

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC and YOUTUBE, LLC,
Petitioners

v.

ROBOCAST, INC.,
Patent Owner

U.S. Patent No. 8,965,932 B2
Issue Date: February 24, 2015

DECLARATION OF DAVID FOX (CORRECTED¹)

¹ Corrected to include referenced exhibits.

Declaration of David Fox

I, David Fox, declare as follows:

1. Except where specifically noted, the statements below are from my own personal knowledge, and if called upon as a witness, I could testify competently thereto.

2. I am currently employed at Double Coconut, a mobile and web game development company based in San Francisco, California, which I founded in 2012. I received B.S. degrees in Computer Science and Journalism from New York University in 1994.

3. I am the lead co-author, with Troy Downing, of a publication entitled *HTML Web Programmer's Construction Kit* ("Fox & Downing"). Fox & Downing was published in 1995 by Waite Group Press ("Waite Group"). The Waite Group was a prominent publisher of high-quality computer books, including books on computer programming techniques. Books published by the Waite Group were widely available and sold in bookstores throughout at least the United States. I co-wrote Fox & Downing for people who wanted to learn about the Web, including how to access and navigate it as well as for those who were interested in starting their own web site or in understanding the intricacies how the Web worked.

4. I have personal knowledge of the writing, editing, publication, and marketing of Fox & Downing. Fox & Downing was published and available to the public by no later than August 1995. By this time, Fox & Downing could be found

Declaration of David Fox

for sale at various bookstores in the United States by anyone interested in its subject matter. The back cover of Fox & Downing includes an instruction for bookstores to place the book in the “Internet” section (“SHELVING: INTERNET”). (See Ex. A (a true and correct copy of the front and back covers of Fox & Downing).) Attached hereto as **Exhibit B** is a true and correct copy of a message I posted to the Internet dated August 30, 1995, which I posted to a USENET group known as comp.infosystems.www.browsers.ms-windows. USENET refers a worldwide distributed discussion system for exchanging messages over the Internet, in which users could post topics to various groups (known as “newsgroups”) and receive responses from other users. The “comp.infosystems.www.browsers.ms-windows” group, as its name implies, refers to a USENET newsgroup relating to Web browsers for Microsoft Windows operating systems. Users typically accessed USENET through client software programs that allowed users to browse, read, and post messages to USENET newsgroups. I used USENET frequently in 1995, as it was widely used by computer programmers to exchange obtain information about technical topics.

5. The newsgroup post attached as **Exhibit B** provides a typical example of how USENET was used in 1995. A user posted a question: “Anybody know of any good books on the Web and/or HTML authoring?” The newsgroup post received a number of responses, including a response that I wrote as shown in

Declaration of David Fox

Exhibit B.¹ The message contains the NYU Media Research Lab email and web site addresses that I had at the time. In my response, I stated that “The most full-featured one is HTML WEb Publisher's Contruction [sic] Kit (Waite Group Press)... it covers hooking up to the Web, navigating, authoring HTML, programming , and even setting up a server. Should be at most bookstores....”

6. My August 30, 1995 statement that Fox & Downing “[s]hould be at most bookstores” is consistent with my memory regarding the public availability of the book, as well as other statements at that time. For example, attached hereto as **Exhibit C** is a true and correct copy of the registration form for Fox & Downing submitted to the U.S. Copyright Office, which identifies August 11, 1995 as the book’s date of first publication. (Ex. C, p.1.) The form identifies Fox & Downing, lists me as the lead author, and was signed by Laura Brown as the authorized agent of The Waite Group, Inc. (Ex. C, p.2.) Laura Brown served as the Development Editor for Fox & Downing, and I personally worked with her complete the book. As such, she would have been knowledgeable about the publication of Fox & Downing, including the date of the book’s first publication. The date of publication on the copyright registration form is consistent with my own memory about its public

¹ Available at <https://groups.google.com/g/comp.infosystems.www.browsers.ms-windows/c/IL8e70FreNc/m/WbVGvYlXdaoJ> (last visited February 7, 2023). I understand that Google Groups (groups.google.com) hosts an archive of USENET posts dating back to May 1981 that is based in part on Google’s acquisition of Deja News’ searchable database of USENET posts.

Declaration of David Fox

availability in August 1995, as well as the USENET response that I posted on August 30, 1995 indicating that, by that date, the book should have been available at most bookstores.

7. My beliefs are further corroborated by other documents from this time period mentioning or discussing Fox & Downing, which provides further indications as to its public availability by late August 1995. As another example, attached hereto as **Exhibit D** is a true and correct copy of a USENET message dated August 9, 1995 posted to the newsgroup comp.infosystems.www.authoring.html, an online forum for users to exchange information about writing HTML for the Web.² The message is responding to another user's question about "the best references out there" for the user "trying to learn how to do HTML right." The author lists Fox & Downing as one of the references for the user to consider, and states that the book was available through a particular reseller (WorldWide Access, wwa.com). The message identifies the title of the book, its ISBN number, and the discounted pricing for the book if purchased from that reseller. Although it is not clear from the USENET post if WWA physically had the by the August 9, 1995 date of the newsgroup post, the fact that a book reseller had listed it among its offerings (along with pricing

² Available at https://groups.google.com/g/comp.infosystems.www.authoring.html/c/6YW_KNva wJs/m/W-GMk_7PcX0J (last visited February 7, 2023).

Declaration of David Fox

information) further supports my view that the book would have available by no later than late August 1995.

8. As another example, attached hereto as **Exhibit E** is a copy of an article dated September 10, 1995 from the Chattanooga Free Press (Tennessee) titled “Personal Computers” that I understand (and which is indicated on the exhibit) was retrieved from the LexisNexis service. The article identifies Fox & Downing as one of the references that the author had reviewed and found helpful for learning HTML and publishing for the Web. The September 10, 1995 date of the article is consistent with late August 1995 public accessibility reflected in my USENET post that Fox & Downing “[s]hould be at most bookstores” because, as anyone would know (and consistent with my background in journalism), the author would have needed time to review the book and write their article ahead of the newspaper’s publication deadline.

9. Similarly, as another example, attached hereto as **Exhibit F** are excerpts from a copy of an issue of MicroComputer Journal that I understand is in the collection of the Library of Congress. The excerpts bear a Library of Congress date stamp of October 4, 1995. (*See Ex. F, p.3.*) Fox & Downing is discussed in an article titled “Bits ‘n’ Pieces” in which the article’s author states that he “received this book about a month ago.” (*See Ex. F, p.109.*) The library date stamp of October 4, 1995, together with that statement, is consistent with late August 1995 public

Declaration of David Fox

accessibility reflected in my USENET post because again, the author would have needed time to complete the article ahead of the journal's publication deadline, followed by additional time for printing and distribution.

10. In signing this Declaration, I recognize that the Declaration will be filed as evidence in a contested case before the Patent Trial and Appeal Board of the United States Patent and Trademark Office. I also recognize that I may be subject to cross-examination in this proceeding. If required, I will appear for cross-examination at the appropriate time.

11. I hereby declare that all statements made herein of my own knowledge are true and that all statements are made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001.

Dated: February 7, 2023

Respectfully submitted,

A handwritten signature in black ink, appearing to read "David Fox", written over a horizontal line.

David Fox
San Francisco, California

EXHIBIT A

THE WAITE GROUP®



HTML WEB PUBLISHER'S CONSTRUCTION KIT

PUBLISHING YOUR
OWN HTML PAGES ON
THE INTERNET



CD-ROM comes with:

NetManage Chameleon • SlipKnot
HoTMetal • HTML Assistant
WinHTTPd • LView • MPEG Play
Wham • CGI scripts for
AppleScript, Unix, and Windows
NCSA's HTTPd for Unix • and more!


WAITE
GROUP
PRESS

DAVID FOX
TROY DOWNING

THE WAITE GROUP®

HTML WEB PUBLISHER'S CONSTRUCTION KIT

PUBLISHING YOUR OWN HTML PAGES ON THE INTERNET

HTML Web Publisher's Construction Kit provides everything the aspiring Web publisher will need to set up shop in the world's cutting-edge emporium of ideas, sound, and imagery.

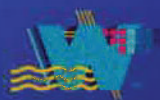
For the novice, the book covers every detail, from obtaining the optimal Internet account to installing the converters, viewers, protocol transfer utilities, and communication sockets necessary for full Web capabilities. Accessible chapters walk the reader through the premium Web Browsers—SlipKnot, NetManage, Chameleon—included on the enclosed CD-ROM.

HTML Web Publisher's Construction Kit explains in straightforward terms popular methods and options for creating Web pages. The book contains actual Web documents that are dissected, illustrating precisely how each aspect was created. Finally, it shows you how to upload and post your finished Web publications, providing a roster of free and commercial Web servers. *HTML Web Publisher's Construction Kit* is your road map to the exciting terrain of World Wide Web publishing.

Platform: PC, Mac, Unix

Operating System: Windows, MacOS, Unix

Requires: 386 DX or better; VGA card and display; 4 MB RAM; hard drive; CD-ROM drive; access to the Internet



WAITE GROUP PRESS™
200 Tamal Plaza
Corte Madera, CA 94925

- ✓ **Connect to the World Wide Web.** Access a world of information with a click of the mouse.
- ✓ **Browse the WWW.** Cruise easily with Lynx, SlipKnot, NCSA Mosaic, WinWeb, and tools Trumpet Winsock and The Internet Adapter.
- ✓ **Author WWW Pages.** Check out HTML specification 3.0, as well as authoring tools such as HTML Assistant and HoTMetal.
- ✓ **Design Top Documents.** Learn layout basics, CGI scripts, and Gopher, Usenet, FTP, e-mail, and WAIS display.
- ✓ **Publish Without Perishing.** Upload and post completed Web pages, locally and via FTP.
- ✓ **Configure Killer Web Sites.** Construct impressive Web sites and servers under Windows, Unix, and Mac. It's easy!

🇺🇸 \$36.95 USA

🇨🇦 \$53.95 Canada

SHELVING: INTERNET

ISBN 1-57169-018-2



9 781571 690180

EXHIBIT B



Conversations



Search conversations withi...



Sign in

comp.infosystems.www.browsers.
ms-windows



Conversations



About

Books on WWW? 17 views



Craig Bedford

Aug 30, 1995, 12:00:00 AM



to

Anybody know of any good books on the Web and/or HTML authoring?

Thanks,

Craig.

Craig Bedford
Carleton University
Email address: cbed...@ccs.carleton.ca



Tim Stark

Aug 30, 1995, 12:00:00 AM



to

Craig Bedford (cbed...@ccs.carleton.ca) wrote:

:

: Anybody know of any good books on the Web and/or HTML authoring?

:

: Thanks,

:

: Craig.

Yes, <http://www.compubooks.com/books>

Also search for HTML publishing, etc.

-- Tim Stark

--

Timothy Stark <>< Inet: tst...@clark.net, TimS...@AOL.com
Alexnadria, Va. TTY: (703) 212-0314 FAX: (703) 212-0371

"For God so loved the world, that he gave his only begotten Son, that
whosoever believeth in him should not perish, but have everlasting life.
Amen." -- John 3:16 (King James Version Bible)



David Fox

Aug 30, 1995, 12:00:00 AM



to

cbed...@ccs.carleton.ca (Craig Bedford) writes:

>Anybody know of any good books on the Web and/or HTML authoring?

The most full-featured one is HTML Web Publisher's Construction Kit (Waite Group Press)... it covers hooking up to the Web, navigating, authoring HTML, programming, and even setting up a server. Should be at most bookstores....

--

David Fox * <http://found.cs.nyu.edu/dfox> * df...@graphics.cs.nyu.edu *

Privacy • Terms



Jason Kramer

Aug 31, 1995, 12:00:00 AM



to

In article <DE4pr...@cunews.carleton.ca>, cbed...@ccs.carleton.ca says...

>

>

>Anybody know of any good books on the Web and/or HTML authoring?

>

I would recommend the Teach Yourself Web Publishing
with HTML in a Week series (There is a MORE followup book)
from SAMS. The author is Laura Lemay.

Jason Kramer
jkr...@mars.superlink.net
<http://mars.superlink.net/user/jkramer/index.html>



Conversations



Sign in

comp.infosystems.www.browsers.
ms-windows

Conversations

About

**Jiang Tao**

Sep 2, 1995, 12:00:00 AM ☆ ↶ ⋮

to

Craig Bedford (cbed...@ccs.carleton.ca) wrote:

: Anybody know of any good books on the Web and/or HTML authoring?

: Thanks,

: Craig.

: -----
: Craig Bedford
: Carleton University
: Email address: cbed...@ccs.carleton.ca
: -----

Managing Internet of O'Reilly.

**Bob Cunningham**

Sep 3, 1995, 12:00:00 AM ☆ ↶ ⋮

to

I have some capsule reviews of books that might be of interest:

<http://www.lava.net/~bob/webmasters/tech.reference.books.html>**Phil Leonard**

Sep 3, 1995, 12:00:00 AM ☆ ↶ ⋮

to

In [comp.infosystems.www.browsers.ms-windows] article
<DE4pr...@cunews.carleton.ca> cbed...@ccs.carleton.ca (Craig Bedford)
writes:

>Anybody know of any good books on the Web and/or HTML authoring?

Publishing on the Internet for Windows. This book with companion CD cost only \$49 US (I've seen it for as little as \$39 US) I can not say enough good things about this book. It took me from knowing absolutely nothing to producing quality UNIQUE home pages in about 1 week. In cluded with the book are 350 sources of information on the Web for publishing. I asked the author for permission to add these URLs (Uniform Resource Locators) to my Home page. If you have a web browser and Internet access, check out my home page at <http://cybercom.net/~pleonard>.

The authors are Brent Heslop bhe...@isddn.bookware.com who has co-authored over 14 books, he is a frequent contributor to PC Magazine and is currently publishing a MAC version.

And Larry Budnick lbud...@mcs.com with 15 years computer systems engineer, developer and systems integration. He has a BS in Systems Engineering from RPI and a MS in Computer Engineering from BU. Currently involved in designing wireless data communications systems.

USER LEVEL: BEGINNER to INTERMEDIATE
VENTANA PRESS INTERNET ISBN: 1-56604-229-1 U.S. 49.95
<http://www.vmedia.com/piw.html>
PO Box 2468, Chapel Hill, NC 27515 919-942-0220 Fax 919-942-1140

Comes with:

- o HoTMetaL Pro 1.0 by SoftQuad to design HTML Web pages \$199 US Value
- o Nescape Navigator 1.1 to view the Web Pages
- o Internet Assistant - Microsoft's Wenb Browser and HTML for WORD
- o RTFtoHTML to convert
- o Panarama SGML Document reader from SoftQuad
- o Acrobat Reader and Common Ground Viewer
- o HTTPD server and EMWAC server - allows you to serve frim your PC
- o Polyform for creating interactive forms on the web
- o CGI backend program for querying a MS Access database from the web
- o Giftrans.exe to make transparent gifs
- o Sample HTML templates, sample images, and home pages
- o The complete toolkit on CD is a \$300 US value

phil leonard | pleo...@cybercom.net | <http://cybercom.net/~pleonard>

[Privacy](#) • [Terms](#)

2/7/23, 12:33 PM

Books on WWW?



Conversations



Sign in

comp.infosystems.www.browsers.
ms-windows

Conversations

About

[Privacy](#) • [Terms](#)

EXHIBIT C

FORM TX

For a Literary Work
UNITED STATES COPYRIGHT OFFICE

REGIS

TX 4-100-720



EFFECTIVE DATE OF REGISTRATION

SEP 19 1995

Month Day Year

DO NOT WRITE ABOVE THIS LINE. IF YOU NEED MORE SPACE, USE A SEPARATE CONTINUATION SHEET.

1

TITLE OF THIS WORK

HTML Web Publisher's Construction Kit

PREVIOUS OR ALTERNATIVE TITLES

PUBLICATION AS A CONTRIBUTION If this work was published as a contribution to a periodical, serial, or collection, give information about the collective work in which the contribution appeared. Title of Collective Work

If published in a periodical or serial give: Volume

Number

Issue Date

On Pages

2

NAME OF AUTHOR

a David S. Fox

DATES OF BIRTH AND DEATH

Year Born

Year Died

1973

Was this contribution to the work a "work made for hire"?

☐ Yes

☒ No

AUTHOR'S NATIONALITY OR DOMICILE

Name of Country

OR

Citizen of

Domiciled in

United States

WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK

Anonymous?

☐ Yes

☒ No

Pseudonymous?

☐ Yes

☒ No

If the answer to either of these questions is "Yes," see detailed instructions.

NOTE

NATURE OF AUTHORSHIP Briefly describe nature of material created by this author in which copyright is claimed

Co-author of manual only.

NAME OF AUTHOR

b Troy Downing

DATES OF BIRTH AND DEATH

Year Born

Year Died

1967

Was this contribution to the work a "work made for hire"?

☐ Yes

☒ No

AUTHOR'S NATIONALITY OR DOMICILE

Name of Country

OR

Citizen of

Domiciled in

United States

WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK

Anonymous?

☐ Yes

☒ No

Pseudonymous?

☐ Yes

☒ No

If the answer to either of these questions is "Yes," see detailed instructions.

NATURE OF AUTHORSHIP Briefly describe nature of material created by this author in which copyright is claimed

Co-author of manual only.

NAME OF AUTHOR

DATES OF BIRTH AND DEATH

Year Born

Year Died

Was this contribution to the work a "work made for hire"?

☐ Yes

☐ No

AUTHOR'S NATIONALITY OR DOMICILE

Name of Country

OR

Citizen of

Domiciled in

WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK

Anonymous?

☐ Yes

☐ No

Pseudonymous?

☐ Yes

☐ No

If the answer to either of these questions is "Yes," see detailed instructions.

NATURE OF AUTHORSHIP Briefly describe nature of material created by this author in which copyright is claimed

Leave the space for dates of birth and death blank.

3

YEAR IN WHICH CREATION OF THIS WORK WAS COMPLETED

This information must be given in all cases.

1995

DATE AND NATION OF FIRST PUBLICATION OF THIS PARTICULAR WORK

Complete this information ONLY if this work has been published.

Month August Day 11 Year 1995

United States

4

COPYRIGHT CLAIMANT(S) Name and address must be given even if the claimant is the same as the author given in space 2

The Waite Group, Inc.
200 Tamal Plaza Ste. 101
Corte Madera, CA 94925

APPLICATION RECEIVED

SEP 19 1995

ONE DEPOSIT RECEIVED

TWO DEPOSITS RECEIVED

SEP 19 1995

FUNDS RECEIVED

TRANSFER If the claimant(s) named here in space 4 is (are) different from the author(s) named in space 2, give a brief statement of how the claimant(s) obtained ownership of the copyright.

By Assignment

See instructions before completing this space.

DO NOT WRITE HERE OFFICE USE ONLY

MORE ON BACK

• Complete all applicable spaces (numbers 5-11) on the reverse side of this page.
• See detailed instructions
• Sign the form at line 10.

DO NOT WRITE HERE

Page 1 of 2 pages

Scanned with CamScanner

EXAMINED BY

FORM TX

CHECKED BY

CORRESPONDENCE

Yes

FOR
COPYRIGHT
OFFICE
USE
ONLY

DO NOT WRITE ABOVE THIS LINE. IF YOU NEED MORE SPACE, USE A SEPARATE CONTINUATION SHEET.

PREVIOUS REGISTRATION Has registration for this work, or for an earlier version of this work, already been made in the Copyright Office?

☐ Yes ☒ No If your answer is "Yes," why is another registration being sought? (Check appropriate box) ▼a. ☐ This is the first published edition of a work previously registered in unpublished form.b. ☐ This is the first application submitted by this author as copyright claimant.c. ☐ This is a changed version of the work, as shown by space 6 on this application.

If your answer is "Yes," give: Previous Registration Number ▼

Year of Registration ▼

DERIVATIVE WORK OR COMPILATION Complete both space 6a and 6b for a derivative work; complete only 6b for a compilation.

a. Preexisting Material Identify any preexisting work or works that this work is based on or incorporates. ▼

b. Material Added to This Work Give a brief, general statement of the material that has been added to this work and in which copyright is claimed ▼

—space deleted—

REPRODUCTION FOR USE OF BLIND OR PHYSICALLY HANDICAPPED INDIVIDUALS A signature on this form at space 10 and a check in one of the boxes here in space 8 constitutes a non-exclusive grant of permission to the Library of Congress to reproduce and distribute solely for the blind and physically handicapped and under the conditions and limitations prescribed by the regulation of the Copyright Office: (1) copies of the work identified in space 1 of this application in Braille (or similar tactile symbols); or (2) phonorecords embodying a fixation of a reading of that work; or (3) both.

a ☐ Copies and Phonorecordsb ☐ Copies Onlyc ☐ Phonorecords Only

See instructions.

DEPOSIT ACCOUNT If the registration fee is to be charged to a Deposit Account established in the Copyright Office, give name and number of Account.

Name ▼

Account Number ▼

CORRESPONDENCE Give name and address to which correspondence about this application should be sent. Name/Address/Apt/City/State/ZIP ▼

Laura Brown, Waite Group Press

200 Tamal Plaza Ste. 101

Corte Madera, CA 94925

Area Code and Telephone Number ▶ 415-924-2575 ext. 117

Be sure to
give your
daytime phone
number

CERTIFICATION* I, the undersigned, hereby certify that I am the

Check only one ▶

☐ author☐ other copyright claimant☐ owner of exclusive right(s)☒ authorized agent of The Waite Group, Inc.

Name of author or other copyright claimant, or owner of exclusive right(s) ▲

of the work identified in this application and that the statements made by me in this application are correct to the best of my knowledge.

Typed or printed name and date ▼ If this application gives a date of publication in space 3, do not sign and submit it before that date.

Laura E. Brown

date ▶



Handwritten signature (X) ▼

Laura E. Brown

MAIL
CERTIFI-
CATE TOCertificate
will be
mailed in
window
envelope

Name ▼

Laura Brown

Number/Street/Apartment Number ▼

200 Tamal Plaza Ste. 101

City/State/ZIP ▼

Corte Madera, CA 94925

YOU MUST

- Complete all necessary spaces
- Sign your application in space 10

SEND ALL 3 ELEMENTS
IN THE SAME PACKAGE

1. Application form
2. Nonrefundable \$20 filing fee in check or money order payable to Register of Copyrights
3. Deposit material

MAIL TO

Register of Copyrights
Library of Congress
Washington, D.C. 20559-6000

The Copyright Office has the authority to adjust fees at 5-year intervals, based on changes in the Consumer Price Index. The next adjustment is due in 1994. Please contact the Copyright Office after July 1993 to determine the actual fee schedule.

*17 U.S.C. § 506(e): Any person who knowingly makes a false representation of a material fact in the application for copyright registration provided for by section 409, or in any written statement filed in connection with the application, shall be fined not more than \$2,500.

Jul 1993—400,000

PRINTED ON RECYCLED PAPER

U.S. GOVERNMENT PRINTING OFFICE: 1993-342-582/60,020

Scanned with CamScanner

EXHIBIT D



Conversations

Search conversations within comp.infosyste...



Sign in

comp.infosystems.www.authoring.html



Conversations

About

Laura Lemay's HTML Books: Are they really that good? 18 views



Steve Scipioni

Aug 8, 1995, 12:00:00 AM ☆

to

I have purchased both of Lemay's books on HTML ("Teach Yourself..." and "Teach Yourself More..."). I like them just fine, but since these are my first books on HTML, I really don't have anything to compare them to.)They seem to be getting a good amount of praise.)

For someone (me) trying to learn how to do HTML right, are these possibly two of the best references out there?

TIA,

Steve



Christopher Hotz (aka WEBster)

Aug 9, 1995, 12:00:00 AM ☆

to Steve Scipioni

...

...

Here is a list of different books on HTML (don't know how current though).

I got these from a search at URL

<http://mirror.wwa.com/mirror/busdir/readmd/readmd.htm>

Also, in case someone wonders, no I do not work for these people, I am not putting in a plug for them except for the fact that I did purchase a book from them and found the service and price acceptable. Ok , here's the [o] Readme .Doc

Search Results for "html"

7 Days to Master HTML 3 w. CD
by Cearley, Kent
ISBN: 1571690247
Pub: THE WAITE GROUP, 1995, 650 pp.
\$34.95 Our Price: \$26.21

The Definitive Guidt to HTML 3.0
by Raggett, Dave
ISBN: 0201876930
Pub: ADDISON-WESLEY, 1995, 352 pp.
\$26.95 Our Price: \$21.56

HTML 3 How-TO w/CD
by Kerven, David
ISBN: 1571690506
Pub: THE WAITE GROUP, 1995, 600 pp.
\$34.95 Our Price: \$26.21

HTML for Fun and Profit w/ CD-ROM
by Morris, Mary
ISBN: 0133592901
Pub: PRENTICE HALL, 1995, 264 pp.
\$35.95 Our Price: \$28.76

HTML Manual of Style
by Aronson, Larry
ISBN: 1562763008
Pub: 1994, 132 pp.
\$19.95 Our Price: \$14.96

HTML Publishing for NEtscape w/CD-ROM
by Ventana Press
ISBN: 1566042887
Pub: VENTANA, 1995, 400 pp.
\$39.95 Our Price: \$29.96

HTML Sourcebook
by Graham, Ian
ISBN: 0471118494
Pub: 1995, 416 pp.
\$29.95 Our Price: \$22.46

The HTML Visual Quick Reference
by Scharf, Dean
ISBN: 0789704110
Pub: QUE, 1995, 160 pp.
\$14.99 Our Price: \$11.24

HTML Web Publishers Construction Kit w/CD
by Fox, David
ISBN: 1571690182
Pub: THE WAITE GROUP, 1995, 1000 pp.
\$36.95 Our Price: \$27.71

Privacy • Terms



comp.infosystems.www.authoring.html

Conversations

About

Conversations

\$39.95 Our Price: \$31.96

The Little HTML Book
by Theise, Erick
ISBN: 0782116914
Pub: SYBEX, 1995, 250 pp.
\$19.99 Our Price: \$14.99

Marketing on the Internet wit Mosaic, Lynx, and HTML
by Ellsworth, Jill
ISBN: 0471118508
Pub: JOHN WILEY & SONS, 1995, 404 pp.
\$24.95 Our Price: \$18.71

Netscape and HTML Explorer w/CD-ROM
by LeJeune, Urban
ISBN: 1883577578
Pub: IDG, 1995, 723 pp.
\$39.99 Our Price: \$29.99

Providing Dynamic Content with HTML
by Eyzsaguirre, Alan
ISBN: 1562763229
Pub: ZIFF DAVIS PRESS, ?, ? pp.
\$29.95 Our Price: \$22.46

Teach Yourself More Web Publishing with HTML in a Week
by Lemay, Laura
ISBN: 1575210053
Pub: SAMS, 1995, 451 pp.
\$29.99 Our Price: \$22.49

Teach Yourself Web Publishing with HTML in a Week
by Lemay, Laura
ISBN: 0672306670
Pub: SAMS, 1995, 397 pp.
\$25.00 Our Price: \$18.75

Tricks of the HTML Gurus
by Morris, Bruce
ISBN: 1575210010
Pub: SAMS, 1995, 500 pp.
\$29.99 Our Price: \$22.49

Using HTML, Special Edition w/CD-ROM
by Que Development Group
ISBN: 0789702363
Pub: QUE, 1995, 600 pp.
\$39.99 Our Price: \$29.99

Call us at 1-800-678-1473

Visa, Mastercard and Discover Accepted

Shipping Charges:

* 1 book = \$3.00
* 2 books = \$5.00
* 3 books = \$6.50
* 4 books = \$8.00
* 5 books = \$9.00
* 6 books = \$9.75
* 7 books = \$10.50
* 8 books = \$11.00
* 9 books = \$11.50
* 10 books = \$12.00
* More than 10, please ask.

Pennsylvania residents must include sales tax.

Well, that's about it.

Have a good one!

Chris Hotz

STD DISCLAIMER: Citicorp does not necessarily agree with or condone anything I say.....

Privacy • Terms



Neal J. Lao

Aug 11, 1995, 12:00:00 AM ☆

to

In article <scipioni-080...@scipioni.nai.net> scip...@nai.net (Steve Scipioni) writes:
>From: scip...@nai.net (Steve Scipioni)
>Subject: Laura Lemay's HTML Books: Are they really that good?
>Date: Tue, 08 Aug 1995 22:00:42 -0500

>I have purchased both of Lemay's books on HTML ("Teach Yourself..." and
>"Teach Yourself More..."). I like them just fine, but since these are my



comp.infosystems.www.authoring.html

Conversations

About

Conversations

>two of the best references out there?

I took a look at them the other day and thought they were pretty good. The thing that stops me from buying books is that there are a lot of very good texts on the web that will tell you everything you want to know. However, I haven't found many very good descriptions of explaining/using CGI's (don't send me a URL unless it's really good, I've looked in the obvious places).

But I don't know if I want to buy a whole book, when all I need are the last two chapters or so....

Do what I do. Keep a binder next to your desk and print out various reference sheets and explanations that you find on the net.

Neal



dwfu...@novia.net

Aug 12, 1995, 12:00:00 AM ☆

to

In <scipioni-080...@scipioni.nai.net>, scip...@nai.net (Steve Scipioni) writes:
>I have purchased both of Lemay's books on HTML ("Teach Yourself..." and
>"Teach Yourself More..."). I like them just fine, but since these are my
>first books on HTML, I really don't have anything to compare them to.
>)They seem to be getting a good amount of praise.)

>
>For someone (me) trying to learn how to do HTML right, are these possibly
>two of the best references out there?

I would characterize these books as excellent. Lemay notes that "you could find out everything you need to know from the information out on the Web."

But, these books put it together so you can get started. Then, using the Web sources she cites, you can build on the foundation. Also, lurking around places like this helps a lot.

Lemay gets my vote.

Darrell Fulmer | dwfu...@oasis.novia.net | Using OS/2 Internet Tools



The Web Academy

Aug 13, 1995, 12:00:00 AM ☆

to

dwfu...@novia.net wrote:

: I would characterize these books as excellent. Lemay notes that "you could

: find out everything you need to know from the information out on the Web."

: But, these books put it together so you can get started. Then, using the
: Web sources she cites, you can build on the foundation. Also, lurking
: around places like this helps a lot.

: Lemay gets my vote.

Mine, too. These books are outstanding not only for the technical content, but also for the writing style. You get a sense that there's an actual *person* behind the words... someone who has gone through the same learning process and is eager to make you knowledgeable and productive.

I think Lemay's first book can take some degree of credit for the growth of the Web itself. I wonder how many of the tens of thousands of home pages created in the past six months have been done by folks with dog-eared copies of "Teach Yourself Web Publishing..." within arm's reach.

Attendees of my classes get a choice of either of her books or (also excellent) "Running a Perfect Web Site".

- Dave Elliott

***** Professional Training for Information Providers *****
THE WEB ACADEMY Email: web...@shell.portal.com
19672 Stevens Creek Blvd. #244 WWW: http://www.portal.com/~webacad/
Cupertino, CA 95014 VoiceMail: 408-271-7060 Fax: 408-253-5794

Privacy • Terms



Shinu Gupta

Aug 15, 1995, 12:00:00 AM ☆

to

I personally think these books are great. I have not found too many good books on CGI scripts.

Send e-mail to in...@libhitech.com (15-25% discount) with message:
help
send internet

Also check out:
<http://www.libhitech.com/libhitech/>

In article <40ie2o\$...@nntp.novia.net>, dwfu...@novia.net writes:
> In <scipioni-080...@scipioni.nai.net>, scip...@nai.net (Steve Scipioni) writes:
> >I have purchased both of Lemay's books on HTML ("Teach Yourself..." and
> >"Teach Yourself More..."). I like them just fine, but since these are my
> >first books on HTML, I really don't have anything to compare them to.
> >)They seem to be getting a good amount of praise.)



comp.infosystems.www.authoring
.html

Conversations

About

Conversations



Sign in

> I would characterize these books as excellent. Lemay notes that "you could
> find out everything you need to know from the information out on the Web."
>
> But, these books put it together so you can get started. Then, using the
> Web sources she cites, you can build on the foundation. Also, lurking
> around places like this helps a lot.
>
> Lemay gets my vote.
>
>

...



Hung-Hsien Chang

Aug 22, 1995, 12:00:00 AM ☆

to

Dear Steve:

Lemay's book is really a good book to start with. Her second book
teach yourself more about html is also good but I don't think it is
as good as the first one. (of course, I can't justify this personal preference.)
There are other books that are pretty good:
HTML for fun and profit. (who? I don't recall. Sun publishes it.)
Build your web site. (NetGensis)
Of course, The HTML resource book is good reference.

Actually, all the stuff they have written is on the Internet. But
these books compile them in a nice way. (one way or another.)

Enjoy... and tell me if you have found some good books.
(I read them all, each one of them. As for gabbarage one, I toss them
right away.)

Steve Scipioni (scip...@nai.net) wrote:
: I have purchased both of Lemay's books on HTML ("Teach Yourself..." and

: "Teach Yourself More..."). I like them just fine, but since these are my
: first books on HTML, I really don't have anything to compare them to.
:)They seem to be getting a good amount of praise.)

: For someone (me) trying to learn how to do HTML right, are these possibly
: two of the best references out there?

: TIA,

: Steve



Peter Flynn

Sep 9, 1995, 12:00:00 AM ☆

to

Dixit laon...@student.msu.edu (Neal J. Lao):

> However, I
> haven't found many very good descriptions of explaining/using CGI's (don't send
> me a URL unless it's really good, I've looked in the obvious places).

Can you describe in a little more detail what it is about using
scripts that you want[ed] to find but which was missing from the
sources you checked? I've been asked if it's worth writing Yet
Another Book About Scripts, but it's not clear which aspects
of scripting people most want to see covered:

- o how to write using sh
- o how to write using csh
- o how to write using ksh/bash/etc
- o how to write using perl
- o how to use sed, awk, grep etc
- o how to write in Visual Basic
- o how to write in Applescript
- o how to use the CGI environment variables in a script
- o restrictions in writing for a httpd server (eg timing)

Please mail me if you have strong views one way or another.

///Peter

<http://www.ucc.ie/~pfflynn/books/wwwbook.html>

Privacy • Terms

Reply all

Reply to author

Forward

EXHIBIT E

PERSONAL COMPUTERS

Chattanooga Free Press (Tennessee)

September 10, 1995, Sunday

Copyright 1995 Chattanooga News-Free Press Company

Length: 688 words

Body

Books, once again, are inundating my office, a sign that the fall book season is on. Last year I could have built a small house using Internet books as bricks. The Internet clearly remains a popular subject this year, with the Web a particular focus now.

By the number of titles on the subject, readers must be interested in creating home pages on the Web. Home pages can be your face to the world -- they're your own personal publishing center. Do you have a short story you want people to read? Put it on your home page. Or a recipe? A film review? Snapshots of your dog? Aunt Peggy's deep thoughts? ("A chicken gizzard ain't much good for nothin' -- but of course, chicken like 'em.") Put them there, too.

The trick to home pages, of course, is to make them interesting to look at and to read. That takes skill and imagination, as well as some knowledge of HTML. Hence there is an array of HTML book titles.

HTML is not as complex as a programming language. It's defined as a "markup language," meaning that you first create a text document, then you mark it up with HTML, giving hypertext links to words or phrases. Such links are connections to other documents or other parts of the same document. You also can add graphics and special fonts. In essence, learning HTML is learning desktop publishing for the Web.

I've glanced through a number of titles and found the following helpful: "Using HTML, Special Edition" by Tom Savola (Que, \$39.99 with CD-ROM); "HTML Web Publisher's Construction Kit" by David Fox and Troy Downing (The Waite Group, \$36.95 with CD-ROM); and "The Macintosh Web Browser Kit" by Dan Meriwether (John Wiley & Sons Inc., \$29.95 with CD-ROM).

By far the simplest and best, however, is a little book called "10-Minute Guide to Internet Assistant for Word" by J. Michael Roach (Que, \$10.99). With the book, you create HTML pages quite easily using an add-on program called Internet Assistant for Microsoft Word for Windows. The program is free and can be downloaded from the Web at Microsoft's home page.

The book is so well-written, and the add-on program so well-conceived, that you really don't need to know the finer points of HTML. You're making your home pages by design rather than by programming. Why read a 700-page book when this 160-page one will get you working quickly and with less frustration?

If you like complexity and programming, however, I received two books aimed at advanced users: "HTML Visual Quick Reference" by Dean Scharf (Que, \$14.99) and "Build a Web Site" by Net.Genesis and Devra Hall (Prima Online, \$34.95).

If you're new to computers -- or you're searching for a gift for a new user -- look to "The Little PC Book" by Lawrence J. Magid (Peachpit Press, \$18). It covers how a PC works, how to get good deals on computers and software, the basics of operating your PC, and which software is best, among other topics. I catch Magid's computer columns in the L.A. Times. He writes well, and I recommended this book last year.

Andrew Mace

PERSONAL COMPUTERS

A book that looked scary but quite quickly proved interesting is "Net Tech - - Your Guide to Tech Support, Product News, and Software Resources on the Info Highway" by Michael Wolff (Random House Electronic Publishing, \$19). It reads and looks much like the Whole Earth catalogs, but instead of interesting material things, it's about interesting things online -- and most of them are free beyond the cost of getting on the Internet.

In this case, the items have to do with getting support for all your computer questions. It tells you how to get online, how to join newsgroups, how to find computer magazines online, and much more. The same publisher also offers other books on the Internet: "Net Guide," "Net Sports," "Net Chat," "Net Money" and "Net Trek."

Last, if you're looking at how the Internet can help your business -- using the Internet as a kind of electronic billboard (which much of it seems to me anyway) -- then you might try "Launching a Business on the Web" by David Cook and Deborah Sellers (Que, \$39.99). In particular, it covers how to place your business on the Web, how to take orders and collect money, and how to advertise on the Net.

Load-Date: September 2, 1996

End of Document

Andrew Mace

EXHIBIT F

**MICRO-
COMPUTER
JOURNAL**

2

1995

**TK 7800
.M43**



MicroComputer

print forum for the MicroComputer professional and semi-professional

JOURNAL

November/December 1995

Tips For Improving Multimedia Sound

- Putting Together A Network For Monitoring & Control
- How To Use A Bidirectional Parallel Port
- Buying & Installing Large Capacity Hard Drives
- Cumulative 1995 Article Index



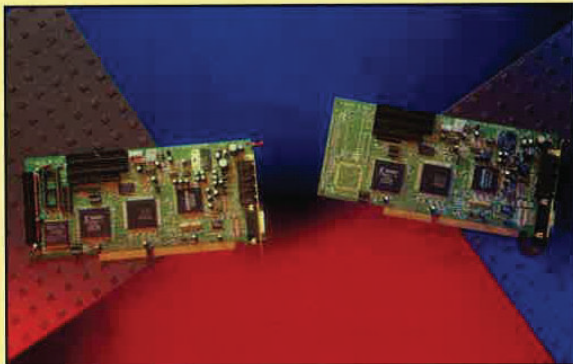
MicroComputer

Volume 2, No. 6, November/December 1995

JOURNAL



page 83



page 87



page 92

Features

- 14 A 68HCx11 EEPROM Programmer/Mini-Development System, Part 1**
By Thomas R. Fox
Basics and construction.
- 20 Large-Capacity Hard Drives**
By Hardin Brothers
What you need to know about them to make an intelligent buy decision and install them in your PC.
- 24 Interrupt Processing on the PIC 16C71**
By Jonathan Michaels
Microchip's support for interrupts on its new series of PIC controllers is good news—but you'll have to learn to deal with these chips.
- 32 Using Bidirectional Parallel Printer Ports**
By Michael A. Covington
How to exploit bidirectional lines if your parallel printer port has them.
- 36 The Multimedia Sound Garden**
By Tom Benford
Better multimedia audio products and tips & techniques for improving your sound recording and playback under Windows.
- 48 A Network for Monitoring and Control Purposes**
By Jan Axelson
Use this example as a foundation for building networks to suit specific needs.
- 58 Getting to Know the RS-232 Standard**
By Fred Eady
Origin of the serial-port standard, its evolution and the technical details you need to know to successfully use it.
- 66 Build a PIC-Based MicroAlarm**
T.L. Petruzzillis
This low-cost miniature alarm offers features and flexibility of much more elaborate-appearing devices.
- 110 Cumulative 1995 Article Index**

Product Review

4 Virus Vanquisher—Dr. Solomon's Anti-Virus Toolkit

By Alexander W. Burawa

Columns

4 Microcomputer Q&A

By TJ Byers

Answers to readers questions about all aspects of personal computing.

3 Computing On The Go

By Joe Desposito

Recommending a \$2,200 Notebook Purchase.

3 Microcomputer Musings

By Ted Neddleman

ComputerEyes/1024 Color Video-Capture Card; Fargo's Photo-FUN! Dye-Sublimation Small-Format Printer; Server Technology's PC-Controlled Versa Timer.

7 GUI Guts

By Yacco

Ho ho ho!

2 Multimedia

By Tom Benford

An Ergonomic Keyboard; a Surge Suppressor; Multimedia Products; and More.

7 Industry Watch

By John Hastings

The AmCoEx Index of Used-Computer Prices.

Departments

Editorial

By Art Salsberg

Windows 95.

What's Happening!

Latest PC News.

What's New!

By Joe Desposito

A roundup of new computer products.

6 Advertisers Index

Contacting MicroComputer Journal On-Line

You can contact *MicroComputer Journal* on-line as follows:

MCI Mail: directly or through an on-line service, such as CompuServe or the Internet (MCI ID No. 456-3433)

America OnLine: NW2L

CompuServe: 72127,745

Genie: CQ (or post a message in the MCJ Feedback area on Genie's Radio & Electronics Roundtable)

Internet: CQ@genie.geis.com or nw2l@aol.com or

p00259@psi.link.com



In This Issue

If you're really into multimedia production—or just want to get into it—check out Tom Benford's "The Multimedia Sound Garden" beginning on page 36. In this feature article, Tom gives insider hints on putting together truly professional sound presentations to augment whatever video clips and stills you plan to use in a presentation. He goes on to describe some superb microphones and speaker systems and a particularly interesting sound processor you should seriously consider adding to your multimedia system.

Tom Fox's Part 1 of "A 68CHx11 EEPROM Programmer/Mini-Development System" beginning on page 14 gets you started with an introduction to the basics and construction details for this extremely popular MCU series. Then on page 24, Jonathan Michaels provides a solid introduction to "Interrupt Processing on the PIC 16C71" microcontroller from Microchip. Finally, T.L. Petruzzillis' "Build a PIC-Based MicroAlarm" on page 66 offers up a tiny, low-cost alarm that offers the kinds of features and flexibility you'd expect from a much more elaborate-appearing and costly professional alarm system.

Need a new large-capacity hard drive? Before you make a buy decision, check out Hardin Brothers' "Large-Capacity Hard Drives" article beginning on page 20 to find out what you need to know to be a canny buyer and, almost as important, to install such a drive in your PC.

Michael A. Covington tells you how to exploit the bidirectional lines of your parallel printer port if it has them in his "Using Bidirectional Parallel Printer Ports" on page 32. Then it's off to "Getting to Know the RS-232 Standard" on page 58 with Fred Eady detailing the serial-port standard via its history, evolution and the technical details you need to know to successfully use it.

The use of SBCs and microcontrollers for monitoring and control purposes is on the rise. Jan Axelson introduces "A Network for Monitoring and Control Purposes" that lets you put together a multiple-unit system for more power and flexibility. The example Jan provides can serve as the foundation for building networks for specific needs. Turn to page 48 for the details.

Lurking somewhere on one of those floppy disks you borrowed, in a file you downloaded from a BBS or other on-line service or even in shrink-wrapped software can be a virus just waiting to run amok through your PC. To guard against such a possibility, it has become almost mandatory that you immunize your PC with a good anti-virus utility. Keep in mind that not all such utilities are equal, as the "Virus Vanquisher—Dr. Solomon's Anti-Virus Toolkit" review points out. Turn to page 44 for details on how Dr. Solomon's succeeded where other popular utilities failed.

Cover Photo By Tom Benford

Seasons Greetings & Happy New Year!

November/December 1995 / MICROCOMPUTER JOURNAL / 3

Windows 95

We watched the path and development of *Windows 95* this year, much as people viewed the progress of hurricanes forming and moving in the Caribbean. Microsoft, however, had a surer hand than nature, down to the day it would certainly hit us.

It was a great buildup, costing Microsoft many megabucks (to make gigabucks). Along the way, *Windows 95* was battered by reviewers of Beta copies. A host of changes were made, as is fitting for pre-release of the final software. There will doubtless be plenty more in upgraded versions to come.

Substituting *Windows 95* for *Windows 3.1* will put pressure on your hardware requirements, as you've probably heard. You'll need at least a fast 486 CPU, 8M of user RAM memory and a spare 100M of hard-drive space. A better hardware arsenal would be a Pentium-based machine with 16M of RAM and a few hundred megabytes of spare hard-drive space. A hard drive with a gigabyte of storage to handle hefty programs that'll inevitably come would make sense to have or to get. For many, this really means starting anew with the purchase of a Pentium machine that's already loaded with *Windows 95*.

Windows 95 installation isn't a snap. It's supposed to take from a half hour to one hour. But reports indicate that you should set aside a few hours for this chore. And if you do it yourself, you'll, hopefully, have a CD-ROM drive so that you won't have to shuffle 13 floppy disks. Doing the latter exposes you to another problem: a virus that lurks on some hard-disk drives that erases or corrupts Disk 2 of the floppy installation set. To avoid it use the write-protect tab on Disk 2.

Also, some Microsoft *Word for Windows 6.0* programs used with *Windows 95* are reported to harbor a damaging macro virus. Most anti-virus scans ignore it, unfortunately. You can get free detection software to combat this from Trend Micro Devices via Internet: <http://www.teleport.com/trend/main.htm>. Download it

with any browser, such as *Netscape*. You can get a free *Norton Anti-Virus for Windows 95* download from CompuServe, too.

Beyond this, though, *Windows 95* is incompatible with loads of present programs. So check out known problem applications by dialing <http://www.microsoft.com/windows/third-party/htm>. Plan on buying updates of your favorite software programs that are *Windows 95*-ready, of course. In the interim, however, it would be nice to use older programs with *Windows 3.1* if they give you trouble in *Windows 95*. But this means installing *Windows 95* in a separate directory instead of over *Windows 3.1*. Doing this, however, will cause you a lot of work since custom settings won't be carried over to *Windows 95* from *Windows 3.1* and your applications.

Windows 95 has some very clear advantages, which have been noted in *MicroComputer Journal*. From my vantage point, I'd sooner live with what I've got nailed down for a while before migrating to *Win95*. I'd like to see more bugs cleared out and wait until a wide choice of 32-bit applications sanctioned by Microsoft with a *Windows 95* logo are available. And I'm talking as an individual. For a large LAN, I'd certainly hold my water for a while. It'll take another year before the smoke clears and one really knows how much computing power and new software would be desirable to tap the full power of *Windows 95*. By that time, maybe *Windows NT* would be the smart move.

Of course, if you have the recommended hardware and an urgent reason to gravitate to *Windows 95*, such as having the need to run multiple programs or take advantage of *Win 95*'s other special features, by all means, do so. Don't discount this new operating system just because it's new and it's the first version to come out.



EDITORIAL STAFF

Art Salsberg
Editor-in-Chief
Alexander W. Burawa
Managing Editor
Dorothy Kehrweg
Production Manager
Emily Kreutz
Assistant Production Manager
Elizabeth Ryan
Art Director
Barbara Terzo
Associate Art Director
Susan Oliveri
Assistant Art Director
Edmond Pesonen
Electronic Composition Manager
Pat Le Blanc
Phototypographer
Hal Keith
Illustrator
Larry Mulvehill
Photographer
Jan Axelson, Tom Benford, Hardin Brothers, T.J. Byers, Joe Desposito, Ted Needleman, Wayne Yacco
Contributing Editors

BUSINESS STAFF

Richard A. Ross
Publisher
Art Salsberg
Associate Publisher
John Dorr
General Manager
Frank V. Fuzia
Controller
Simon Schatzmann
Circulation Director
Catherine Ross
Circulation Manager
Melissa Nitschke
Operations Manager
Carol Licata
Data Processing
Denise Pyne
Customer Service

ADVERTISING MANAGER

Margaret Milanese
(516) 681-2922
FAX: (516) 681-2926

Offices: 76 North Broadway, Hicksville, NY 11801.
Telephone: (516) 681-2922. FAX: (516) 681-2926.
MicroComputer Journal is published bi-monthly by CQ Communications, Inc. Subscription prices (payable in U.S. Dollars only): Domestic—eight bi-monthly issues \$29.70, eighteen bi-monthly issues \$59.40; Canada/Mexico—eight bi-monthly issues US \$36.00, eighteen bi-monthly issues US \$69.00; Foreign—eight bi-monthly issues US \$38.00, eighteen bi-monthly issues \$73.00; Foreign Air Mail—eight bi-monthly issues US \$95.00, eighteen bi-monthly issues US \$206.00.

U.S. Government Agencies: Subscriptions to *MicroComputer Journal* are available to agencies of the United States government, including military services, only on a cash with order basis. Request for quotations, bids, contracts, etc. will be refused and will not be returned or processed.

Entire contents copyright © 1995 CQ Communications, Inc. *MicroComputer Journal* or CQ Communications, Inc. assumes no responsibility for unsolicited manuscripts. Allow six weeks delivery of first issue and for change of address. Printed in the United States of America.

Postmaster: Please send change of address notice to *MicroComputer Journal*, 76 North Broadway, Hicksville, NY 11801.

desktop. The convenience alone is worth the small price per image.

Stocking Stuffers

The CD-ROM is a hardy medium. Magnetic fields don't bother it at all. You can drop it from significant heights without breaking it, and you'll never trash a read/write head. It's also much more dependable and longer-lived than tapes. In fact, data stored on CD-ROM should last for many decades, if not centuries. However, the CD-ROM does have one weakness. Its surface is constantly exposed to dirt and abrasions that can interfere with the laser energy that reads them. Fingerprints, dust specks and scratches can cause the appearance of extraneous data, as well as complete read failures.

CD-ROMs are difficult to break, because they're manufactured from polycarbonate, the extremely resilient material used to make bullet-proof "glass." Nicks and minor scratches, however, are common.

Last year, I suggested giving the Discwasher HydroBath as a stocking stuffer. It's ideal for removing all sorts of grime that might cause data errors, but it can't do a thing about abrasions. This year, I'd like to recommend another Discwasher product that can resurrect damaged discs and bring data back from the grave.

The Discwasher CD-2 system consists of a polishing agent and a cleaner, swabs and soft wipes for application and polishing. You apply the polish using either the swabs or a clean finger. After the compound dries, you buff it with the wipes. Small scratches just disappear. Larger scratches take more work, but if they're not too deep, they'll come out, too, with multiple applications. In the final step, you remove the residue with either the wipes and cleaning solution or the HydroBath.

Once the process is complete, you have a pristine, highly polished disc. A single restoration could save you hundreds of dollars if the scratch was causing your CD-ROM to malfunction.

Incidentally, despite what the instructions on the HydroBath cleaning solution state, a company representative recently told me that you don't have to throw it out after each use. According to the representative, with whom I spoke at the Electronic Entertainment Exhibition in Los Angeles, it contains a bactericide that preserves it for approximately a hundred cleaning cycles. Recover it from the drain hole immediately, and store it for future sessions.

Yacco can be reached at yacco@earthlink.net and is yacco@compuserve.com

Bits 'n' Pieces By Alexander W. Burawa

Windows 95 Books

At long last, *Windows 95* has arrived, and it's so different from what even old hands at using *Windows 3.x* are used to that it will take a bit of time to become familiar with its conventions. Since the only hard-copy "manual" that comes with it is strictly bare-bones information on how to install it on your PC and the rudiments of using it, a plethora of after-market books, all claiming to teach you how to use *Windows 95*, have hit the market. So far, Microsoft Press seems to be in the van with these new books, with multiple titles announced weekly. Two Microsoft Press titles that have come my way are worthy of note. One is the *Field Guide to Microsoft Windows 95* (soft cover, 187 pages, \$9.95) by Stephen L. Nelson and the other is *Microsoft Windows 95 Step By Step* (soft cover, 277 pages, \$29.95).

The *Field Guide* is one of those books you'll want to have handy as you become acquainted with *Windows 95*. It's basically a reference handbook. Following a brief introduction that tells you what the *Guide* is all about, the book gives you a tour of the new *Windows 95* environment. The latter is accomplished via a series of *Win95* screens with call-outs to various displayed items and minimal explanatory text—not that you need much with this new OS. Here you'll find out how to start applications and run multiple apps. You're also introduced to *Win95*'s system tools, managing windows and using menus and commands. This section closes with *Windows Explorer*, which lets you look at the way your computer system is organized and what's connected to it. Like the operating system itself, the *Windows 95 Environment* section of this book is graphics-intensive. Through screen illustrations, you get a brief tour that gets you up to speed in no time flat.

Most of the rest of the book is titled *Windows 95 A to Z*, which consists of an alphabetical listing of the tools, terms and techniques you'll use in your day-to-day operations on your PC under *Win95*. This is little more than an expanded glossary of terms and their definitions, most of which you'll already be familiar with but some of which are *Win95*-specific and should be learned.

Next comes a Troubleshooting section, all 18 pages of it. The idea here, I guess, is that not much can go wrong with *Windows 95*. Therefore, this section covers only the more-common problems you may encounter, like not being able to get an application to respond, not being able to print, not

being able to save a file onto a disk, etc. Actually, the problems covered here are more or less the ones anyone who uses *Windows 95* is likely to encounter. Problems that aren't covered are most likely hardware and/or software-specific, for which you'll need much more technical help than this *Guide* is designed to provide.

A Quick Reference section closes the *Guide*. The objective of this section is to provide the shortcut keyboard combinations for the Start Menu Guide, *Windows Explorer* and My Computer Menu Guide, Printers Folder Menu Guide and Printer Menu Guide.

All in all, this is a worthwhile reference book to have. I'd call it a "handbook" because of its compact size, but it's not so compact that it will fit comfortably into a pocket. Even so, it's compact enough to sit unobtrusively beside your PC, where it will always be handy for a quick look-up.

Bear in mind this is a basic book and that in a relatively short time using *Windows 95* you'll become familiar enough with the operating system to rarely have reason to refer to it. So why buy it? The answer is that it can ease the transition to this new operating system—and at \$10, the price is right.

As its title implies, *Microsoft Windows 95 Step By Step* is an interactive tutorial. It consists of 12 lessons you complete to get you up and running and make you a power user. Supplied with the book is a 3 1/2" floppy diskette that contains the files you'll use interactively while completing each lesson. (You must have *Windows 95* installed on your PC to use these lessons.)

Once you've read the Getting Ready section at the beginning of the book and have loaded the software from diskette onto your PC, you're ready to begin with Lesson 1, where you'll be working with the desktop tools. Here, you'll learn the basics, like controlling window elements with your mouse, giving commands with your mouse and menus, specifying options and properties in dialog boxes and moving and re-sizing windows on the screen. Lesson 2 continues with the basics, guiding you through locating and starting documents, activating and controlling documents using the taskbar and looking up topics and learning about *Windows 95* using on-line help.

Having mastered the basics, you move on to Lesson 3, where you learn how to access frequently used programs by adding commands to your Start and

(Continued on page 99)

180-MHz versions will be out later this year or early next year. Apple put this technology to good use with improved operating-system software. By maximizing the benefits of the new processor, the new software enables the new Mac to exceed most critics' expectations. Additional operating-system improvements permit older software applications to be run much faster on the new machines.

While the current offering is the high-end machine in Apple's product line, less-expensive models are expected to appear by the time you read this. These new offerings are expected to be priced aggressively. This introduction could cause prices of older Macs, especially the Quadras, to tumble.

IBM has announced it will license the Macintosh operating system, likely installing the software on computers it will produce next year. Some people expect other manufacturers, like Canon and Zenith, to follow suit.

Microsoft and Apple have developed graphic tools that will enable software designers to make better use of their operating systems. The three-dimensional and virtual-reality tools are primarily for software companies that develop games. This strategy will enable the computer giants to compete with Nintendo and Sega. Since more money was spent in the past year on computer games than movie admissions and rentals, this seems to be a market worth the effort.

As a trump card, the computer companies will have the ability to permit game players to compete with each other over the Internet. Teams and leagues are expected to form around the world.

Congress is currently contemplating the Communications Decency Act, legislation designed to clean up the smut available on the Internet. Offenders will be subject to a \$100,000 fine and two years imprisonment—that is, if offenders are in the United States. What Congress seems to ignore is the world-wide pervasiveness of the Internet. On the World Wide Web, users can easily and instantly connect to systems in England, Sweden, Australia or any other country. Unless our Congress can convince all other countries to adopt similar legislation, its efforts will be little more than ceremonial. The real solution, some experts say, is self-regulation. Several companies are forming a coalition to permit parents to control material their children can access. Like movies, Internet sites would be rated. ■

Since 1988, the American Computer Exchange has matched buyers and sellers of used microcomputer equipment. For more information contact the American Computer Exchange at 800-786-0717 or <http://www.crl.com/~amcoex>.

Bits 'n' Pieces *(Continued from page 91)*

Programs menus, create shortcuts to frequently used files and display them as Desktop icons, set your computer's date and time, customize your Windows 95 display to suit your preferences and configure your mouse to reflect the way you work.

Beginning with Part 2, you're on your way to doing useful work with your PC under Windows 95. Lesson 4 introduces you to Windows 95's built-in WordPad text editor for creating, editing, formatting and viewing short text documents. In Lesson 5 you're given a basic introduction to drawing pictures with the Paint program included in Win95. Lessons 6 and 7 guide you through using Windows- and DOS-based programs, respectively.

With Part 3, you learn how to store and organize your work. For example, Lesson 8 shows you how to set up a filing system. Next, Lesson 9 has you managing files and disks. Then, in Lesson 10, you're stepped through the procedure for locating your files.

Part 4, titled Communicating Your Work, consists of two lessons. Lesson 11 details how you can share your information between computers, while Lesson 12 steps you through connecting computers through telephone lines.

An appendix provides instructions for installing Windows 95 on your PC if you haven't already done so. This appendix simply parrots the installation instructions provided in the brief manual that comes with Windows 95. It's followed by a glossary.

The foregoing might give you some idea of what's in this book/diskette combo, but it doesn't begin to tell you how well-thought-out and enjoyable the experience can be actually using it. The lessons are designed to be completed consecutively, of course, and each lesson is rated to take a minimum of your time, the longest at 40 minutes and the shortest at 20 minutes. The text is brief and to the point. Each step to be performed is by the numbers. Liberal use of screen captures throughout the lessons keeps you on-target all the way. If you don't see on your screen what's shown in the book, you did something wrong.

No program of this nature would be very effective if it doesn't give immediate feedback. This one does. You read the lesson, initiate the actions and see the result immediately. Each Part concludes with a Review & Practice section, through which you gauge your progress. With everything this book/diskette combo has going for it, I'd opt for this method over a video that covers the same ground. Having

skimmed through most of the lessons and performed selected portions, I'm more than satisfied with the results.

Both the *Field Guide to Microsoft Windows 95* and *Microsoft Windows 95 Step By Step* belong in the libraries of anyone who has moved up to this newest of operating systems. And if you know someone who has recently moved up to Windows 95 and are looking for a worthwhile holiday gift for him or her, either or both titles will be welcomed.

Internet Resource

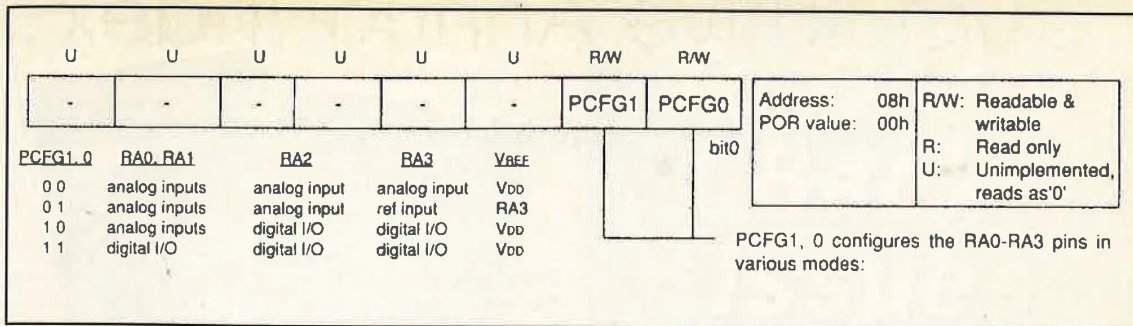
The Waite Group has done it again with a superb new title for Internet devotees. The *HTML Web Publisher's Construction Kit* is a book/CD-ROM combo (soft cover, 673 pages, \$36.95) by David Fox and Troy Browning you won't want to miss if you want to become a canny user of the Internet. This book covers everything you need to know for connecting to and exploring the Web, authoring your own Web pages with HTML tools and setting up your own Web site. The included CD-ROM contains a set of popular Web-browsing tools, including *Lynx*, *SlipKnot*, *NewManage* and *Chameleon*; premium Web publishing software for Windows; and all the software you need for setting up a Web site. It serves as a tour guide to the best Web pages around. And for novices, it even includes an Internet account.

The *Kit* offers step-by-step instructions at each level: from the procedures for installing converters, transfer protocols and communication sockets needed for Web browsing to the nuances of constructing a document with graphics, hypertext, movie and animation. Each chapter in this section opens with an actual Web document that's then dissected to illustrate precisely how each aspect was created. Sample documents are analyzed not only in terms of their attendant technology, but for style, esthetics and rhetorical appeal as well.

This book assumes you're vaguely familiar with the on-line world, the Internet and Microsoft Windows. Other than that, chapters in this book each have a number of lessons. Easy concepts are covered first, more difficult and obscure things come later. Once you've satisfied the basic requirements, you're ready to jump in with both feet.

Right up front, the *HTML Publisher's Construction Kit* introduces the *Chameleon* sampler on the CD-ROM. After telling you what Internet tools are available

(Continued on page 109)



Details of the A/D Control Register,

The PIC 'C71 maintains an internal stack it uses to store the return addresses of an interrupt or a procedure CALL. Since the stack isn't addressable by your application, there isn't much you can do with it. You should be aware that it's only eight levels deep. Thus, you must be sure not to nest interrupts or procedures more than eight levels deep. With only 1K of program space, I don't think most programmers will ever need a deeper stack than this.

Since the stack isn't accessible, you may be wondering how you pass values from the interrupt handler. The answer is that you could use a global variable stored in a reserved RAM location. This is probably the most straightforward method. However, you could trick the processor into passing a return value in the W register. See Listing 8 for an example of this bit of wizardry.

Here's why it works. Normally when you return from an interrupt with an RETFIE instruction, one of the things that automatically occur is that the GIE bit is set. That is why it's important to clear the appropriate interrupt flag before using this instruction. But you can also pop the top address off the stack by using a RETLW instruction. This allows you to pass a value through the W register. But if you do this, you must manually set the GIE bit of the INTCON register, which can be more trouble than it's worth, unless you know exactly from where your code is interrupted. Otherwise, the return value can be pretty useless. Generally speaking, it's probably better to pass values through reserved RAM locations. But then again....

The final topic of concern when

dealing with interrupts is saving the processor's context. Since only the program counter is pushed and popped on interrupts and returns, you must save any other registers of interest in your code. Fortunately, this is rather an easy thing to do. Listing 8 gives the steps you can perform to preserve the processor context.

Boot Me

I've covered a lot of ground here. I've shown you how to configure each of

the interrupts available on the PIC 'C71 and methods for some advanced concepts, such as critical sections, return values from interrupts and processor context preservation. Everything was designed as a framework leading up to Listing 8. The other listings provide complete information on how to set up each particular interrupt. If you followed along with me, you should now be fully prepared to engage in all sorts of interrupt-based processing using the PIC 16C71 processor. ■

Are You Moving? Let us know.

Mail your subscription label along with your new address, to us, so you can be sure you don't miss a single issue.

Bits 'n' Pieces *(Continued from page 99)*

to you with *Chameleon*, it details how to install the software onto your hard disk, how to sign up for an Internet provider account and register the *Chameleon* software, connecting to the Internet and Web browsing with WebSurfer.

The remainder of the book consists of three parts. Part 1, Chapters 1 through 7, covers the procedures for connecting to the Web. Here you learn about Web browsers, *Lynx*, *SlipKnot*, *NCSA Mosaic*, the *Netscape* Navigator and other browsers.

Part 2 picks up from there and takes you through Chapter 19 with details on everything you need to know to create Web pages. You find out what you can do, the hypertext markup language, text, graphics, sound, interactivity, CGI scripts, other Web resources and much more.

Part 3, which consists of Chapters 20

and 21 and Appendices A through D, is titled *Weaving a Web of Your Own*. Chapters 20 and 21 cover such topics as where to place your HTML documents and starting your own Web site, respectively. The appendices cover Slip Internet providers, other software sources, Web help sources and details about the included CD-ROM.

I received this book about a month ago, and I'm still reading it—it's that interesting. I've learned a lot of things I didn't know and am certain to learn a lot more before I finish the book. From what I've read and skimmed over, I can form an educated opinion about this book. It's really good. It's well-written, well-illustrated and a very worthwhile addition to my library. If you're an Internet devotee, whether you're new to the Internet or a seasoned veteran, I think you'll agree with me. ■



HECKMAN
BINDERY INC.



T136-976

**MICRO-
COMPUTER
JOURNAL**

2

1995

**TK 7800
.M43**