
Preface

The Internet has experienced spectacular growth over the last few years. A wide range of knowledge is needed by anyone interested in publishing on and participating in the *World Wide Web*. Many would argue that everyone should have a basic understanding of computing principles and the ability to track down information on the Web. In other words, everyone should be *Internet literate*. The amount of information available on-line is so vast that anyone interested in obtaining timely news, stock updates, a hard-to-find product, or basic research information cannot overlook the Web.

The level of sophistication for which we are aiming in this book is not the “point and click” level, nor the “hacker” end of the spectrum. We are interested in helping you learn enough that you are comfortable performing the following functions (among others):

- Sending and receiving electronic mail (email).
- Browsing the World Wide Web.
- Publishing on the Web.
- Coding in HyperText Markup Language (HTML).
- Using search engines.
- Processing on-line information in a critical fashion.
- Using such Internet applications as Telnet and FTP.
- Submitting forms on-line.
- Conducting research on-line.
- Developing a good grasp of computer terminology and acronyms.
- Reading and posting to newsgroups and mailing lists.
- Understanding chat rooms and MUDs.
- Downloading and installing plug-ins to view multimedia.
- Understanding basic security and copyright issues involving computers.

Who Should Read This Book

Anyone interested in learning about the Internet and the World Wide Web will benefit from this book. You will learn about concepts, rather than specific details about short-lived pieces of software. Our goal is to help you develop the confidence and skills to create a lifelong interest in computers, the Internet, and the Web. Computers already play a significant role in the lives of nearly everyone. So, even if the Web is not around in its current form in five years, a technology based on similar principles involving computers no doubt will be.

More specifically, this book is a good starting point:

1. For the student with an interest in becoming computer literate.
2. For the professional who needs to ramp up quickly before getting left behind in the technological world.
3. For all those seeking a career in a computer-related field.
4. For retired people who want to add another dimension to their¹ lives.

Organization of the Text

The material in this text is organized for a one-semester college course. The subject matter is presented in an order acceptable to an inexperienced computer user. Those with more experience may decide to skim over some of the early sections. The book also contains many exercises at the end of each section. It can also be used as a self-study guide for anyone interested in recent computing developments revolving around the Internet.

The book chapters deal with the following topics: email, Web browsing, Web page installation, the Internet, the World Wide Web, search tools, Telnet and FTP, HTML, Web graphics, HTML tools, newsgroups and mailing lists, chat rooms and MUDs, electronic publishing, Web programming, multimedia, and privacy and security issues.

The appendices deal with more specialized issues, such as Internet service providers, text editors, mailers, and operating systems. In addition, we provide a bibliography, a list of on-line references, a list of all HTML tags presented in the book, a glossary, a list of all acronyms used in the book, a place for you to record your own URLs, and an index.

¹ In this book, we use the pronouns “their,” “them,” and “they,” even where the correct usage is singular. This seems to be a better solution than: (1) using he/she, (2) alternating the gender of pronouns throughout the book, or (3) using “she” to compensate for years of overuse of masculine pronouns.

Icons are used in the margins of the text to highlight important or interesting points and to suggest activities to the reader.

Useful Item



Denotes an interesting tidbit of information, a factoid, or a recent news item.

Go On-Line



Indicates to go on-line and experiment with the topic or the commands described in the text.

Hot Topic



Marks extensive or important information or a hint.

Second Edition

The second edition has involved a comprehensive update of the first edition: New material on search engines, Cascading Style Sheets, and JavaScript has been added. The discussion of FTP and Telnet has been expanded. Many of the exercises in the book have been revised, and many new problems have been included. Suggestions from many reviewers have been incorporated to further improve the book. Many new figures have also been included. The supplemental materials that accompany the book, described in more detail later in the preface, have all been updated and expanded. In addition, quizzes, more on-line content, and PowerPoint lecture notes have been created.

As is traditional in computer science books, our book now has a theme, namely the **Appalachian Trail**, one of the largest continuous footpaths in the world. When Ray visited McGraw-Hill in May 2000, the lunchtime discussion turned to his thru-hike. John Wannemacher of McGraw-Hill had the idea of connecting the theme of the Appalachian Trail to *In-line/On-line*. For anyone hiking the entire Appalachian Trail, the trail represents a journey of a lifetime, a beautiful struggle to reach a worthy goal. Similarly, learning about the Internet and World Wide Web for the first time can initially be overwhelming and stimulating. The possibilities for learning and achievement are essentially endless. Thus, as you delve into this book chapter-by-chapter to achieve the goal of having learned its contents, think of your authors as guides on a long journey. You will progress through the book chapter-by-chapter as a hiker progresses state-by-state along the

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Appalachian Trail. When you complete the final chapter, you will have accomplished something significant and your eyes may just be opened to an extent that you view the world differently. To keep you on the path, this edition includes vignettes about episodes along the trail. We wish you well on your journey.

Accompanying Web Presentations

Two Web presentations are associated with this book: one called “class” and the other called “book.” The class presentation can be customized by an instructor and includes the following material: assignments, frequently asked questions, grading information, a hall of fame, information for parents, a project outline, a student directory, a syllabus, and a “welcome” message.

The book presentation contains the following items: a set of lecture summaries, a collection of useful links for each chapter, additional examples (not contained in the book) that utilize many HTML tags, HTML code for all of the “screen shots” contained in the book, search engine links, sample quizzes, updates of recent material/new developments, and corrections.

The on-line presentations can be accessed through McGraw-Hill’s Web presentation:

www.mhhe.com

or by visiting one of our Web pages.

Online Learning Center

Together with the authors, McGraw-Hill has developed an on-line learning center to accompany this text. The learning center contains supplemental materials, including interactive quizzes, one per chapter. This material will give students a hands-on opportunity to practice many of the concepts they learn about in the text.

Legal and Ethical Guidelines

You will want to read on-line information, review paper handouts, and discuss local policies with your system administrator. The standard rules follow common sense. Let us express the guidelines in the form of a “do not” list:

- Copy, borrow, or steal another person’s work.
- Try to break into another person’s account.

- Forge email.
- Steal passwords.
- Make selfish use of system resources.
- Produce offensive material.
- Violate computer policies.

In summary, exercise good judgment and remember that using computer facilities is considered a privilege, not a right.

Bibliography

This book contains a bibliography plus a list of supplemental hyperlinks for each chapter. The 10 to 20 hyperlinks provided per chapter are also accessible through the book's accompanying on-line material. Both instructors and students are encouraged to explore these hyperlinks. We have gone through each Web page linked into the site and selected well-known and key sites for each additional topic. Some of these Web pages will have moved or will no longer exist by the time you try to access them. We would appreciate a quick email letting us know which hyperlinks are out of date.

HTML Source Code

We should point out that the source code **for all** HTML examples contained in this book is available in the book's accompanying on-line supplements. For each figure in the book involving HTML, the reader can load the figure on-line through a Web browser and then view the corresponding HTML. Due to the vast number of examples contained in the text, it is not feasible to include all of the HTML in the text itself. However, both students and instructors should keep in mind that full HTML source code for all HTML examples presented in the text is available on-line. Furthermore, additional examples not mentioned in the text are also available on-line.

Instructors

We have developed a set of PowerPoint lecture notes for each chapter of the book. These notes should provide an excellent starting point for developing a customized set of lecture notes.

We have developed a Quiz Book that consists of 350 multiple choice quiz questions.

The Instructor's Resource Guide that accompanies the text contains the solutions to all exercises presented in the book. It also contains sample exams and an exam question bank.

The Web sites that accompany the text may be customized by instructors to suit the needs of their class. Grading hints and sample projects are available in the on-line material as well.

Source code for all HTML examples used in the text is available on-line. References are available in the back of the text as well as conveniently located on-line.

Supplements

The following supplementary materials are available:

- *Student Solutions Manual*—contains the solutions to all odd-numbered problems in the book.
- *Instructor's Resource Guide*—contains the solutions to all exercises in the book, sample exams, and an exam question bank.
- *Quiz Book*—consists of fourteen 25-question multiple choice quizzes.
- *PowerPoint Lecture Notes*—consists of a total of almost 600 PowerPoint slides. Each chapter is outlined in an easy-to-customize manner.
- *Accompanying Web Presentations*—a class and a book Web presentation with lots of information for students and instructors. The class Web presentation is designed so instructors can easily customize it for their classes. The book Web presentation contains lots of additional HTML examples, useful hyperlinks, and all of the screen shots from the text, including their source code.
- *McGraw-Hill's Online Learning Center*—an on-line repository for all sorts of supplemental book material.

Suggestions and Corrections

The text may contain some errors, and certain topics that readers feel are especially relevant may have been omitted. In anticipation of possible future printings, we would like to correct our mistakes and incorporate as many suggestions as possible. Please send comments to us via email at:

emhepp@cs.unh.edu or greenlaw@armstrong.edu

Corrigenda and additions to this work can be found at:

www.mhhe.com/greenlaw

We especially welcome input from students.



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Ray Greenlaw
Ellen Hepp