may also be coupled to the systems to enable them to couple to other data processing systems, remote printers, or storage devices, through either intervening private or public networks. Modems, cable modems, and Ethernet cards are just a few examples of the currently available types of network adapters.

Finally, the algorithms and displays presented in this application are not inherently related to any particular computer or other apparatus. Various general-purpose systems may be used with programs in accordance with the teachings here, or it may prove convenient to construct more specialized apparatus to perform the required method steps. The required structure for a variety of these systems is outlined in the description below. In addition, the present technology is not described with reference to any particular programming language. It should be understood that a variety of programming languages may be used to implement the technology as described here.

Architecture Overview

FIG. 1 is a high-level block diagram illustrating some embodiments of systems for providing gaming applications, either directly via social networks, an online live gaming server associated or linked with a social network, or on third party servers associated with or linked with a social network. The system 100 illustrated in FIG. 1 provides gaming platforms 106a or 106b so that participants (players or gamers) may access one or more gaming applications, initiate a play on one device or gaming platform and continue play at another device or gaming platform, making

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transitions between devices or platforms essentially seamless and enabling a continuous playing experience.

The system 100 includes one or more social network servers 102a through 102n that may be accessed via user devices 115a, 115b through 115n, which are used by users 125a, 125b, through 125n, to connect to any one of the social network servers 102a through 102n. The user devices 115a through 115n may be a desktop computer, a game system or a mobile phone. These entities (user devices 115a-115n and social network servers 102a-102n) are communicatively coupled via one or more networks 105a, 105b, and 105n. Although only three user devices or platforms 115a, 115b through 115n are illustrated, any numbers of user devices or platforms 115n may be used by any number of users (players, gamers, or the like) 125n. Moreover, those skilled in the art should recognize that while the present disclosure is described below primarily in the context of providing gaming applications, the present disclosure may be applicable to other types of applications, for entertainment or otherwise. By way of example, gaming applications may include operations for creating plays, participating in plays, etc.

The user devices 115a through 115n in FIG. 1 are illustrated by way of example. Although FIG. 1 illustrates only three devices, the present disclosure applies to any system architecture having one or more user devices 115a through 115n, therefore, any number of user devices 115n (hundreds, thousands, even millions or more) may be used.

Furthermore, while only three networks 105a, 105b, and 105n are illustrated as coupled to the user devices 115a, 115b through 115n, the social network servers 102a-102n, the profile server 130, the web server 132, the online live gaming server 140, the cross-platform server 142, and one or more third party servers 134a through 134n, in practice, any number of networks 105n may be connected, either directly or indirectly, to these entities. In addition, although only two third party servers 134a through 134n are shown, the system architecture 100 may include one or more third party servers 134n, each with a gaming platform 106b through 106n, operating one or more gaming applications that are similar or different.

In some embodiments, the social network server 102a is coupled to the network 105a, via a signal line 110. The social network server 102a includes a social network application 104, which comprises the software routines and instructions to operate the social network server 102a and its functions and operations. Although only one social network server 102a is described here, persons of ordinary skill in the art should recognize that multiple servers may be present, as illustrated by social network servers 102n, each with functionality similar to social network server 102a or different.

The term "social network" as used here encompasses its plain and ordinary meaning including, but not limited to, any type of social structure where the users are connected by a common feature or link. The common feature includes relationships/connections, e.g., friendship, family, work, a similar interest, etc. The common features are provided by one or more social networking systems, such as those included in the system architecture 100, including explicitly-defined relationships and relationships implied by social connections with other online users, where the relationships form a social graph 108.

The term "social graph" as used here encompasses its plain and ordinary meaning including, but not limited to, a set of online relationships between users (players and non-players), such as provided by one or more social networking systems, operating on social network servers 102a through

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102n, including explicitly-defined relationships and relationships implied by social connections with other online users, where the relationships form a social graph. In some examples, the social graph 108 may reflect a mapping of these users and how they are related.

It should be understood that social network server 102a and the social network software/application 104 are representative of a single social network. Each of the plurality of social networks 102a through 102n is coupled to any one of the networks 105a, 105b, and 105n, each having its own server, application, and social graph. For example, a first social network system operated or hosted on a social network server may be directed to business networking, a second directed to or centered on academics, a third directed to local business, a fourth directed to dating or gaming, and yet others directed to other general interests or perhaps a specific focus. Yet, each may provide access to a gaming platform 106a for operating or providing access to video gaming applications.

A profile server 130 is illustrated as a stand-alone server in FIG. 1. In other embodiments of the system architecture 100, all or part of the profile server 130 may be part of the social network server 102a. The profile server 130 is directly connected to the network 105a, via a line 131. The profile server 130 stores profiles for all the users that belong to a social network. A third party server 134a is connected to the network 105b, via a signal line 135. A web server 132 is connected, via a line 133, to the network 105n. The web server 132 delivers access to content, via the internet, for example, by hosted websites or the like. Users may use the web browsers on their electronic devices or gaming platforms to browse for gaming applications and access websites hosting gaming applications.

An online live gaming server 140 is an online multiplayer gaming and digital media delivery service connected to the network 105a through 105n via signal line 141 for providing users (i.e., players) with online gaming capabilities. This allows users to interact (e.g., play games) with multiple players (hundreds, thousands, if not millions) via the online live gaming server 140 (e.g., Xbox Live, Playstation Network, etc.).

A cross-platform server 142 is an online server connected to the network 105a through 105n via signal line 143 that receives information from one or more clients (e.g., mobile device, social network, gaming server, etc.) and translates the data such that it becomes usable by the gaming platform 106a through 106n. The cross-platform server 142 also translates information from the gaming platform 106a through 106n such that it becomes usable by the one or more clients (e.g., mobile device, social network, gaming server, etc.).

The user devices or player gaming platforms 115a through 115n may be a computing device, for example, a laptop computer, a desktop computer, a tablet computer, a mobile telephone (iOS, Android, or windows-based phone, a personal digital assistant (PDA), a mobile email device, a portable game player, a game console (PS3, Xbox 360, Wii or the like) a portable music player, a television with one or more processors embedded in the television or coupled to it, or any other electronic device capable of accessing a network and participating in a gaming application.

The network 105a, 105b, or 105n, is of conventional type, wired or wireless, and may have any number of configurations, such as a star configuration, token ring configuration, or other configurations known to those skilled in the art. Furthermore, the network 105 may comprise a local area network (LAN), a wide area network (WAN, e.g., the

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Internet), and/or any other interconnected data path across which one or more devices may communicate.

In another embodiment, the network **105a**, **105b**, or **105n** may be a peer-to-peer network. The network **105a**, **105b**, or **105n** may also be coupled to or include portions of one or more telecommunications networks for sending data in a variety of different communication protocols.

In yet another embodiment, the network **105a**, **105b**, or **105n**, includes Bluetooth communication networks or a cellular communications network for sending and receiving data such as via short messaging service (SMS), multimedia messaging service (MMS), hypertext transfer protocol (HTTP), direct data connection, WAP, email, etc.

In some embodiments, the social network server **102a**, the profile server **130**, the web server **132**, online live gaming server **140**, cross-platform server **142**, and the third party servers **134a** through **134n** are hardware servers including a processor, memory, and network communication capabilities. One or more of the users (players or gamers) **125a** through **125n** access any of the social network servers **102a** through **102n**, or the third party servers **134a** through **134n**, via browsers in their user devices or gaming platforms and via the web server **132**. The user devices **115a** through **115n** have user interface applications **117a**, **117b**, through **117n**, that manage access by particular players to select gaming applications or their choice.

FIG. 2 is a block diagram illustrating some embodiments of the social network server **102** (a through n) or third party server **134** (a through n). In FIG. 2, like reference numerals have been used to reference like components with the same or similar functionality that has been described above with reference to FIG. 1. Since those components have been described above that description is not repeated here. The social network server **102a** generally comprises one or more processors, although only one processor **235** is illustrated in FIG. 2. The processor is coupled via a bus **220** to memory **237** and database storage **233**, which stores user account data **252**, game options data **254**, user rewards/points **256**, user play/save data **258**, game options/preferences **260**, promotion data **262** and advertising data **264**.

In some embodiments, the database storage **233** is a database organized by the hosting server and the user. For each user or player, the data storage **233** stores data on the user and user game plays, etc. For example, this data may include related social network activity such as posts, shares, invitations, status changes, etc., associated with each user engaged in a video gaming application.

A user or player **125a**, via a user or gaming device **115a**, communicates a request to initiate a gaming application or reacts to a keyword via communication unit **239**. The “set up” for a video gaming application is managed by the gaming platform **106a**. It should be recognized that the gaming platform **106a** (illustrated in the social network server **102a**) and **106b** (illustrated in the third party server **134a**) are shown separately, but include similar functionality, at least for purposes of operating the gaming applications. A user or player display **25** coupled to the user device **115a** through **n**, is configured to provide the video source of the gaming application in one of many formats, high definition graphics, three dimensional formats, etc.

Referring now to FIG. 3, like reference numerals have been used to reference like components with the same or similar functionality that has been described above with reference to FIG. 1. Since those components have been described above, that description is not repeated here. The gaming platform **106** (a or b) includes various modules that are programmed to perform the functionalities described

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here. These modules may be variously distributed or may be in a single unit. The gaming platform **106** includes a user interface module **301**, a permissions module **303**, a user/player account module **305**, a user/player status module **307**, a promotion/rewards module **309**, a game initiation/operation module **311**, and a social network module **313**. Each of these modules is coupled to a software communication mechanism **320** to communicate the other modules. Examples of a software communications mechanism **320** may be an object bus (such as COBRA), direct socket communication (such as TCP/IP sockets) among software modules, remote procedure calls, UDP broadcasts and receipts, HTTP connections, function or procedure calls, etc. Further, any or all of the communication could be secure (SSH, HTTPS, etc.). The software communication can be implemented on any underlying hardware, such as a network, the Internet, a bus **220** of FIG. 2, or a combination thereof, etc.

By way of example, a particular user **125a** communicates via a user device **115a**, to either initiate or react to a game play. The user interface module **301** facilitates a connection of the user device **115a** with the social network server **102a**, in the event the player wishes to engage or participate in a gaming application via the social network server **102a**. The permission module **303** ensures that the user device is compliant with protocols and any privacy concerns. Once a video gaming application has been set up, the user/player account module **305** makes a note of the user to determine if the user has an existing account or must create one. The user/player status module **307** considers the status of the various users (“leader,” “follower,” or “spectator”). A promotion/rewards module **309** operates the necessary promotions permitting players to earn rewards accorded by the promotions. The game initiation/operation module **311** initiates play and the social network module **313** tracks the applications engaged by a particular player and updates the player’s social profile accordingly.

Methods

FIG. 4 illustrates an example method for posting game-play activity on a social network. It should be understood that the order of the operations in FIG. 4 is merely by way of example and may be performed in different orders than those that are illustrated and some operations may be excluded, and different combinations of the operations may be performed. In the example method illustrated, one or more operations may include signing in or displaying log-in options, as illustrated by block **402**. The method **400** then proceeds to the next block **404** and may include one or more operations to initiate or perform game play. The method **400** then proceeds to the next block **406** and may include one or more operations to post an event to a social network feed. The method **400** then proceeds to the next block **408** and may include one or more operations to store post identification information.

FIG. 5 illustrates an example method for interacting with a game based on social network activity. It should be understood that the order of the operations in FIG. 5 is merely by way of example and may be performed in different orders than those that are illustrated and some operations may be excluded, and different combinations of the operations may be performed. In the example method illustrated, one or more operations may include posting game-play event to the social network feed, as illustrated by block **502**. The method **500** then proceeds to the next block **504** and may include one or more operations to receive social interaction (e.g., comments, likes, etc.) related to the posted event. The method **500** then proceeds to the next

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block 506 and may include one or more operations to generate a reward for the player based on the social interaction related to the posted event. The method 500 then proceeds to the next block 508 and may include one or more operations to send in-game reward to player.

FIG. 6 illustrates a video gaming scenario, with two core players 1 and 2 (at A and D), who have a “leader” status, indicated by reference numerals 602 and 608. A “casual” player or “follower” (at B) is illustrated by reference numeral 604 and has the capability to influence both the core players, as indicated by the arrows. Additionally, a “core” player, for example, Player 2, can participate as a “bystander” as well and influence another “core” player, Player 1. A non-player or “bystander” also participates (at C), providing keyword-based participation, as indicated by reference numeral 606. All the various players interact with each other, some having larger impact (those that are “leader” or “core” players) on the play of another “core” player, whereas a “casual” player has a smaller or little impact on the play of others, and a “bystander” has even less impact.

As one example, a religious gaming application is described here. A “core” player may create his or her own church or organization. Another “core” player 2 may create his or her own church or organization as well. The “casual” player 3 may be a follower of both “core” Player 1 and Player 2, such that acts by the “follower” either enhance or detract a play by Player 1 or Player 2. By way of example, the follower Player 3 may give virtual money (\$10 per day out of a \$20) to each of the core players. Circumstances may change this flow of money, for example, “core” Player 2 upsets follower Player 3, who routes all of his virtual money to Player 1. Player 2 may retaliate against Player 3, by initiating an action against Player 1, creating a deficit in his or her account, thereby impacting the play by Player 1. Likewise, the bystander C may continue to influence plays by Player 1 or Player 2. Finally, FIG. 6 illustrates a social network 1, illustrated by reference numeral 610 and a social network 2 illustrated by reference numeral 612, each indicating Player responses and friend responses in Player A’s social network or social graph.

FIG. 7 is a graphical representation 700 illustrating some embodiments of multiple devices connected for centralized game play in a gaming application linked with a social network. For example, multiple user devices may be connected to a virtual game-play cloud 720. The multiple user devices may be all the same or different and may include, for example, one or more personal computers 710 via a social network server 102a, one or more game consoles 712, one or more mobile devices 714, and one or more tablets 716. All or some of these devices are connected to the virtual game-play cloud for platform agnostic, shared, and synchronized gameplay.

FIG. 8 is a graphical representation 800 illustrating some embodiments of receiving an in-game reward based on social network activity. In some implementations, in-game rewards (experience, coins, special game events etc.) may be triggered by the player’s friends commenting or interacting with the player’s game activity wall post. For example, the player signs in/logs-in to the game illustrated by block 810. Simultaneously the player is logged into the client (that hosts the game application) and the social network to perform social network activity illustrated by blocks 820 and 830. While logged-in to the client, the player may participate in game play, as illustrated by block 822. While playing the game, the player may post an event to a social network feed, as illustrated by block 824 at which point the postID (for

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access) is written to a database, as illustrated by block 826. Also while playing the game, the player may receive an in-game reward, as illustrated by block 828.

In the social network, when the postID (for access) is written to a database, as illustrated by block 826, the social network application (e.g., game application) loops through all postIDs generated in the game, as illustrated by block 832. The social network application then processes each post for comments and likes, as illustrated by block 834. The social network application then generates a friend reward within the social network, as illustrated by block 836. The social network application then generates a player reward, as illustrated by block 838 which also sends a request to the game to give the reward to the player in the game.

FIG. 9 illustrates an example of the user interface display 900 to a user in the event a video gaming application is hosted or accessed by a social network. A user may accept a request via posting a comment (#accept in this example) to the social network post. User posts are indicated by 910, user activities or operations during play are indicated by 920, and user acceptances (indicated by reference numeral 940) and approvals are indicated by reference numeral 930.

FIG. 10 illustrates an example of a user interface 1000 for unlocking game play content within the game. A user may unlock in-game content by posting a comment on a player’s social network post. A friend’s activities and status during a game are indicated by 1020, and promotion approvals are indicated by 1030. Approvals may be by the user’s friends 1040 and 1050.

As one example, an aviation video gaming application is described here. The specific rules of the social network aspect of the aviation gaming application (e.g., AviNation) are indicated below, simply by way of example:

- GPS/Check-in Game Play—Airport Specific
- Player must log back into the game to collect all that they have earned every time someone posts. If not, they are subject to losing benefits (see comments)
1. Airport Check-ins (only players who are playing the game):
 1. For the player who checks in receives:
 1. Passengers (e.g. Extra 10/100)—[can only check-in to same airport once per day]
 2. Virtual currency (e.g. \$10,000) [automatically added to players account]
 3. Either experience or energy points (not both)
 2. For the players who “like” the check-in:
 1. The player who checked in receives:
 1. Passengers
 2. Energy points
 2. The player who clicked “like” receives:
 1. Additional passengers
 2. Energy points
 3. Non-Players who “like” the check-in, the main player is awarded a fraction of passengers/energy (e.g., 1/3 or less)
 3. Comments (Key Words)—each player can only post one key word—subsequent posts from the same player are ignored.
 1. “Oversold”
 1. Each player of AviNation receive 10% of the passengers that the primary check-in player has earned but not collected yet;
 2. Each non-player results in a loss of one-passenger from the primary check-in player has earned but not collected yet;

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2. "Flight Cancelled"
 1. Player who first posts this that plays AviNation receives all of the passengers that the primary check-in player has earned but not yet collected;
 2. Player who second posts this receives all the energy a player has earned upon check-in but has not yet collected;
 3. "Mechanical"—anyone can post
 1. One of the check-in player's aircraft must be repaired (random aircraft) before it can fly again—only one airplane can be affected and only once by a player.
 4. "Frequent Flyer"
 1. Each player of AviNation receives a 10% passenger bump for the day; check-in player receives a 10% bump on uncollected passengers
- Airport specific check-ins should be focused on passengers, money, and possibly experience or energy (not both).
 Player Wall Post of a New Route Established
 For players advertising a new route on their wall:
1. "like" post:
 1. Player who posted the new route receives:
 1. New passengers for the day (player must log in to collect)
 2. Experience or Energy (not both)
 2. Player who "liked" the post that plays the game receives:
 1. Certain number of passengers for the day
 3. Non-players who "like" the post add 1/5 (or minimum number) of the passengers (e.g., 1)
 2. Comments (key words):
 1. "Oversold"
 1. Each player of AviNation receive 10% of the passengers that primary check-in player has earned but not collected yet;
 2. Each non-player results in a loss of one-passenger from the primary check-in player has earned but not collected yet;
 2. "Flight Cancelled"
 1. Player who first posts this that plays AviNation receives all of the passengers that the primary check-in player has earned but not yet collected;
 2. Player who second posts this receives all the energy a player earned upon check-in but has not yet collected;
 3. "Mechanical"—anyone can post
 1. One of the check-in players aircraft must be repaired (random aircraft) before it can fly again—only one airplane can be affected and only once by a player.
 4. "Frequent Flyer"
 1. Each player of AviNation receives a 10% passenger bump for the day; check-in player receives a 10% bump on uncollected passengers
- Action of a Player Who Buys a New Airplane:
1. "like"
 1. Player who posted receives:
 1. Additional fuel (free)
 2. Player who "liked" the post receives:
 1. 5 additional passengers
 - Comments (key words):
 1. "Mechanical"—anyone can post
 1. One of the check-in players aircraft must be repaired (random aircraft) before it can fly again—only one airplane can be affected and only once by a player.

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2. "Frequent Flyer"
 1. Each player (original post and respondent) of AviNation receives a 10% passenger bump for the day; check-in player receives a 10% bump on uncollected passengers
- In general for each action, the following are examples:
1. Each post does NOT have to award a lot of game items to the original poster or the respondent. It is kept in context to what is being posted. Examples:
 1. Setting up a new route may earn experience and passengers
 2. Buying an airplane may award fuel and passengers
 3. Setting up a terminal may award passengers and energy
 2. There needs to be competitive play in the spectator wall posts with key words:
 1. Key words that continue to award to the primary poster and also the spectator;
 2. Key words that 'steal' items away from primary poster to respondent player;
 3. Key words that are detrimental to a player (whether completely detrimental or just gives everything not collected to the respondent player)
 4. Key words that are descriptive to the action involved.
 3. The "like" button should award items to both players
 4. Players who are being awarded items must go back (log-in) to the game to collect them or they are fair game for other players
- FIG. 11A illustrates an example of a user interface 1100 within a social network with a player notification about one player's promotion within the game and other player comments on the player notification. For example, the post 1104 indicates that the player has been promoted within the game. The notification 1110 indicates that for the approval 1112 from a player, the commenter and the poster receive three points within the game. The notification 1120 indicates that for the comment 1122, the commenter and the poster receive five points within the game.
- FIG. 11B illustrates an example of a user interface 1150 within a social network with a player notification about one player's promotion within the game and other non-player comments on the player notification. For example, the post 1154 indicates that the player has been promoted within the game. The notification 1160 indicates that for the approval 1162, the player (i.e., poster) receives three points within the game. The notification 1170 indicates that for the comment 1172 from a non-player, the player (i.e., poster) receives one point within the game.
- FIG. 12A illustrates an example of a user interface 1200 within a social network with a player notification about one player traveling to another player's area within the game and other player comments on the player notification. For example, the post 1202 indicates that the player is traveling to another player's airport. The notification 1210 indicates that for the approval, the flight time is decreased by 5%. The notification 1212 indicates that for the comment "#divert" from a player, the airplane is sent to the commenter's airport. The notification 1214 indicates that for the comment "#roger" from a player, the airplane receives two passengers. The notification 1216 indicates that for the comment "#clear skies" from a player, the flight time is decreased by 5%. The notification 1218 indicates that for the comment "#turbulence" from a player, the flight time is increased by 5%. The notification 1220 indicates that for the comment "#thunderstorm" from a player, the commenter receives a thunderstorm item (in-game item). The notification 1222 indicates

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that for the comment “#snowstorm” from a player, the commenter receives a snowstorm item (in-game item).

FIG. 12B illustrates an example of a user interface 1250 within a social network with a player notification about one player traveling to another player’s area within the game and other non-player comments on the player notification. For example, the post 1252 indicates that the player is traveling to another player’s airport. The notification 1260 indicates that for the approval, the flight time is decreased by 5%. The notification 1262 indicates that for the comment “#divert” from a non-player, the airplane is sent to the closest friend’s airport. The notification 1264 indicates that for the comment “#roger” from a non-player, the airplane receives one passenger. The notification 1266 indicates that for the comment “#clear skies” from a non-player, the flight time is decreased by 5%. The notification 1268 indicates that for the comment “#turbulence” from a non-player, the flight time is increased by 5%. The notification 1270 indicates that for the comment “#thunderstorm” from a non-player, the player’s airport is hit by a thunderstorm. The notification 1272 indicates that for the comment “#snowstorm” from a non-player, the player’s airport is hit by a snowstorm.

FIG. 13A illustrates an example of a user interface 1300 within a social network with a player notification about one player visiting another player’s area within the game and other player comments on the player notification. For example, the post 1302 indicates that the player is visiting another player’s airport. The notification 1310 indicates that for the approval, one energy point is given to both players. The notification 1312 indicates that for the comment “#thanks” from a player, five energy points are given to both players. The notification 1314 indicates that for the comment “#thunderstorm” from a player, the commenter receives a thunderstorm item (in-game item). The notification 1316 indicates that for the comment “#snowstorm” from a player, the commenter receives a snowstorm item (in-game item).

FIG. 13B illustrates an example of a user interface 1350 within a social network with a player notification about one player visiting another player’s area within the game and other non-player comments on the player notification. For example, the post 1352 indicates that the player is visiting another player’s airport. The notification 1360 indicates that for the approval, one energy point is given to the player (i.e., poster). The notification 1362 indicates that for the comment “#thanks” from a non-player, two energy points are given to the player (i.e., poster). The notification 1364 indicates that for the comment “#thunderstorm” from a non-player, the player’s (i.e., poster) airport is hit by a thunderstorm. The notification 1366 indicates that for the comment “#snowstorm” from a non-player, the player’s (i.e., poster) airport is hit by a snowstorm.

FIG. 14A illustrates an example of a user interface 1400 within a social network with a player notification about one player sending a game-play item within the game and other player comments on the player notification. For example, the post 1402 indicates that the player has sent an airplane to an in-game airport (in this example John Wayne Airport). The notification 1410 indicates that for the approval, the flight time is decreased by 5%. The notification 1412 indicates that for the comment “#bird attack” from a player, the plane is damaged and the flight time is increased by 5%. The notification 1414 indicates that for the comment “#turbulence” from a player, the flight time is increased by 5%. The notification 1416 indicates that for the comment “#clear skies” from a player, the flight time is decreased by 5%. The notification 1418 indicates that for the comment “#thunderstorm” from a player, the commenter receives a thunder-

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storm item (in-game item). The notification 1420 indicates that for the comment “#snowstorm” from a player, the commenter receives a snowstorm item (in-game item).

FIG. 14B illustrates an example of a user interface 1450 within a social network with a player notification about one player sending a game-play item within the game and other non-player comments on the player notification. For example, the post 1452 indicates that the player has sent an airplane to an in-game airport (in this example John Wayne Airport). The notification 1460 indicates that for the approval, the flight time is decreased by 5%. The notification 1462 indicates that for the comment “#bird attack” from a non-player, the airplane is damaged and the flight time is increased by 5%. The notification 1464 indicates that for the comment “#turbulence” from a non-player, the flight time is increased by 5%. The notification 1466 indicates that for the comment “#clear skies” from a non-player, the flight time is decreased by 5%. The notification 1468 indicates that for the comment “#thunderstorm” from a non-player, the player’s (i.e., poster) airport is hit by a thunderstorm. The notification 1470 indicates that for the comment “#snowstorm” from a non-player, the player’s (i.e., poster) airport is hit by a snowstorm.

FIG. 15A illustrates an example of a user interface 1500 within a social network with a player notification about one player purchasing a game-play item within the game and other player comments on the player notification. For example, the post 1502 indicates that the player has purchased an in-game airplane. The notification 1510 indicates that for the approval, the commenter gains 10 coins. The notification 1512 indicates that for the comment “#maiden voyage” from a player, the commenter and the poster gain one “1 hour boost item”. The notification 1514 indicates that for the comment “#thunderstorm” from a player, the commenter receives a thunderstorm item (in-game item). The notification 1516 indicates that for the comment “#snowstorm” from a player, the commenter receives a snowstorm item (in-game item).

FIG. 15B illustrates an example of a user interface 1550 within a social network with a player notification about one player purchasing a game-play item within the game and other non-player comments on the player notification. For example, the post 1552 indicates that the player has purchased an in-game airplane. The notification 1560 indicates that for the approval, no award is given. The notification 1562 indicates that for the comment “#maiden voyage” from a non-player, the player (i.e., poster) receives one experience point. The notification 1564 indicates that for the comment “#thunderstorm” from a non-player, the player’s (i.e., poster) airport is hit by a thunderstorm. The notification 1566 indicates that for the comment “#snowstorm” from a non-player, the player’s (i.e., poster) airport is hit by a snowstorm.

FIG. 16A illustrates an example of a user interface 1600 within a social network with a player notification about one player purchasing a game-play area within the game and other player comments on the player notification. For example, the post 1602 indicates that the player has purchased a small terminal. The notification 1610 indicates that for the approval, the building time is decreased. The notification 1612 indicates that for the comment “#let me help” from a player, the building time is decreased by 5%. The notification 1614 indicates that for the comment “#congrats” from a player, the commenter is given 10 coins. The notification 1616 indicates that for the comment “#vandalize” from a player, the building time is increased by 5%. The notification 1618 indicates that for the comment “#thunder-

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storm" from a player, the commenter receives a thunderstorm item (in-game item). The notification 1620 indicates that for the comment "#snowstorm" from a player, the commenter receives a snowstorm item (in-game item).

FIG. 16B illustrates an example of a user interface 1650 within a social network with a player notification about one player purchasing a game-play area within the game and other non-player comments on the player notification. For example, the post 1652 indicates that the player has purchased a small terminal. The notification 1660 indicates that for the approval, the building time is decreased. The notification 1662 indicates that for the comment "#let me help" from a non-player, the building time is decreased by 5%. The notification 1664 indicates that for the comment "#congrats" from a non-player, the player (i.e., poster) is given 5 coins. The notification 1666 indicates that for the comment "#vandalize" from a non-player, the building is damaged and the building time is increased by 5%. The notification 1668 indicates that for the comment "#thunderstorm" from a non-player, the player's (i.e., poster) airport is hit by a thunderstorm. The notification 1670 indicates that for the comment "#snowstorm" from a non-player, the player's (i.e., poster) airport is hit by a snowstorm.

FIG. 17A illustrates an example of a user interface 1700 within a social network with a player notification about one player building a game-play item within the game and other player comments on the player notification. For example, the post 1702 indicates that the player is trying to finish building a hangar. The notification 1710 indicates that for the approval, the poster and commenter receive three energy points. The notification 1712 indicates that for the comment "#fuel drums" from a player, the poster receives an in-game item.

FIG. 17B illustrates an example of a user interface 1750 within a social network with a player notification about one player building a game-play item within the game and other non-player comments on the player notification. The notification 1760 indicates that for the approval, the player (i.e., poster) receives three energy points. The notification 1762 indicates that for the comment "#fuel drums" from a non-player, the player (i.e., poster) receives an in-game item.

FIG. 18A illustrates an example of a user interface 1800 within a social network with a player notification about one player performing a task within the game and other player comments on the player notification. For example, the post 1802 indicates that the player is trying to finish a task, in this example, "favor for the mayor." The notification 1810 indicates that for the approval, the poster and commenter receive five experience points. The notification 1812 indicates that for the comment "#lumber" from a player, the poster receives an in-game item.

FIG. 18B illustrates an example of a user interface 1850 within a social network with a player notification about one player performing a task within the game and other non-player comments on the player notification. For example, the post 1852 indicates that the player is trying to finish a task, in this example, "favor for the mayor." The notification 1860 indicates that for the approval, the player (i.e., poster) receives five experience points. The notification 1862 indicates that for the comment "#lumber" from a non-player, the player (i.e., poster) receives an in-game item.

FIG. 19A illustrates an example of a user interface 1900 within a social network with a player notification about one player finishing a task within the game and other player comments on the player notification. For example, the post 1902 indicates that the player has finished a task, in this example, "favor for the mayor." The notification 1910

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indicates that for the approval, the poster and commenter receive three experience points. The notification 1912 indicates that for the comment "#congrats" from a player, the poster and commenter receive five experience points.

FIG. 19B illustrates an example of a user interface 1950 within a social network with a player notification about one player finishing a task within the game and other non-player comments on the player notification. For example, the post 1952 indicates that the player has finished a task, in this example, "favor for the mayor." The notification 1960 indicates that for the approval, the player (i.e., poster) receives three experience points. The notification 1962 indicates that for the comment "#congrats" from a non-player, the player (i.e., poster) receives one experience point.

FIG. 20A illustrates an example of a user interface 2000 within a social network with a player notification about one player arriving at another player's area within the game and other player comments on the player notification. For example, the post 2002 indicates that the player has checked into a friend's airport. The notification 2010 indicates that for the approval, the poster and commenter receive two experience points. The notification 2012 indicates that for the comment "#safe flight" from a player, the poster and commenter receive one "+5 energy item."

FIG. 20B illustrates an example of a user interface 2050 within a social network with a player notification about one player arriving at another player's area within the game and other non-player comments on the player notification. For example, the post 2052 indicates that the player has checked into a friend's airport. The notification 2060 indicates that for the approval, the player (i.e., poster) receives two experience points. The notification 2062 indicates that for the comment "#safe flight" from a non-player, the player (i.e., poster) receives one "+5 energy item."

The comments and game actions they invoke which are described in FIGS. 9-20B are used by way of example, one skilled in the art will recognize that other examples and configurations are possible.

The foregoing description of the implementations of the present technology has been presented for the purposes of illustration and description. It is not intended to be exhaustive or to limit the present technology to the precise form disclosed. Many modifications and variations are possible in light of the above teaching. It is intended that the scope of the present technology be limited not by this detailed description, but rather by the claims of this application. As should be understood by those familiar with the art, the present technology may be implemented in other specific forms, without departing from the spirit or essential characteristics thereof. Likewise, the particular naming and division of the modules, routines, features, attributes, methodologies, and other aspects are not mandatory or significant, and the mechanisms that implement the present disclosure or its features may have different names, divisions and/or formats. Furthermore, as should be apparent to one of ordinary skill in the relevant art, the modules, routines, features, attributes, methodologies and other aspects of the present technology can be implemented as software, hardware, firmware, or any combination of the three. Also, wherever a component, an example of which is a module, of the present technology is implemented as software, the component can be implemented as a standalone program, as part of a larger program, as a plurality of separate programs, as a statically or dynamically linked library, as a kernel loadable module, as a device driver, and/or in every and any other way known now or in the future to those of ordinary skill in the art of computer programming. Additionally, the

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present technology is in no way limited to implementation in any specific programming language, or for any specific operating system or environment. Accordingly, the disclosure of the present technology is intended to be illustrative, but not limiting, of the scope of the present disclosure, which is set forth in the following claims. 5

What is claimed is:

1. A computer-implemented method operated using one or more computing devices for providing video gaming hosted on one or more servers in association with a social network, comprising: 10

providing access using the one or more computing devices to a video gaming environment associated with the social network, by one or more users using at least one of a plurality of different user electronic devices, the at least one of a plurality of different user electronic devices including a user interface configured to display the video gaming environment; 15

posting, using the one or more computing devices, a post to the social network including an event relating to the video gaming environment of interest to the social network; 20

generating, using the one or more computing devices, a post identification of the post;

writing, using the one or more computing devices, the post identification to a database, the database configured to store one or more post identifications; 25

processing, using the one or more computing devices, each of the one or more post identifications in the database for comments to determine whether the comments include one or more particular keywords commented on the post by a second user; and 30

in response to determining that the comments include the one or more particular keywords commented on the post by the second user, using the one or more particular keywords as play relating to a select game in the video gaming environment, the video gaming environment being displayed on the user interface of the at least one of a plurality of different user electronic devices and being affected by the determination that the comments include the one or more particular keywords. 40

2. A computer-implemented method according to claim 1, wherein the plurality of different user electronic devices include at least one of a personal computer, a laptop, a mobile device, a gaming console, and a tablet. 45

3. A computer-implemented method according to claim 1, wherein the video gaming environment is hosted on a social network server.

4. A computer-implemented method according to claim 1, wherein the video gaming environment is hosted on a third party server linked to the social network. 50

5. A computer-implemented method according to claim 1, wherein the video gaming environment is hosted in a cloud linked to the social network, wherein the video gaming environment provides a plurality of different games. 55

6. A computer-implemented method according to claim 1, wherein the video gaming environment is hosted by a cross-platform server accommodating access by all of the different user electronic devices.

7. A computer-implemented method according to claim 1, wherein at least one of the one or more users performs a play in the video gaming environment via a comment posted in the social network. 60

8. A computer-implemented method according to claim 1, wherein the select game includes at least one of a main game for play via the social network and a sub-game for play via the social network. 65

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9. A computer-implemented method according to claim 1, further comprising:

designating a particular status level to the one or more users, wherein the particular status designated controls a play capability accorded to the one or more users depending upon the particular status level.

10. A system architecture for providing video gaming hosted on one or more servers in association with a social network, comprising one or more computing devices configured to operate based on instructions that cause the one or more computing devices to: 10

provide access using the one or more computing devices to a video gaming environment associated with the social network, by one or more users using at least one of a plurality of different user electronic devices, the at least one of the plurality of different user electronic devices including a user interface configured to display the video gaming environment; 15

post, using the one or more computing devices, a post to the social network including an event relating to the video gaming environment of interest to the social network; 20

generate, using the one or more computing devices, a post identification of the post;

writing, using the one or more computing devices, the post identification to a database, the database configured to store one or more post identifications; 25

process, using the one or more computing devices, each of the one or more post identifications in the database for comments to determine whether the comments include one or more particular keywords commented on the post by a second user; and 30

in response to determining that the comments include the one or more particular keywords commented on the post by the second user, use the one or more particular keywords as play relating to a select game in the video gaming environment, the video gaming environment being displayed on the user interface of the at least one of the plurality of different user electronic devices and being affected by the determination that the comments include the one or more particular keywords. 40

11. A system architecture according to claim 10, wherein the plurality of different user electronic devices include at least one of a personal computer, a laptop, a mobile device, a gaming console, and a tablet. 45

12. A system architecture according to claim 10, wherein the video gaming environment is hosted on a social network server.

13. A system architecture according to claim 10, wherein the video gaming environment is hosted on a third party server associated with a social network. 50

14. A system architecture according to claim 10, wherein the video gaming environment is hosted in a cloud linked to the social network, wherein the video gaming environment provides a plurality of different games. 55

15. A system architecture according to claim 10, wherein the video gaming environment is hosted by a cross-platform server accommodating access by all of the different user electronic devices.

16. A system architecture according to claim 10, wherein at least one of the one or more users performs a play in the video gaming environment via a comment posted in the social network.

17. A system architecture according to claim 10, wherein the select game includes at least one of a main game for play via the social network and a sub-game for play via the social network.

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18. A system architecture according to claim 10, further comprising:

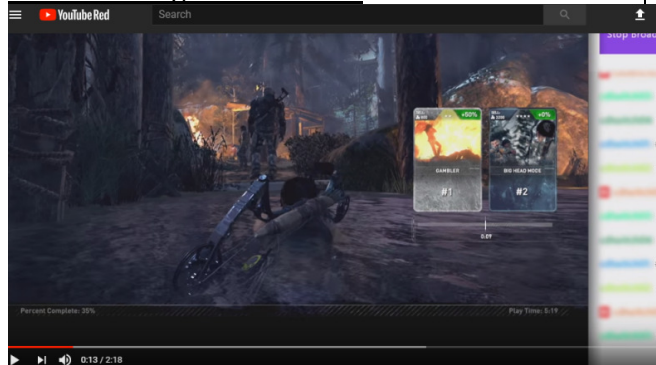
designating a particular status level to the one or more users, wherein the particular status designated controls a play capability accorded to the one or more users 5 depending upon the particular status level.

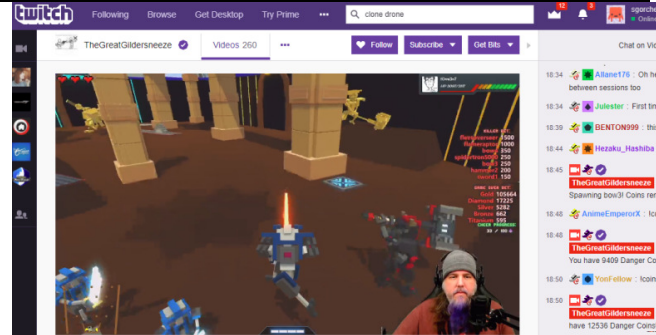
* * * * *

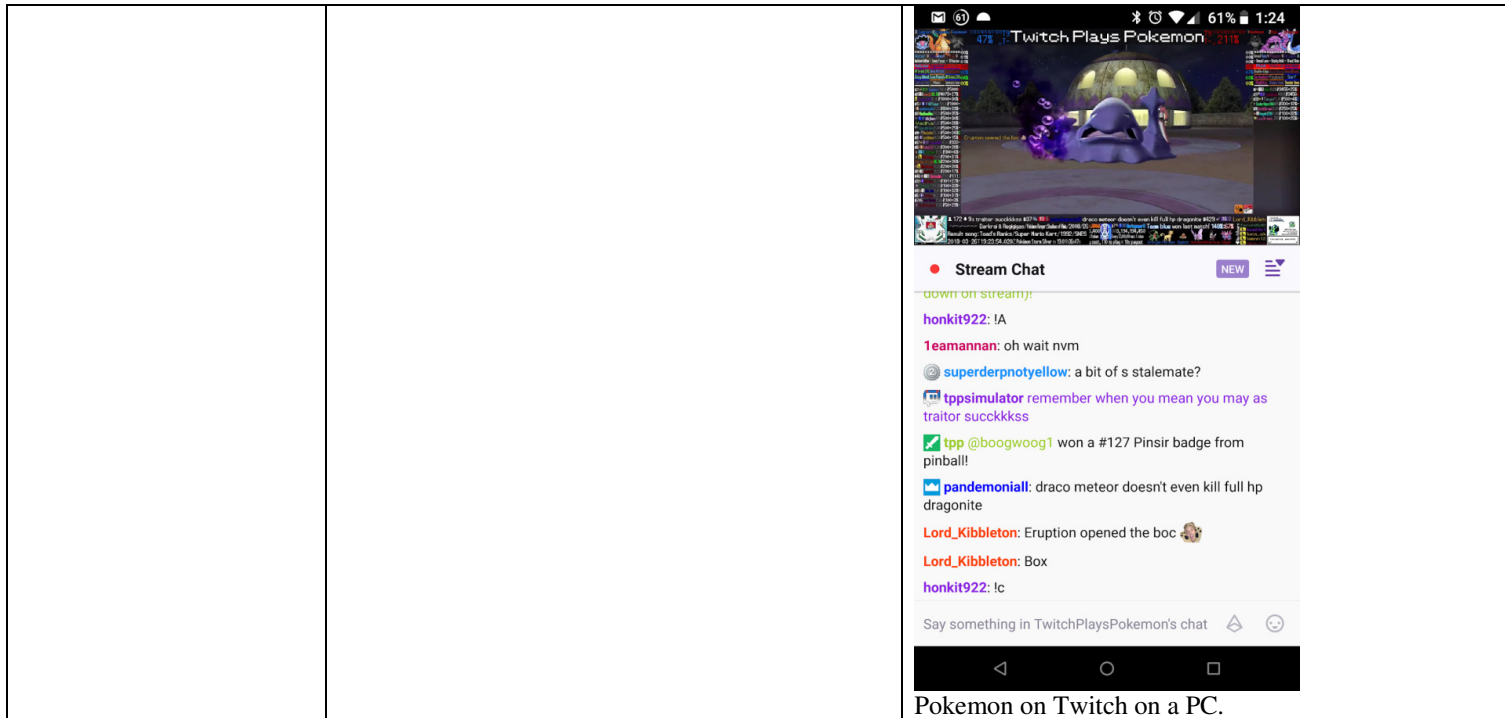
Appendix B

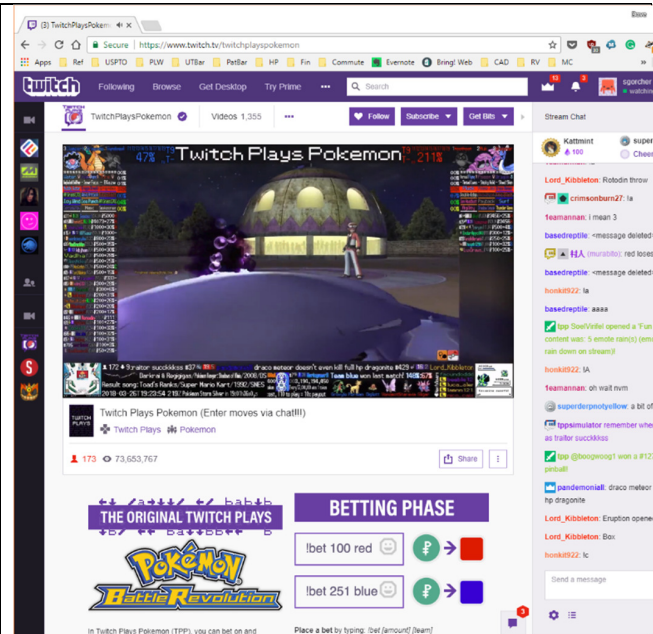
Illustrative Claim Chart for '132 Patent vs. Amazon Twitch

Claim 1	Analysis	Select Evidence
A computer-implemented method using one or more computing devices for implementing a video gaming application, comprising:	• A computer-implemented method using one or more computing device (Amazon Twitch is providing a Twitch app which is computer-implemented using one or more computing device.) • Implementing a video gaming application (Amazon Twitch app, when installed and launched, provides a video gaming application.)	https://app.twitch.tv/download Twitch provides App download for different platforms of computer devices including Windows, Mac, iPhone, Android phone, etc.
providing access by one or more user devices of one or more players to the video gaming application operated on at least one of a social network server, a third party server, and an application provided on electronic devices used by the one or more players;	• providing access (Amazon Twitch is providing access by hosting the social network server, twitch.tv.) • by one or more user devices (Amazon Twitch provides access to its social network server by one or more user devices, such as computers, tablets, mobile devices, etc.) • of one or more players (Amazon Twitch provides access to their social network server to the devices of one or more players-the host of the channel who plays a game.) • to the video gaming application (Amazon Twitch provides that access for games such a “Clone Drone in the Danger Zone,” “Rise of the Tomb Raider,” “Twitch Plays Pokemon,” etc.) • operated on at least one of a social network server, a third party server, and an application provided on electronic devices used by the one or more players (Amazon Twitch provides such access to the video gaming	<u>Twitch hosting Twitch Plays Pokémon (“Pokémon”):</u> Twitch provides access, according to these claim elements, to Twitch Plays Pokémon. https://www.twitch.tv/twitchplayspokemon (Since twitch pages cannot be saved or archived, I do have screenshots for support if the live page changes) See also, https://www.theverge.com/2014/2/26/5451552/twitch-plays-pokemon-nearly-beats-the-game. <u>Twitch hosting Rise of the Tomb Raider (“Tomb Raider”):</u> Twitch provides access according to these claim elements to Tomb Raider. <u>Twitch hosting Clone Drone in the Danger Zone (“Clone Drone”):</u> Twitch provides access according to these claim elements to Clone Drone in the Danger Zone.

	application that is operated on their social network server, a third party server, or an application on a user device such as a computer or mobile device. The twitch.tv server is a social network server at least because users can “follow” other users.)	https://www.youtube.com/watch?v=BF1TdE7SOPc&oref=https%3A%2F%2F&has_verified=1,
providing an interface to the video gaming application via at least one of a social network interface, a mobile device interface, a gaming console interface, and a browser interface;	• providing an interface to the video gaming application (Amazon Twitch provides an interface to the video gaming application, such as, Pokemon, Tomb Raider, Clone Drone, via at least a social network interface (the twitch website) and a browser interface to the website.) • via at least one of a social network interface, a mobile device interface, a gaming console interface, and a browser interface;	<u>Twitch hosting Pokemon:</u> https://www.twitch.tv/twitchplayspokemon <u>Twitch hosting Tomb Raider:</u>  https://www.youtube.com/watch?v=BF1TdE7SOPc&oref=https%3A%2F%2F&has_verified=1, <u>Twitch hosting Clone Drone:</u>

		 Twitch.tv
facilitating variable and distinct user experiences based on the one or more user devices that the one or more players use to access the video gaming application, the variable and distinct user experiences including at least one of a three-dimensional user interface and a two-dimensional user interface;	• facilitating variable and distinct user experiences based on the one or more user devices that the one or more players use to access the video gaming application, the variable and distinct user experiences including at least one of a three-dimensional user interface and a two-dimensional user interface (Amazon twitch facilitates variable and distinct experiences on the user device using a 2D interface are facilitated, at least, because the user can resize the browser window and scroll the chat window contents.)	Twitch facilitates each player having their own variable and distinct experience (view in a browser on their own machine, using variable display size/resolution/color and window size). Users can also scroll the window to see any part of interest to them. This is distinct, variable, two-dimensional. E.g., https://www.twitch.tv/twitchplayspokemon <u>Twitch hosting Pokemon:</u> Pokemon on Twitch on a mobile device:





Twitch hosting Tomb Raider:

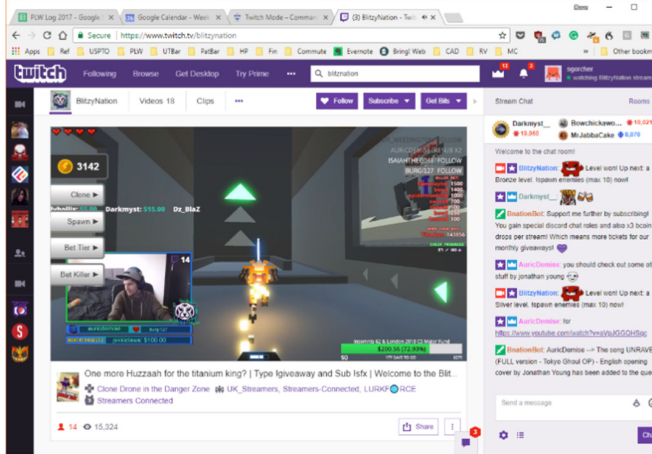
Q. What is the Rise of the Tomb Raider Twitch rewards feature?

A. The "Rise of the Tomb Raider" Twitch rewards feature allows Xbox One Twitch viewers to receive rewards for witnessing specific events while watching a broadcaster playing "Rise of the Tomb Raider."

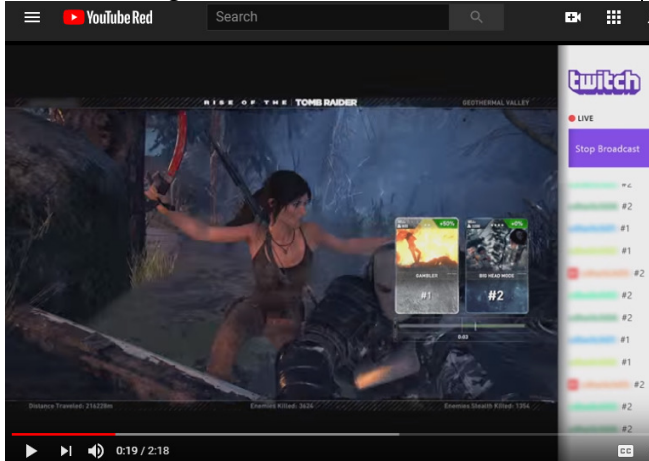
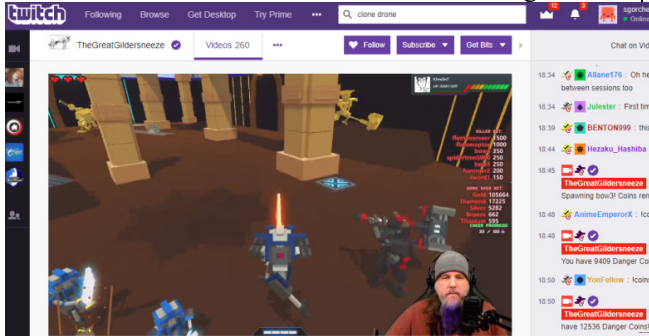
<https://help.twitch.tv/customer/en/portal/articles/2187395>

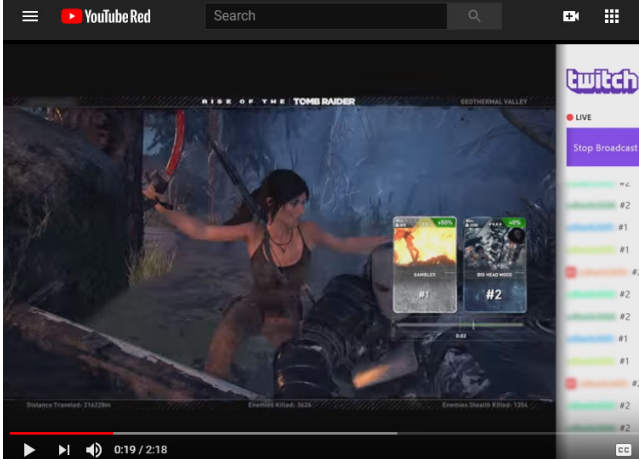
If you're watching via the Xbox One Twitch app (and the streamer is using it, too), you'll be rewarded with in-game credits just for witnessing the player make progress by completing a mission, challenge or achievement.

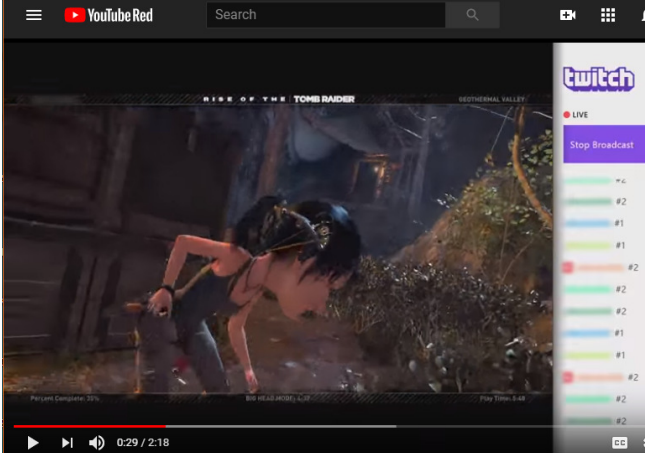
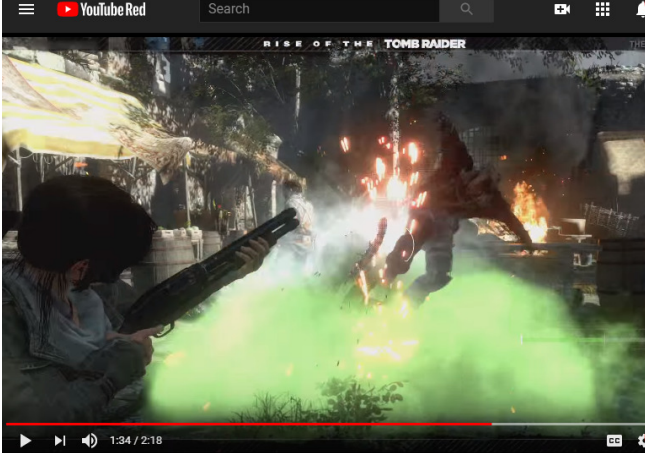
<https://help.twitch.tv/customer/en/portal/articles/2187395>

		95 If the streamer has enabled the feature and is broadcasting via the Xbox One Twitch app, every six minutes viewers will be asked to vote on one of two cards to apply to the player's game. That card will then be active for the next five minutes, or until the player dies or restarts. https://www.eurogamer.net/articles/2015-11-11-how-twitch-viewers-can-change-your-rise-of-the-tomb-raider-game <u>Twitch hosting Clone Drone:</u> Clone Drone on Twitch on a PC.  Clone Drone on Twitch on a mobile device.
receiving, via the social network server, one or more social network interactions from one or more non-players, the one	• receiving, via the social network server, one or more social network interactions from one or more non-players (Players can vote or enter other commands as chat messages.) • the one or more non-players being users with	<u>Twitch hosting Pokemon:</u> In Pokemon, comments posted to the chat window influence the game.

or more non-players being users with whom the one or more players share an affinity in a social network, the one or more social network interactions including a comment posted to the social network server by the one or more non-players, the comment being a comment on one or more events posted to the social network server; and	whom the one or more players share an affinity in a social network (Players that “follow” the host player share an affinity in the social network—Twitch.tv.) • the one or more social network interactions including a comment posted to the social network server by the one or more non-players (Players can vote or enter other commands as chat messages.) • the comment being a comment on one or more events posted to the social network server; (Players can vote or enter other commands as comments in the chat message interface.)	In Twitch Plays Pokemon (TPP), you can bet on and influence matches of Pokemon Battle Revolution (PBR) in chat! https://www.twitch.tv/twitchplayspokemon (Since twitch pages cannot be saved or archived, I do have screenshots for support if the live page changes) <u>Twitch hosting Tomb Raider:</u> “Q. How can viewers interact with the streamer via Twitch?” “A. The “Rise of the Tomb Raider” Twitch features allow fans watching streams of Expedition Modes the ability to vote between two (2) Expedition Cards which will modify the broadcaster’s experience. These Expedition Cards will make the broadcaster’s experience temporarily more challenging, easier, or entertaining.” https://help.twitch.tv/customer/en/portal/articles/2187395 “If you’re a broadcaster, select Expedition Mode to give viewers the ability to impact your game play through voting. At various points of the game, viewers can choose between one of two Expedition cards—the card with the most votes will be activated for five minutes. This can cause the game play to become more challenging, a little easier, or unpredictably wild!” https://blog.twitch.tv/control-fate-in-rise-of-the-tomb-raider-on-twitch-13bceb43810c Once voting is triggered, a 60-second timer will start and voting is conducted via text entry of “#1” or “#2” in the chat. The Expedition Card with the most votes gets activated when the timer expires. Viewers can vote from any Twitch chat client interface. In Tomb Raider, comments posted to the chat window
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		are used to select which of the displayed cards influences the game.  <u>Twitch hosting Clone Drone:</u> In Clone Drone, comments posted to the chat window are used to issue commands that influence the game.  Twitch.tv
modifying play of the video gaming application based on the one or more social network interactions from the one or more non-	• modifying play of the video gaming application based on the one or more social network interactions from the one or more non-players (The non-players' chat-interface-	<u>Twitch hosting Pokemon:</u> Twitch.tv hosts POKEMON where players “bet on and influence matches,” among other infringing interactions.

players.	entered votes or commands influence gameplay by changing the appearance of characters, introduce obstacles, provide equipment, spawn enemies, create extra “lives.” etc.)	In Twitch Plays Pokemon (TPP), you can bet on and influence matches of Pokemon Battle Revolution (PBR) in chat! <u>Twitch hosting Tomb Raider:</u> Non-players voting for card #1 (Gambler) or card #2 (Big Head Mode) to be applied to the game. Here spectators vote for card #2, Big Head. Before the card is applied, the game character has normal proportions.  After the “Big Head Mode” is selected, the character has a larger-proportioned head for a period of time, during game play.
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	 Other cards more directly affect the performance of the game. For example, “Gas Cloud” releases a cloud of poisonous gas around an enemy when he is shot, devastating nearby enemies:  https://www.youtube.com/watch?v=BF1TdE7SOPc&oref=https%3A%2F%2F&has_verified=1,
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		<u>Twitch hosting Clone Drone:</u> http://clonedroneinthedangerzone.com/twitch/ Spawn an enemy for the player:  bribrobot : !spawn sword1   Vatthammer :  bribrobot Spawning sword1! Coins remaining: 5358 Types of enemies (with their cost):   bribrobot : !enemies bribrobot : Enemies: sword1 (100), bow1 (100), sword2 (200), sword3 (500), bow2 (300), bow3 (500), spidertron5000 (500), jetpack1 (500), jetpack2 (800), jetpackarcher (800), spidertron6000 (1000), hammer1 (200), hammer2 (400), hammer3 (600), jetpackhammer (1000), sword4 (700), bow4 (800) Add another “life” or “clone” for the player: Nahuel20027 : !clone   bribrobot : Nahuel20027  CLONE CREATED! 
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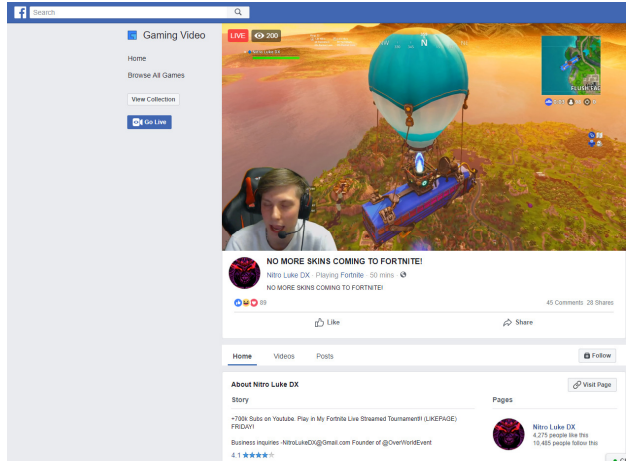
Appendix C

Illustrative Claim Charts for '132 Patent against others

Facebook

Illustrative Claim Charts for '132 Patent vs. Facebook

Claim 1	Analysis	Select Evidence
A computer-implemented method using one or more computing devices for implementing a video gaming application, comprising:	• A computer-implemented method using one or more computing devices (FacebookGaming provides a live gaming video website which is computer-implemented using one or more computing devices.) • implementing a video gaming application (FacebookGaming provides a video gaming application that allows a game player to play a game when accessing the website.)	https://www.facebook.com/FacebookGaming/ FacebookGaming website can be accessed from different platforms of computer devices including Windows, Mac, iPhone, Android phone, etc.
providing access by one or more user devices of one or more players to the video gaming application operated on at least one of a social network server, a third party server, and an application provided on electronic devices used by the one or more players;	• providing access by one or more user devices of one or more players (FacebookGaming provides access by hosting the social network and live gaming video streaming server(s) to allow access to its social network server/live gaming video by one or more user devices.) • to the video gaming application operated on at least one of a social network server, a third party server, and an application provided on electronic devices used by the one or more players (FacebookGaming provides such access to the video gaming application that is operated on their social network server, a third party server, or an application on a user device such as a computer or mobile device. The FacebookGaming server is a social network server at least because users can “comment” on live game streaming and the FacebookGaming	https://www.facebook.com/gaming/?section_id=dmg6MTg5MTU5MTMzMDg4MTE5Ng%3D%3D&view=all&previous_view=home FacebookGaming “Live Now” section includes gaming videos that are being broadcasted (and thus “accessed”) by one or more user devices of one or more players. https://www.facebook.com/gaming/NitroLukeDX/videos/2068926036458975/?fb_dtsg_ag=AdyxkEqvvGLQP5MlqCnWbat2i54fwCIFOXFbjXrzw7NnfQ%3AAAdymAlzrxl9Sg-Re7kK_L5i6nMIOAQ9yTdSOZqPHDHZR_A Video gaming application that is accessed by one or more players shown in “Live Now” section is operated at least on a third-party server, a third party server, and an application provided on electronic devices used by the one or more players.

	provides access to a video gaming application so that a player can play games and broadcast gameplays.)	
providing an interface to the video gaming application via at least one of a social network interface, a mobile device interface, a gaming console interface, and a browser interface;	• providing an interface to the video gaming application (FacebookGaming provides an interface to the video gaming application, such as, Fortnite, Sea of Thieves, Playerunknown's Battlegrounds, PUBG Mobile, etc.) • via at least one of a social network interface, a mobile device interface, a gaming console interface, and a browser interface (An interface is provided for the above listed games for display the live gaming streaming, where the interface is at least one of a social network interface, a mobile device interface, a gaming console interface, and a browser interface.)	FacebookGaming provides an interface to Fortnite and other video gaming applications to display to viewers accessing the FacebookGaming, as shown below. The interface is displayed as a browser interface. 
facilitating variable and distinct user experiences based on the one or more user devices that the one or more players use to access the video gaming application, the variable and distinct user experiences including at least one of a three-dimensional user interface and a two-dimensional user interface;	• facilitating variable and distinct user experiences based on the one or more user devices that the one or more players use to access the video gaming application (FacebookGaming facilitates variable and distinct experiences based on the one or more user devices that the one or more players use to access the video gaming application. The one or more players who play the games on the FacebookGaming may use one or more user devices (e.g. a mouse, a keyboard, etc.) to facilitate variable and distinct user experiences	FacebookGaming facilitates each player having his or her own variable and distinct experience (view in a browser on their own machine, using variable display size/resolution/color and window size). Users can also scroll the window to see any part of interest to them. This is distinct, variable, two-dimensional. <u>FacebookGaming hosting Fortnite:</u>

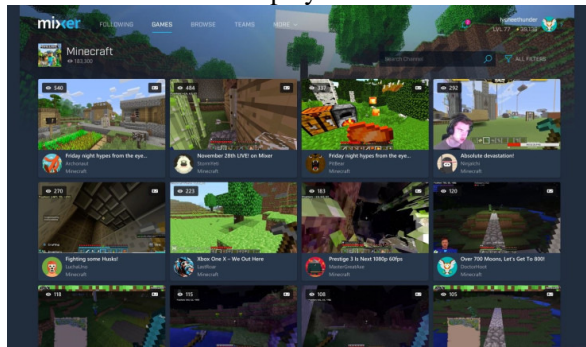
	in playing the games.) • the variable and distinct user experiences including at least one of a three-dimensional user interface and a two-dimensional user interface (FacebookGaming facilitates variable and distinct user experiences on the user device using a 2D interface that displays the gaming process.)	 The user experiences include a 2-dimensional user interface that displays the gaming activities.
receiving, via the social network server, one or more social network interactions from one or more non-players, the one or more non-players being users with whom the one or more players share an affinity in a social network, the one or more social network interactions including a comment posted to the social network server by the one or more non-players, the comment being a comment on one or more events posted to the social network server; and	• receiving, via the social network server, one or more social network interactions from one or more non-players (FacebookGaming includes a social network interaction section that displays comments from one or more non-players.) • the one or more non-players being users with whom the one or more players share an affinity in a social network (Non-players that “follow” the host player share an affinity with players in the social network.) • the one or more social network interactions including a comment posted to the social network server by the one or more non-players (The one or more social network interactions on the FacebookGaming include comments posted to the social network server (e.g., Facebook server) by one or more non-players (i.e., the viewers).) • the comment being a comment on one or more events posted to the social network	FacebookGaming hosting Fortnite: On the right part of the website, there is a social network interaction section that displays one or more social network interactions (e.g., comments on games) from one or more non-players (e.g., viewers).  Comments are posted to the FacebookGaming and are real-time comments posted by one or more non-players.

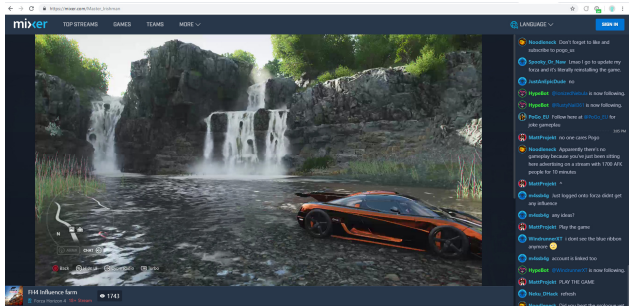
	server (The comment is a comment on a gaming video broadcasted on the Facebook gaming video webpage (i.e.,)	CommentsUp Next Realtime Comments ▾  Leslie Hernandez · 14:01 Heyyy Luke Like · Reply · 1d  Tj Backhouse · 14:03 Ok can I Like · Reply · 1d  Ryan Walters · 14:14 Hello Like · Reply · 1d  Bailey Parker · 14:47 Best game can you try land paradise palms? Like · Reply · 1d  Sykodelic · 14:54 Omg! Like · Reply · 1d  Mario Valenzuela · 15:01 What's up playa get that's tilled win ! Like · Reply · 1d  Tj Backhouse · 15:02 Get vbucks Like · Reply · 1d  Sykodelic · 15:03 JOHN WICK HAD A BABY?! Like · Reply · 1d https://www.facebook.com/NitroLukeDX/videos/264718984157213/ The comments are comments on an event (i.e., the gaming video being broadcasted).
modifying play of the video gaming application	• modifying play of the video gaming	

based on the one or more social network interactions from the one or more non-players.	application based on the one or more social network interactions from the one or more non-players (The one or more social network interactions from one or more non-players (e.g., the non-players' comments) may affect the play of the video gaming application via the player (i.e., the anchor of the gaming video being broadcasted.)	 The screenshot shows a vertical list of four chat messages on a Twitch interface. Each message includes a circular profile picture, a username, a timestamp, and the text of the comment. Below each comment are the words 'Like' and 'Reply' followed by a small downward arrow. The first comment is from Bailey Parker at 14:47, asking for the best game to try on a land with palm trees. The second is from Sykodelic at 14:54, saying 'Omg!'. The third is from Mario Valenzuela at 15:01, asking what game the player is playing. The fourth is from Tj Backhouse at 15:02, asking for v-bucks. From the above, it can be seen that the comments include game strategies from the viewers. The anchor may check the comments and modify the play of the game based on the comments from non-players.
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Microsoft

Illustrative Claim Charts for '132 Patent vs. Microsoft Mixer

Claim 1	Analysis	Select Evidence
A computer-implemented method using one or more computing devices for implementing a video gaming application, comprising:	• A computer-implemented method using one or more computing devices (Mixer provides a live gaming video website which is computer-implemented using one or more computing devices.) • implementing a video gaming application (Mixer gaming video website or app, when launched, provides a video gaming application that allows a game player to play and/or stream a game.)	https://www.xbox.com/en-US/mixer Mixer can be launched from different platforms including Windows, Mac, iPhone, Android phone, etc. https://techcrunch.com/2018/05/24/microsofts-twitch-rival-mixer-gets-a-revamp-including-new-developer-tools-for-interactive-gameplay/ “MixPlay will enable other games that are only playable on Mixer where controls blend into the stream – like Mini Golf, which launched this month and now has 300,000 views, or Truck Stars, for example.”
providing access by one or more user devices of one or more players to the video gaming application operated on at least one of a social network server, a third party server, and an application provided on electronic devices used by the one or more players;	• providing access by one or more user devices of one or more players (Mixer website/app is providing access by hosting the social network and live game video streaming server(s) to allow one or more user devices of one or more players to access to its social activities/live gaming videos.) • to the video gaming application operated on at least one of a social network server, a third party server, and an application provided on electronic devices used by the one or more players (Mixer website/app provides such access to the video gaming application that is operated on its social network server, a third party server, or an application on a user device such as a computer or mobile device. The Mixer	https://mixer.com/browse/games Mixer website/app “GAMES” “TOP STREAMS” sections include gaming videos that are being broadcasted (and thus “accessed”) by one or more user devices of one or more players.  https://mixer.com/Jaidefinichon_GOTH

	website/app server includes at least a social network server that users can “comment” on live game streaming. Mixer’s video game streaming platform also provides access to a video gaming application to allow a player to play games and/or broadcast the gameplay.)	Video gaming application that is accessed by one or more players shown in “GAMES” or “TOP STREAMS” section is operated at least on a social network server, a third party server, and an application provided on electronic devices used by the one or more players.
providing an interface to the video gaming application via at least one of a social network interface, a mobile device interface, a gaming console interface, and a browser interface;	• providing an interface to the video gaming application (Mixer gaming video website/app provides an interface to the video gaming applications, such as, Fortnite, Minecraft, League Legends, Forza Horizon 4, Playerunknown’s Battlegrounds, etc.) • via at least one of a social network interface, a mobile device interface, a gaming console interface, and a browser interface (The above interface for displaying the live game streaming may be a browser interface, for instance: https://mixer.com/JaredFPS, or a mobile device interface for a Mixer app.)	Mixer gaming video website/app provides an interface for Fortnite and other video gaming applications to display to viewers. As shown below, an interface is displayed as a browser interface. 
facilitating variable and distinct user experiences based on the one or more user devices that the one or more players use to access the video gaming application, the variable and distinct user experiences including at least one of a three-dimensional user interface and a two-dimensional user interface;	• facilitating variable and distinct user experiences based on the one or more user devices that the one or more players use to access the video gaming application (Mixer website facilitates variable and distinct experiences based on the one or more user devices used by one or more players to access the video gaming application. One or more players who play the games may use different user devices (e.g. a mouse, a keyboard, etc.) to facilitate variable and distinct user experiences in playing the games.) • the variable and distinct user experiences	https://watchbeam.zendesk.com/hc/en-us/articles/115000983766-What-do-Chat-colors-mean- “Here at Mixer, our chat colors are more than just a color, they show a specific role of the users in chat. Below you'll find just what each color means and a little about them. Official Mixer Staff: • Red - Red is a rare fleet of user, there are only 2 in all of Mixer. They are the 2 co-founders of the site. • Yellow/Gold - Yellow/Gold are Mixer Staff (people who work for Mixer). They can be anything from an engineer, to partner managers to site admins. If a yellow name tells you

	including at least one of a three-dimensional user interface and a two-dimensional user interface (Mixer gaming video website/app facilitates variable and distinct experiences on the user devices that display the gaming process for each player.)	something is "ok" or "not ok" they may or may not be correct. ○ <i>The CAT Guardians are the only staff members who deal with rule violations. Always ask if the staff member is a Guardian when asking about rules. Questions answered in chat do not count as official answers. For an official answer send an email to guardians@mixer.com</i> Official Moderators: • Teal - These are Global Moderators. They can moderate chat in any channel, but they cannot remove users from the site or suspend a stream. ○ Asking for Global moderator will ensure you will not be chosen. These members are chosen and vetted by CAT, and trained to follow site guidelines. They mostly handle moderation of official Mixer channels but may also help out in other channels. ○ Global Moderators will only help moderate channels that are featured on Hypezone or other official channels, and only if specifically requested to do so by the streamer. Non-Staff Accounts: • Green - Green users are <i>channel moderators</i>. These users are appointed by the channel owner and enforce the channel owner's rules on the chat via time outs and bans. • Purple - Purple is <i>Pro</i> members. Pro is our monthly subscription service we offer on Mixer. • Blue - If you don't fall into any of the above
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		categories, you will show as blue in chat. Don't let that discourage you though, we love you regardless. • White - White is the owner of the channel you're currently watching.”  The user experiences include a 2-dimensional user interface that displays the gaming activities, as shown above.
receiving, via the social network server, one or more social network interactions from one or more non-players, the one or more non-players being users with whom the one or more players share an affinity in a social network, the one or more social network interactions including a comment posted to the social network server by the one or more non-players, the comment being a comment on one or more events	• receiving, via the social network server, one or more social network interactions from one or more non-players (Mixer gaming video website/app includes a social network interaction section that displays comments from one or more non-players, i.e., viewers.) • the one or more non-players being users with whom the one or more players share an affinity in a social network (Mixer gaming video website/app includes different teams, each team including players and non-players, or viewers.) • the one or more social network interactions including a comment posted to the social network server by the one or more non-	https://www.lifewire.com/what-is-mixer-4156866 “The Xbox One Mixer app also allows for participation in a channel’s chatroom.” https://www.geekwire.com/2017/microsofts-twitch-rival-mixer-introduces-mobile-streaming-apps-ios-android/ “Mixer painted the app as not only an extension of the core function of broadcasting games but also as a social outlet, similar to something like Facebook Live.” https://watchbeam.zendesk.com/hc/en-us/articles/211509386-Create-Teams “Teams can be many things, from groups of friends who stream together, to big networks. They are a great way to collaborate and grow your audience.”

posted to the social network server; and	players (A chatroom in the Mixer gaming video website/app includes a plurality of comments posted by one or more non-players (and by players as well). The server that supports the chatroom functionality is a social network server.) • the comment being a comment on one or more events posted to the social network server (The comments in the chatroom include a comment on a gaming video broadcasted on the Mixer gaming video platform.)	• You can either create a team yourself for 5,000 Sparks at https://mixer.com/me/teams or attempt to join one by contacting the owner of a team. You can view all the teams on Mixer at https://mixer.com/browse/teams” On the right part of the website, there is a social network interaction section that displays one or more social network interactions (e.g., comments on games) from one or more non-players (e.g., viewers). An example is shown in the following for a chatroom for a broadcasting video game FH4 Influence farm:  Comments are posted on the gaming video website and are real-time comments posted by one or more non-players (may include comments from players as well).
modifying play of the	• modifying play of the video gaming	https://techcrunch.com/2018/05/24/microsofts-twitch-

video gaming application based on the one or more social network interactions from the one or more non-players.	application based on the one or more social network interactions from the one or more non-players (The one or more social network interactions from the one or more non-players may affect the play of the video gaming application.)	rival-mixer-gets-a-revamp-including-new-developer-tools-for-interactive-gameplay/ “One example of what MixPlay can enable can be seen in April’s launch of Mixer’s “ Share Controller ” feature, which created a virtual Xbox controller that could be shared by anyone broadcasting from their Xbox One. This allowed gamers and viewers to play along in real-time from the web.” “Three new MixPlay-enabled games are launching today, as well, including Earthfall , which lets viewers interact with streamers or even change the game; Next Up Hero , where viewers can help a streamer by taking control or freeze the streamer at the worst possible moment, depending on their mood; and Late Shift , a choose-your-own-adventure crime thriller you control.” https://en.wikipedia.org/wiki/Mixer_(website) “Mixer focuses on video gaming , including playthroughs of video games , but is primarily distinguished by features designed to allow viewers to interact with streams. Using an SDK , features can be integrated into games to allow users to affect gameplay or vote on elements using buttons displayed alongside the stream. Users earn ‘Sparks’ for watching and participating in streams, which can then be spent to activate these features.” https://www.xbox.com/en-US/mixer
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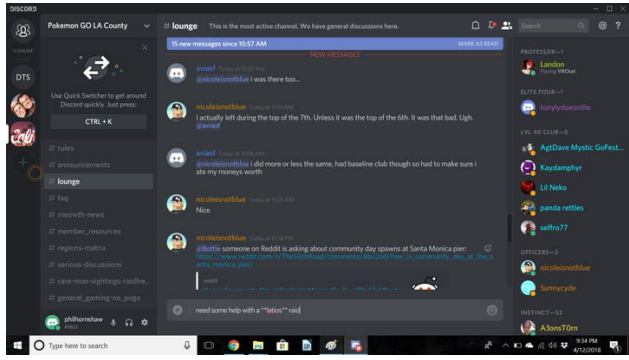
		 “Let viewers rock your Minecraft world Now viewers can fully participate in your Minecraft stream. Summon zombies, gift weapons, place objects, and make nightfall. For every Minecraft command, you can create an interactive button and let your viewers loose to help, hinder, or just mess with you.” https://www.slashgear.com/minecraft-gets-mixer-interactive-live-streaming-mixed-reality-features-22508859/ “Broadcasting is already an interactive activity, albeit indirectly. Hosts speak to an audience while the viewers respond via typed chat. Viewers may be able to influence the player’s decisions and outcome of a game, but usually by flooding the chat room with suggestions or demands.”
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Discord

Illustrative Claim Charts for '132 Patent vs. Discord

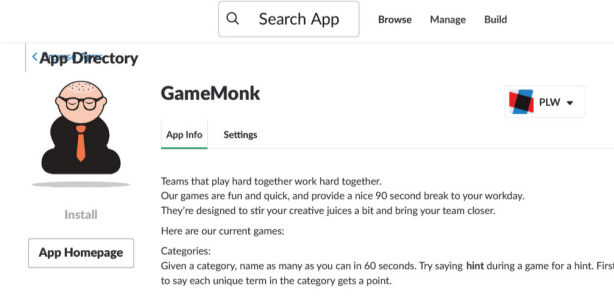
Claim 1	Analysis	Select Evidence
A computer-implemented method using one or more computing devices for implementing a video gaming application, comprising:	• A computer-implemented method implementing a video gaming application (Discord includes downloadable PC program, web-based version and a mobile version. Discord is also making itself a game launcher.)	https://techcrunch.com/2018/08/09/discord-is-launching-a-game-store/ “Discord is making itself a launcher — that is, you’ll be able to sort and launch most of the games on your computer right from Discord, including games purchased elsewhere and even those, notes the company, that requires <i>another</i> launcher to run.”
providing access by one or more user devices of one or more players to the video gaming application operated on at least one of a social network server, a third party server, and an application provided on electronic devices used by the one or more players;	• providing access by one or more user devices of one or more players (Once installed, Discord provides access to players through player devices.) • to the video gaming application operated on at least one of a social network server, a third party server, and an application provided on electronic devices used by the one or more players (As above, Discord is making itself a game launcher, which means that video gaming application operated on Discord will be provided on electronic devices used by one or more gamers.)	https://www.businessinsider.com/how-to-use-discord-the-messaging-app-for-gamers-2018-5 “Discord was specifically designed to serve the gaming community. The app, which offers text messaging and voice and video calling, allows gamers to communicate and strategize with friends mid-game.”
providing an interface to the video gaming application via at least one of a social network interface, a mobile device	• providing an interface to the video gaming application (As discussed above, when a game launched through Discord, a user interface will be provided to the video gaming application.) • via at least one of a social network interface, a	https://www.digitaltrends.com/gaming/what-is-discord/ “Discord is also accessible through a number of means, which makes it easy to use even if you’re not sitting in front of a gaming PC. The app has a downloadable PC program you can run on your computer — which is the

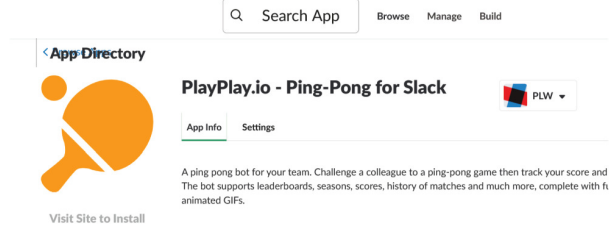
interface, a gaming console interface, and a browser interface;	mobile device interface, a gaming console interface, and a browser interface (Either through PC program, web-based version, or a mobile version, Discord will provide a video gaming application through one or more of a social network interface, a mobile device interface, a gaming console interface, and a browser interface.)	handy, lightweight version best for running in the background while you play games — as well as a web-based version and a mobile version.”
facilitating variable and distinct user experiences based on the one or more user devices that the one or more players use to access the video gaming application, the variable and distinct user experiences including at least one of a three-dimensional user interface and a two-dimensional user interface;	• facilitating variable and distinct user experiences based on the one or more user devices that the one or more players use to access the video gaming application (Different user devices may have different computer configurations that facilitate variable and distinct user experiences.) • the variable and distinct user experiences including at least one of a three-dimensional user interface and a two-dimensional user interface (Discord platform provides one or more two-dimensional interfaces for chatting and/or for playing a game when a game is launched through Discord.)	https://www.digitaltrends.com/gaming/what-is-discord/ “The free platform, which blends the approachable chat UI found in apps like Slack with video and voice chat, a la Skype, has quickly become one of the most popular, reporting 90 million users, with 14 million people logging on every day.”
receiving, via the social network server, one or more social network interactions from one or more non-players, the one or more non-players being users with whom the one or more players share an affinity in a social network, the one or more social network interactions including a comment	• receiving, via the social network server, one or more social network interactions from one or more non-players (Discord provides private or public servers (i.e., chatrooms) where fans (e.g., a non-player) in a specific community may chat with each other, for instance with a player, and with the game developer.) • the one or more non-players being users with whom the one or more players share an affinity in a social network (The players and non-players in a server may share an affinity,	https://www.digitaltrends.com/gaming/what-is-discord/ “Joining a server is as easy as clicking a link, though, generally speaking, you need to be invited first. Many servers are public and available through Discord’s search function — for instance, <i>Pokémon Go</i> players in Los Angeles have a public “PoGo LA” server to coordinate playing the game in their city, and anybody can join it. Discord also recently added “verified servers” — official servers created by game studios and other notable entities that serve as official community forums for fans to chat with each other, and with game developers.”

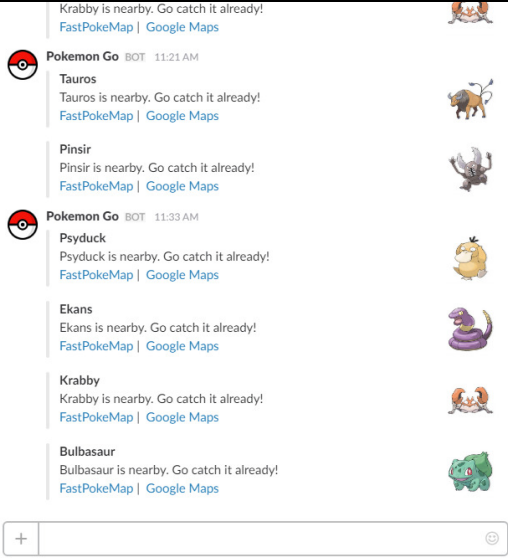
posted to the social network server by the one or more non-players, the comment being a comment on one or more events posted to the social network server; and	such as in the same community.) • the one or more social network interactions including a comment posted to the social network server by the one or more non-players (The chatrooms in the Discord “server” include a plurality of comments posted by one or more non-players. The “server” that supports the chatroom functionality is a social network server.) • the comment being a comment on one or more events posted to the social network server (The comments in the chatroom include a comment on a gameplay.)	
modifying play of the video gaming application based on the one or more social network interactions from the one or more non-players.	• modifying play of the video gaming application based on the one or more social network interactions from the one or more non-players (The one or more social network interaction from the one or more non-players may affect the play of the video gaming application.)	https://www.businessinsider.com/how-to-use-discord-the-messaging-app-for-gamers-2018-5 “The app, which offers text messaging and voice and video calling, allows gamers to communicate and strategize with friends mid-game.”

Slack

Illustrative Claim Charts for '132 Patent vs. Slack

Claim 1	Analysis	Select Evidence
A computer-implemented method using one or more computing devices for implementing a video gaming application, comprising:	• A computer-implemented method implementing a video gaming application (Slack runs on Windows, MacOS, iOS, Android, and Linux, and web browser.)	https://www.digitaltrends.com/computing/best-pc-and-mac-im-chat-client-alternatives/ Slack is a chat application that is computer-implemented and may be installed on various platforms or be launched from a web browser.
providing access by one or more user devices of one or more players to the video gaming application operated on at least one of a social network server, a third party server, and an application provided on electronic devices used by the one or more players;	• providing access by one or more user devices of one or more players (Once installed, Slack provides access to users through user devices. In occasions, the users may include one or more players, as there are game communities in Slack.) • to the video gaming application operated on at least one of a social network server, a third party server, and an application provided on electronic devices used by the one or more players (Slack provides access to the video gaming application through an app directory that includes a social and fun category including different games. The games included in the social and fun category in Slack are operated on at least one of a social network server, a third party server, and an application provided on electronic devices used by one or more players who play the games while chatting on Slack.)	https://medium.com/startupsco/the-full-list-of-400-slack-communities-5545e82cf65d Slack includes game communities where players and non-players can chat for the games that the players are playing. For instance, there are gaming-related communities, such as PokemonGo-Bot, RPG Talk, #MTG Magic The Gathering, etc . https://plw310.slack.com/apps/A0S34F541-gamemonk 
providing an interface to the video gaming application via at least one	• providing an interface to the video gaming application via at least one of a social network	https://plw310.slack.com/apps/A0H0ZJHP0-playplayio-ping-pong-for-slack

of a social network interface, a mobile device interface, a gaming console interface, and a browser interface;	interface, a mobile device interface, a gaming console interface, and a browser interface (The video gaming applications listed in the social and fun category in the app directory in Slack are provided through a browser interface.)	 The screenshot shows the Slack App Directory interface. At the top, there is a search bar labeled 'Search App' and buttons for 'Browse', 'Manage', and 'Build'. Below this, the 'App Directory' header is visible. The featured app is 'PlayPlay.io - Ping-Pong for Slack', which has an orange icon of a ping-pong paddle and ball. The app description states: 'A ping pong bot for your team. Challenge a colleague to a ping-pong game then track your score and The bot supports leaderboards, seasons, scores, history of matches and much more, complete with fi animated GIFs.' There is a 'Visit Site to Install' link at the bottom.
facilitating variable and distinct user experiences based on the one or more user devices that the one or more players use to access the video gaming application, the variable and distinct user experiences including at least one of a three-dimensional user interface and a two-dimensional user interface;	• facilitating variable and distinct user experiences based on the one or more user devices that the one or more players use to access the video gaming application (Different user devices may have different computer configurations that facilitate variable and distinct user experiences.) • the variable and distinct user experiences including at least one of a three-dimensional user interface and a two-dimensional user interface (Slack platform provides one or more two-dimensional interfaces for chatting.)	https://slack.com/features  The illustration shows a smartphone on the left and a laptop on the right, both displaying the Slack application interface. The smartphone screen shows a chat conversation with a colorful avatar. The laptop screen shows a more complex view with a sidebar for channel navigation and a main chat area. Below the devices, there is a green rectangular graphic element. There are two-dimensional user interfaces that users can access and chat by text.

receiving, via the social network server, one or more social network interactions from one or more non-players, the one or more non-players being users with whom the one or more players share an affinity in a social network, the one or more social network interactions including a comment posted to the social network server by the one or more non-players, the comment being a comment on one or more events posted to the social network server; and	• receiving, via the social network server, one or more social network interactions from one or more non-players (Slack includes different game communities, where each game community receives, via the social network server, one or more social network interactions from non-player members (and from players as well.) • the one or more non-players being users with whom the one or more players share an affinity in a social network (The players and non-players in a game community may share an affinity.) • the one or more social network interactions including a comment posted to the social network server by the one or more non-players (Non-players in a game community may post a comment to the community.) • the comment being a comment on one or more events posted to the social network server (The comments in a game community may include a comment on a gameplay.)	 People may use Slack chat function to discuss while they are playing Pokémon.
modifying play of the video gaming application based on the one or more social network interactions from the one or more non-players.	• modifying play of the video gaming application based on the one or more social network interactions from the one or more non-players (Social network interactions from one or more non-players may affect the play of the video gaming application in a game community in Slack.)	https://blog.standuply.com/1000-slack-communities-part-2-7-6e1eba5c3252 Still, the discussion on the games may modify play of the video gaming applications based on the comments posted to each game community. Here the following are the few example game communities: X-Wing Games (XWingTMG) (533): Place to chat about list building, battle reports, the latest announcements and everything else related to tiny plastic spaceships. Star Wars Battlefront (25): EA Star Wars Battlefront players to share friend-tags, news, alert others to streams and more.

		North Side Trainers (n/a): Guys who use slack to chat together and send notifications to your phone when rare Pokémon spawn nearby.
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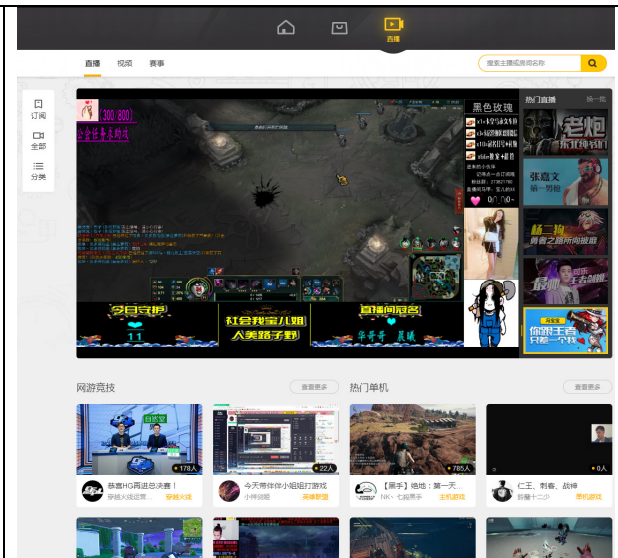
Tencent

Illustrative Claim Charts for '132 Patent vs. Tencent (WeGame)

Claim 1	Analysis	Select Evidence
A computer-implemented method using one or more computing devices for implementing a video gaming application, comprising:	• A computer-implemented method using one or more computing devices (WeGame platform provides a video game-related application, which is computer-implemented using one or more computing devices.) • implementing a video gaming application (WeGame, when launched, provides a video gaming application that allows a game player to play and/or broadcast a gameplay.)	“Tencent upgraded gaming platform TGP (Tencent Games Platform) into WeGame in April 2017 when it announced that it aims to support players from all over the world.”
providing access by one or more user devices of one or more players to the video gaming application operated on at least one of a social network server, a third party server, and an application provided on electronic devices used by the one or more players;	• providing access by one or more user devices of one or more players (One or more user devices, upon installation of WeGame, provide access to one or more players to the installed WeGame platform, and the gaming application in the WeGame platform allows a player to play a game and/or broadcast a gameplay.) • to the video gaming application operated on at least one of a social network server, a third party server, and an application provided on electronic devices used by the one or more players (WeGame includes a video gaming application that is operated on at least one of a social network server and a third-party server, and is an application that is provided on electronic devices, e.g., a desktop, a laptop, etc., that are used by the one or more players.)	https://www.youtube.com/watch?v=woGrYERgOpw WeGame allows a player to download the games (e.g., Blade &Soul, Rocket League, Call of Duty Online. etc.) into the WeGame platform and directly play/broadcast the downloaded games. The video gaming application WeGame is operated on an application provided on electronic devices used by one or more players.

providing an interface to the video gaming application via at least one of a social network interface, a mobile device interface, a gaming console interface, and a browser interface;

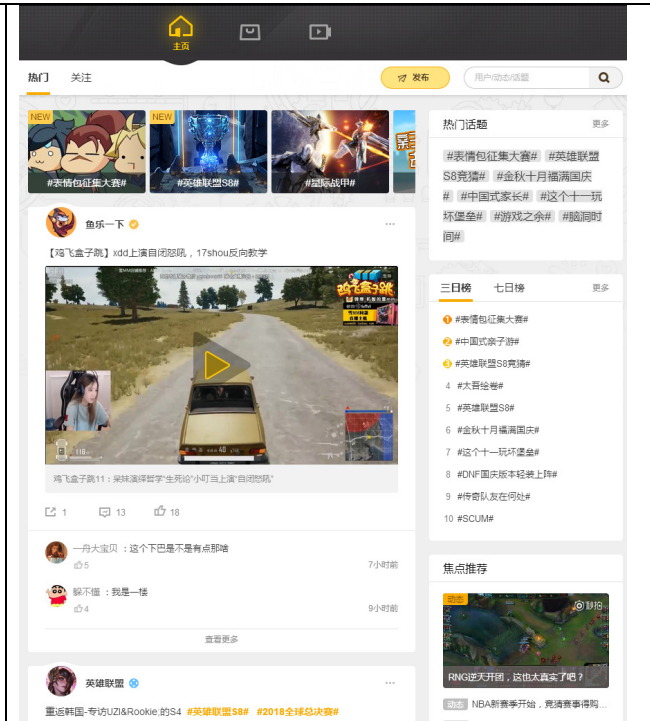
- **providing an interface to the video gaming application** (WeGame, when launched, includes a browser-style interface that allows a player to download a game and select a downloaded game and play the game.)
- **via at least one of a social network interface, a mobile device interface, a gaming console interface, and a browser interface** (The browser style interface in WeGame is a social/network interface and/or a browser interface.)



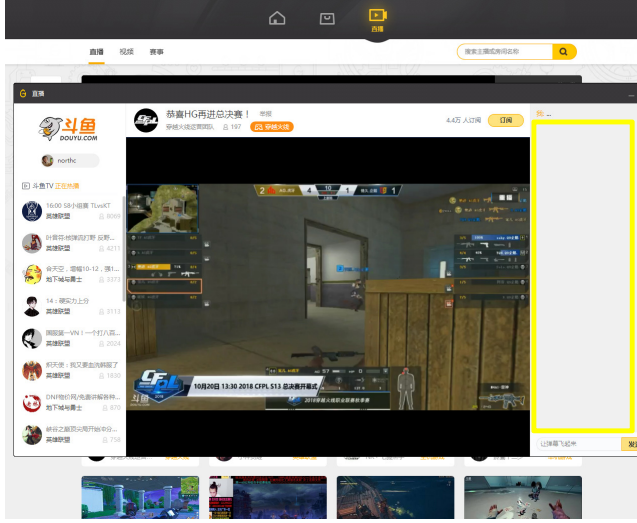
The above is a displayed interface as WeGame is launched. In the interface, there are links for homepage, store, and broadcasting. In the store, a player can download a game from the store into his/her library. In the broadcasting link, a player can select a downloaded game and play the game and/or broadcast a gameplay.

facilitating variable and distinct user experiences based on the one or more user devices that the one or more players use to access the video gaming application, the variable and distinct user experiences including at least one of a three-dimensional user interface and a two-dimensional user interface;

- **facilitating variable and distinct user experiences based on the one or more user devices that the one or more players use to access the video gaming application** (Different user devices may have different computer configurations that facilitate variable and distinct user experiences.)
- **the variable and distinct user experiences including at least one of a three-dimensional user interface and a two-dimensional user interface** (WeGame platform provides one or more two-dimensional interfaces for browsing and broadcasting.)



WeGame interfaces include at least one two-dimensional interface for variable and distinct user experiences based on the needs and computer configurations of different users.

receiving, via the social network server, one or more social network interactions from one or more non-players, the one or more non-players being users with whom the one or more players share an affinity in a social network, the one or more social network interactions including a comment posted to the social network server by the one or more non-players, the comment being a comment on one or more events posted to the social network server; and	• receiving, via the social network server, one or more social network interactions from one or more non-players (WeGame have a chatroom that allows a non-player to provide comments on the game being played and broadcasted by a player.) • the one or more non-players being users with whom the one or more players share an affinity in a social network (Non-players may follow a player/anchor that is playing a game.) • the one or more social network interactions including a comment posted to the social network server by the one or more non-players (The chatroom in the WeGame platform includes a plurality of comments posted by one or more non-players. The server that supports the chatroom functionality is a social network server.) • the comment being a comment on one or more events posted to the social network server (The comments in a chatroom include a comment on a gameplay broadcasted on the WeGame platform.)	 WePlay user interfaces include a chatroom (marked yellow in the above picture) next to a gameplay section. The chatroom includes comments provided by one or more non-players.
modifying play of the video gaming application based on the one or more social network interactions from the one or more non-players.	• modifying play of the video gaming application based on the one or more social network interactions from the one or more non-players (One or more social network interactions from the one or more non-players may affect a gameplay of the video gaming application.)	

Douyu

Illustrative Claim Charts for '132 Patent vs. Douyu

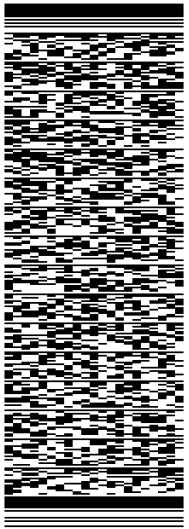
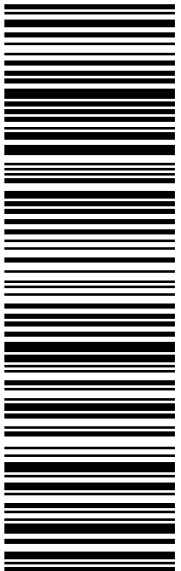
Claim 1	Analysis	Select Evidence
A computer-implemented method using one or more computing devices for implementing a video gaming application, comprising:	• A computer-implemented method using one or more computing devices (Douyu website provides online access to various computing devices.) • implementing a video gaming application (Douyu website provides a video gaming application that allows a game player to play and/or broadcast a gameplay.)	https://www.douyu.com/directory/all Douyu website includes a video gaming application that allows a player/anchor to play and broadcast a gameplay.
providing access by one or more user devices of one or more players to the video gaming application operated on at least one of a social network server, a third party server, and an application provided on electronic devices used by the one or more players;	• providing access by one or more user devices of one or more players (One or more user devices, upon accessing Douyu website, provide one or more players access to their accounts to play and/or broadcast a gameplay.) • to the video gaming application operated on at least one of a social network server, a third party server, and an application provided on electronic devices used by the one or more players (Douyu includes a video gaming application that is operated on at least one of a social network server and a third-party server, and is an application that is provided on electronic devices, e.g., a desktop, a laptop, etc., that are used by the one or more players.)	https://www.douyu.com/ The website is accessible to one or more players. https://www.douyu.com/special/guide/anchor  The above Douyu website provides a guidance on how to become an anchor, which includes anchor information verification, streaming tool download, and how to launch a live gameplay in different device platforms. Upon setup, an anchor may visit Douyu website and

		video game applications operated on a Douyu server, which is a social network server that, as described in other parts, supports social interactions between players and nonplayers.
providing an interface to the video gaming application via at least one of a social network interface, a mobile device interface, a gaming console interface, and a browser interface;	• providing an interface to the video gaming application (Douyu website includes an interface to the video gaming application that allows a player to select a game and play a game. When played, a gameplay is also displayed in a user interface.) • via at least one of a social network interface, a mobile device interface, a gaming console interface, and a browser interface (Besides website access, Douyu also provides “app” that can be downloaded onto mobile devices. An interface on a mobile device interface is provided to a video gaming application in Douyu.)	 The above is a part of a browser interface that includes an interface to the video gaming application. In the video gaming application, a gameplay can be displayed in the user interface. Two players playing the same game are also displayed in the interface, and the two players have different user experience.
facilitating variable and distinct user experiences based on the one or more user devices that the one or more players use to access the video gaming application, the variable and distinct user experiences including at least one of a three-dimensional user interface	• facilitating variable and distinct user experiences based on the one or more user devices that the one or more players use to access the video gaming application (Different user devices may have different configurations (e.g., screen size, screen resolution, processor speed, video card type, etc.) which provide different user experiences.) • the variable and distinct user experiences including at least one of a three-dimensional	Douyu facilitates each player having his or her own variable and distinct experience (using variable display size/resolution/color and window size). Users can also scroll the window to see any part of interest to them. This is distinct, variable, and two-dimensional. E.g., https://www.douyu.com/90016

and a two-dimensional user interface;	user interface and a two-dimensional user interface (Douyu gaming video website/app facilitates variable and distinct experiences on the user device using a 2D interface that displays the gaming process including the variable and distinct user experiences.)	
receiving, via the social network server, one or more social network interactions from one or more non-players, the one or more non-players being users with whom the one or more players share an affinity in a social network, the one or more social network interactions including a comment posted to the social network server by the one or more non-players, the comment being a comment on one or more events posted to the social network server; and	• receiving, via the social network server, one or more social network interactions from one or more non-players (Douyu website/app live streaming section includes a social network interaction section (e.g., a chatroom) that displays comments from one or more non-players, i.e., audience.) • the one or more non-players being users with whom the one or more players share an affinity in a social network (In Douyu, the one or more non-players or viewers may be a fans group of a player, where the fans in the fans group and the player share an affinity in a social network.) • the one or more social network interactions including a comment posted to the social network server by the one or more non-players (A chatroom in Douyu website/app live streaming section includes a plurality of comments posted by one or more non-players. The server that supports the chatroom functionality is a social network server.) • the comment being a comment on one or more events posted to the social network server (The comments in the chatroom include a comment on a gameplay live-streamed on Douyu webpage/app.)	 When a gameplay is live-streamed on Douyu website/app, there is also a chatroom (marked yellow in the above picture), where non-players may interact with one or more players by commenting on the gaming being live-streamed. In addition, the bullet screens may also display comments from one or more non-players. The chatroom is supported by a social network server. The comments are related to the game being live-streamed on the Douyu website/app, which is supported by a social network server.

		 There is a fans group (marked yellow above) for an anchor or a player who broadcasts different games. Here, the fans group includes non-players who may comment on the game live-streamed by the player.
modifying play of the video gaming application based on the one or more	• modifying play of the video gaming application based on the one or more social network interactions from the one or more	http://www.yxdown.com/olnews/345480.html “In the ‘Jesus Survival All-Out Attack’ section, the new live broadcast 3.0 by Douyu will fundamentally

social network interactions from the one or more non-players.	non-players (The one or more social network interactions (e.g., bullet screens or gifts) from the one or more non-players may affect the gameplay of the video gaming application.)	revolutionize the interaction between the anchor and the audience. When watching the live broadcast, the audience can participate in the live broadcast to a certain extent, or even through the bullet screens and gifts, help the anchor to accumulate energy to trigger special gameplay to determine the final fate of the anchor in the game.” (Translated from Chinese)
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