Dictionary of Computer and Internet Terms

Tenth Edition

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Courier a typewriter-like typeface often used on laser printers. Unlike other typefaces, Courier has fixed pitch; that is, all characters are the same width. It was designed for IBM typewriters in the 1960s, but on modern laser printers, it is often unpleasantly light (thin).

Courier

a b c d e f g h i j k l m
n o p q r s t u v w x y z
A B C D E F G H I J K L M
N O P Q R S T U V W X Y Z
1 2 3 4 5 6 7 8 9 0 ! @ #

FIGURE 69. Courier, a fixed-pitch font

CP/M (**C**ontrol **P**rogram for **M**icrocomputers) an operating system developed by Digital Research, Inc., and used on microcomputers in the 1980s. (*See* OPERATING SYSTEM.) The original CP/M (now called CP/M-80) was widely employed on computers that used the 8-bit Z80 processor. CP/M greatly influenced the early development of DOS. *See* MS-DOS.

CPU (**C**entral **P**rocessing **U**nit) the part of a computer where arithmetic and logical operations are performed and instructions are decoded and executed. The CPU controls the operation of the computer. A microprocessor is an integrated circuit that contains a complete CPU on a single chip.

CR (**c**arriage **r**eturn) the character code that tells a printer or terminal to return to the beginning of the line; ASCII code 13. On the Macintosh, CR indicates the end of a line in a text file; UNIX uses LF, and Windows uses CRLF. *See* CRLF; LF.

cracker a person who "breaks into" computers via the Internet and uses them without authorization, either with malicious intent or simply to show that it can be done. *Compare* HACKER. *See also* 2600; COMPUTER TRESPASS; ETHICAL HACKING; HONEYPOT.

crash the sudden, complete failure of a computer because of a hardware failure or program error. A well-designed operating system contains protection against inappropriate instructions so that a user's program will not be able to cause a system crash.

crawler a computer program that automatically explores the WORLD WIDE WEB and collects information; also called a *spider.*

Cray Research, Inc. a company founded by Seymour Cray, a manufacturer of supercomputers (*see* SUPERCOMPUTER). Cray's first major product was the Cray-1, introduced in 1977, a vector processor designed for repetitious numeric calculations. *See* VECTOR PROCESSOR. Web address: *www.cray.com.*

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In 1998, the International Electrotechnical Commission (IEC) proposed the "binary" metric prefixes *kibi-*, *mebi-*, *gibi-*, and *tebi-* to be used in place of *kilo-*, *mega-*, *giga-*, and *tera-* where powers of 1024 rather than powers of 1000 are meant.

In Greek, *kilo-*, *mega-*, *giga-*, and *tera-* mean, respectively, "thousand," "big," "giant," and "monster."

mezzanine bus a special bus that connects the CPU to some of the faster peripherals, such as memory modules, and is separate from the slower bus used for slower peripherals. *See* BUS.

MFP (**M**ulti **F**unction **P**rinter) a printer that also performs other functions such as faxing and scanning.

MHz *see* MEGAHERTZ.

MIB (describing items for sale) **m**int **i**n **b**ox (i.e., new and never unpacked). *See also* EBAY; NRFB.

micro- metric prefix meaning ÷1,000,000 (one millionth). For example, a microsecond is one millionth of a second (0.000001 second), and a microfarad is one millionth of a farad. *Micro-* is derived from the Greek word for "small." *See* METRIC PREFIXES.

microblogging publishing short descriptions of your current activity to a blog or web site designed for microblogging, such as Twitter, often from a phone or other mobile device. Status and mood updates on web sites such as Facebook and LiveJournal can be considered a form of microblogging.

microbrowser a web browser using less memory than a conventional browser so it can be used on a small device such as a palmtop.

microcomputer a computer whose CPU consists of a single integrated circuit known as a microprocessor. Commonly, a microcomputer is used by only one person at a time. All home computers are microcomputers. *See* INTEGRATED CIRCUIT; MICROPROCESSOR.

microcontroller a microprocessor designed specifically for controlling equipment. Microcontrollers usually contain some memory and input-output circuitry on the same chip with the microprocessor. This enables the microcontroller to work as a self-contained unit. Microcontrollers are used in consumer products such as telephones, automobiles, and microwave ovens, as well as in industrial equipment. *See also* EMBEDDED SYSTEM.

Microdrive *see* COMPACTFLASH.

microprocessor an integrated circuit containing the entire CPU of a computer, all on one silicon chip, so that only the memory and input-output devices need to be added. The first popular microprocessor, the Intel 8080, came out in 1973 and cost approximately $400.

Microprocessors are commonly described as 16-bit, 32-bit, or the like. The number can refer either to the number of bits in each internal

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data register, or to the number of bits on the data bus (*see* BUS); these two numbers are usually the same. Other things being equal, larger registers and a larger bus enable the processor to do its work faster.

Clock speed is also important. The clock is the oscillator that causes the microprocessor to proceed from one step to the next in executing instructions. (Each machine instruction takes several clock cycles.) Clock speed is measured in megahertz (MHz) or gigahertz (GHz): 1 MHz is 1 million cycles per second, and 1 GHz = 1000 MHz. Higher clock speeds result in faster computation, but only if exactly the same machine instructions are being executed; it is misleading to compare the clock speeds of processors of different types. It is even possible for two microprocessors with the same instruction set and clock speed to perform computations at different rates because of differences in internal design. A 100-MHz Pentium II, for example, is faster than a 100-MHz Pentium.

Microsoft the world's leading software-producing company, headquartered in Redmond, Washington, and founded by Bill Gates and Paul Allen in 1975 when they wrote a version of BASIC for an early hobbyist microcomputer, the Altair. In the late 1970s the company grew as it sold versions of BASIC to other computer makers, but it was still fairly small when it was approached by IBM to design the operating system for the IBM PC (released in 1981).

This operating system (known as PC-DOS, MS-DOS, or simply DOS) became a huge seller, since almost all PC and PC clones used it. In 1990 Microsoft released version 3.0 of Windows, providing a graphical user interface for the PC. Updated versions of Windows continue to be the most common operating system on the PC (*see* WINDOWS).

Microsoft is also a big seller of applications software for both PCs and Macintoshes. The suite Microsoft Office includes the word processing program Microsoft Word, the spreadsheet Excel, the database program Access, and the presentation program Powerpoint. In 1991 Microsoft introduced Visual Basic, an advanced version of BASIC that allows the programmer to take advantage of the graphical environment of Windows. It now provides development environments for other languages in the Visual Studio series. Other products include the Microsoft Network Online service, the web browser Internet Explorer, and X-box game machines.

For further information about Microsoft and its products, *see www.microsoft.com.*

Microsoft antitrust charges a series of official accusations that Microsoft has violated U.S. antitrust laws (laws that prohibit businesses from monopolizing a market or conspiring to stifle competition).

In 1994, while under investigation by the U.S. Department of Justice, Microsoft accepted a consent decree in which it promised to change some of its licensing practices. For example, prior to 1994, Microsoft gave computer manufacturers a discount on Windows if the manufacturers paid Microsoft a fee for every computer made, regardless of the oper-

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printer to print it. The spooler then sends the stored output to the printer at the proper speed. Print spoolers are built into Windows and UNIX. *See also* SPOOLING; BUFFER.

printer a device for putting computer output on paper or other appropriate media such as transparencies and adhesive labels. *See* DAISYWHEEL PRINTER; DOT-MATRIX PRINTER; ELECTROSTATIC PRINTER; IMPACT PRINTER; INKJET PRINTER; LASER PRINTER; LINE PRINTER; PAGE PRINTER; PICKUP ROLLER; THERMAL PRINTER.

private key the key (password, code word) that the recipient of a message uses to decrypt a message that was encrypted with the recipient's PUBLIC KEY. Only the recipient of a message knows his or her own private key. *See* ENCRYPTION.

.pro a suffix indicating that a web or e-mail address belongs to a licensed professional, such as a physician, lawyer, or accountant (in any country). *Contrast* .COM. *See also* ICANN; TLD.

procedure a SUBROUTINE; a smaller program that is part of a main program. The procedure is executed when the main program calls it.

Procedures eliminate the need to program the same thing more than once. If you know that one task will be performed more than once in your program, it is better to write a procedure to handle the task rather than duplicate the program code when the task is needed again. Also, a large program is easier to understand if it consists of procedures, each with a well-defined purpose. *See* TOP-DOWN PROGRAMMING.

A procedure that returns a value is often called a FUNCTION. In object-oriented languages such as Java, a procedure is called a METHOD.

process a series of instructions that a computer is executing in a multitasking operating system. Many processes execute concurrently. From the user's viewpoint, processes may be programs or parts of programs (such as the editing routine and the printing routine in a word processor that can print while editing). *See* MULTITASKING; UNIX.

process color four-color printing on a commercial printing press, usually used for producing a full-color publication. *See* CMYK. *Contrast* SPOT COLOR.

processor *see* COPROCESSOR; CPU; MICROPROCESSOR.

profile

1. in any software package or operating system, a file of saved information that contains settings chosen by the user.

2. in Windows, the folder containing information specific to one user, including account information, numerous settings and preferences, e-mail files, the DESKTOP and all the files on it, and the like. *See* DOCUMENTS AND SETTINGS. *See also* ROAMING USER PROFILES.

3. a user's home page on a social networking site, displaying basic biographical information and pictures.

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