EVERY STUDENT'S GUIDE TO THE INTERNET

WINDOWS VERSION

Keiko Pitter ■ Sara Amato
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McGraw-Hill
New York St. Louis
San Francisco Auckland
Bogotá Carcas Lisbon
London Madrid
Mexico Milan
Montreal New Delhi
Paris San Juan
Singapore Sydney
Tokyo Toronto

THE McGRAW-HILL COMPANIES, INC.
San Francisco, CA 94133

Every Student's Guide to the Internet: Windows Version

2 3 4 5 6 7 8 9 0 FGR FGR 9 0 9 8 7 6 5

ISBN 0-07-052107-7

Sponsoring editor: Frank Ruggirello
Editorial assistant: Kyle Thomes
Production supervisor: Natalie Durbin
Project manager: Cecelia G. Morales
Copyeditor: Ryan Stuart
Cover designer: Janet Bollow
Compositor: Arizona Publication Service
Printer and binder: Quebecor Printing Fairfield, Inc.

Library of Congress Card Catalog No. 95-77457

This book is printed on acid-free paper.

PREFACE

TO THE STUDENT

The Internet, one of today's most powerful communication and information resources, gives millions of people around the world access to current and archived information on a multitude of topics. The Internet can be a tremendous help to you in your studies now and later in life. By following the easy-to-use instructions, *Every Student's Guide to the Internet: Windows Version* will enable you to search the world efficiently for information and communicate with individuals of widely divergent backgrounds.

While learning how to access the Internet, you will also learn the underlying concepts and strategies involved. Various Internet tools are discussed, along with the types of communication and information you can retrieve using those tools. This text takes full advantage of the Windows graphical user interface, however, the skills you learn will allow you to feel comfortable in any platform (Macintosh, UNIX, or Windows) or environment (a library index or a database at a research institute). You will find these skills invaluable in the constantly shifting landscape of the Internet.

TO THE INSTRUCTOR

Every Student's Guide to the Internet: Windows Version is written specifically for college and high school students, no matter what their field of study. This book can be used for short courses or training workshops on the Internet or as a supplement to courses in introductory computing, freshman orientation, and so on.

The book is organized so it can be used for teaching in the classroom or as a self-paced course. Each chapter begins with a list of objectives and ends with a chapter summary, a list of key terms, review questions, online exercises, and

discussion topics. A series of projects, a list of useful Internet resources, a further reading list, and a glossary of key terms are found at the end of the book.

An Instructor's Manual, free to adopters, is also available. This manual includes teaching tips, answers to review questions and exercises, additional exercises, and projects not in the text.

Whenever possible, educational examples are used so students can relate concepts easily to their immediate environment. We hope to instill in readers a sense of excitement about the Internet, as well as give them the ability to use it effectively.

This book offers the following benefits.

- Simply written with the beginner in mind, it teaches students how to access various types of information and provides strategies for finding and using resources.
- It provides access to online resources at Willamette University created specifically for use with the book: an e-mail address to which students can send messages for practice and a listserv discussion group called esgti-l to which students can subscribe for practice using the listserv and for discussing topics with other students using the book. Students can subscribe by sending the following message to listproc@willamette.edu:

  subscribe esgti-l <*full name*>

  A confirmation and instruction on how to use the listserv will be sent.
- It also provides Internet online support. Students can receive help by sending a message to the listserv esgti-l or by contacting any of the authors via e-mail. Their e-mail addresses are as follows:

Keiko Pitter	kpitter@willamette.edu
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- It keeps users informed of the Internet updates and changes that are pertinent to use of the book via a Web page maintained by authors. The URL is http://www.willamette.edu/~kpitter/esgti.html.

OUR STRATEGY

The greatest challenge in writing a book like this is the dynamic nature of the Internet. Available resources and the popularity of tools on the Internet change daily. We therefore believe it is important to teach the basic concepts behind

each tool so students can adapt to any platform and any tool that will be available in the future. At the same time, we set up a relatively stable environment through the computing facility at Willamette University that students can access both for practice now and for use in the future.

We assume readers have minimal technical experience. However, we also assume that the user is familiar with the use of a PC and Windows, understands Windows terminology, and knows how to operate a mouse or use the keyboard to make a selection onscreen. The reader must also have an account on an Internet host computer.

The PC in use must be on a network with an Internet host computer and have copies of the following client software installed: Eudora for Windows, WSGopher, Uwterm, WS_FTP, WinVN, WinWAIS, and Netscape. Undoubtedly, you will be using more current versions of software than the ones used for examples in this book. The versions used here are Eudora for Windows 1.4 , WSGopher 1.2, Uwterm 0.97i, WS_FTP 95.01.11, WinVN 0.93.11, WinWAIS 2.4, and Netscape 1.1N. Information on how to obtain these software packages is given in the Internet Resources and Directories section at the back of the book. Also, the Instructor's Guide gives some help on installation.

ACKNOWLEDGMENTS

We wish to thank Daris Howard of Ricks College and Michael Harris of Del Mar College for their input, and countless users of our UNIX and Macintosh books for sending us constructive messages, many of which came through the listserv esgti-l. We also want to thank the students and staff of the Willamette University for their support and Frank Ruggirello of McGraw-Hill for hanging in there.

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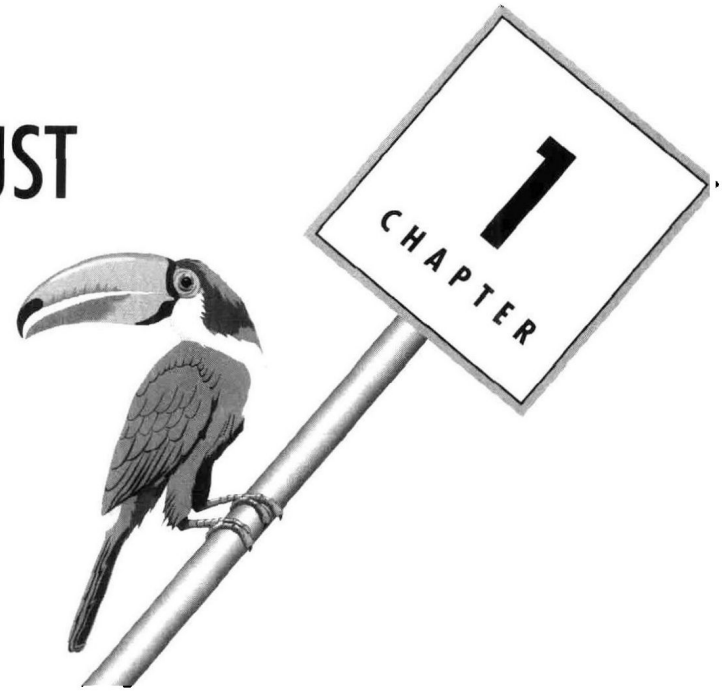
INTERNET OR BUST



Imagine that you are visiting a very large, vibrant city. From the apartment where you are staying, you see buildings, streets, avenues, districts, and boroughs, stretching as far as the eye can see. Imagine leaving the building and entering the heart of the city. You find a bewildering array of shops, stores, museums, libraries, schools, houses, businesses of all kinds, dance clubs, restaurants, and more! You can take nearly any kind of transport to get around town: You can hire a taxi, take the bus, descend to the subways, ride a bicycle, or even walk. The people are diverse as well, even more varied than the places and things to do here. Some of them you would like to meet; others, not. The things you can do here are many and varied, and with time and energy, you can see a lot in one day. From morning till night, there is always something to do, something to see. And you will probably never see all of it, no matter how long you're here, because it's always changing.

Now imagine that the only way to get to that "city" is through your computer. Imagine a "place," countless uncharted "places," where people meet and interact, where information passes back and forth, where all kinds of activities—scholarly, business, intellectual, and just plain fun—take place. Imagine being able to sit at your computer, seeing this virtual metropolis through your computer screen, moving back and forth by telling the computer where you want to go. There is nowhere you can't go in this vast, ethereal place, and yet you never leave the room.

This place is the Internet.

OBJECTIVES

Upon completing the material presented in this chapter, you should understand the following aspects of the Internet:

- The concept behind the Internet
- Terminology used when dealing with the Internet
- The domain names
- Available Internet resources
- Tools for using the Internet
- Guidelines for behavior on the Internet

PROLOGUE

Here you are—a new student. The person working at the registration desk says, "You probably want to get an e-mail account right away, right? Your history professor is really hooked on **the 'net**.[1] He requires everyone in his class to use it for all sorts of things." You smile and walk away, unsure of yourself. What exactly did "all sorts of things" mean?

You wander over to the computer lab. A group of students is huddled around a couple of computers, all staring at one screen. You get curious. They are looking at some really nifty color images on the screen. They're gabbing about something called "Genetic Art" that they're looking at from "over in Pittsburgh, over at Carnegie Mellon." You get the feeling that they are using the Internet.

You've heard of the Internet and the Information Superhighway. Who hasn't? It's on the news everywhere. You really need to learn to use this thing. From the sound of it, you need to learn to use it right away. But where do you start? What do you have to know? How is the Internet going to help you as a student?

WHAT IS THE INTERNET?

The Internet is often referred to as the network of networks—a communication medium made possible by computers and networks. People exchange all kinds of information, in innumerable social contexts, on the Internet. Research and information pass back and forth ceaselessly. It is a fluid and dynamic environment; it has no definite boundaries, its limitations imposed only by available software and

[1] *The 'net* is a term used by many to refer to the Internet.

hardware technology. It has been used exhaustively by the scientific and academic communities for many years. With the recent surge in interest by business and government, the Internet or its successor computer network will be of major importance to tomorrow's world. As a citizen of tomorrow, you need to learn how to use the tools for exploring the 'net, its information, and the people on it.

HOW WILL THE INTERNET HELP ME?

The Internet stretches from New England to New Zealand, with points of access at thousands of colleges and companies around the world. Using it, you can send a message to a friend across the ocean, obtain free (or cheap) software, and discuss world issues with the world. A large number of those who use the Internet are college students, and it can be a handy way to get in touch with friends and professors, both locally and from afar. You most likely have access to this global, instant connection through your school, now.

In description, the Internet sometimes seems a little bit of a pale thing. The question often asked is, "But what can it do?" This question may never be satisfactorily answered—at least, not in a way that would satisfy those who would swear by the Internet. In simplest terms, it can do this: It can send information from one computer to another. The trick is that the computers involved can, and often do, span the world. Imagine, if you will, taking the senior thesis you have just completed, sending it to your professor (who is on sabbatical in Germany), and having it arrive in a matter of seconds. Or sharing real-time scientific data between two experiments being performed, respectively, in Tokyo and Paris—or Dallas and Moscow—or Salem and London. Or browsing through online art galleries and exhibits at the Smithsonian from a classroom in a rural community.

You will encounter two kinds of things on the Internet: people and information. Both can help you as you progress in your academic career.

People. The Internet allows you to be in contact with people—a lot of people. There are tools, such as newsgroups and electronic mail, that can assist you in communicating with other people, people who are interested in the same topics that you are. These people are often more than eager to help out, providing answers to questions and engaging you in thoughtful discussions.

Information. The Internet is a medium for accessing a vast amount of information. A number of tools for information retrieval are discussed in this book. You can use these tools to find reference materials on the Internet, such as:

- Growing collections of electronic books, from *Alice in Wonderland* to *Hacker Crackdown.*

- ✦ Economic and social statistical data, such as census information, daily exchange rates, and government budgets and reports.
- ✦ Fine arts and music, including digital images of art.
- ✦ Historical information, including several online exhibits from the Library of Congress and the Smithsonian.

It should be mentioned, however, that while the Internet is a wonderful resource, it's not perfect. For one thing, you can't find information on everything by using the Internet. However, you can often find out about useful alternate and supplementary sources of information not on the Internet, in addition to what you might find at your library or learn about from your professors. For another thing, you should be concerned with the reliability of information you find on the Internet. Most of the information available online has been supplied by volunteers, and while you can often trust it, it can also occasionally contain inaccurate and misleading information. You should always be circumspect with information found online; be sure to double-check all facts before citing them.

BIRTH OF A NETWORK

The evolution of the Internet and network access in general has been similar to the development of any other useful resource. Since its genesis in early networks, tools and utilities have been developed to make access easier and more flexible. This development continues today. It is important to understand why the Internet came about in the first place, for this history helps explain the allure of computer-mediated communication today.

Our history begins in the 1960s when scientists and researchers both inside and outside of academia were confronted with a problem in communication. In those days, it was rather time-consuming and laborious to share research information around the country; the vital centers of research were often far apart, and it was difficult to share ideas and data. For scientific research to continue and grow unhampered by geographic constraints, scientists needed a new, rapid, and dependable method of communication.

Computers were seen as a logical solution. Text was a flexible communication medium, and a computer could process and store text quite nicely, even print it out on paper if desired. If one computer could speak to another computer, text could be sent from computer to computer. The problem lay in getting all the different computers in the country to talk to one another. At that time, there were many different kinds of computers, not all of them compatible, even at the same university or site! Different kinds of computers stored and processed information in slightly different formats, which meant that some kind of translation scheme was necessary for one computer to talk to another. And if more than two

BOX 1.1

QUICK PREVIEW OF THE WEB

One reason for the increased interest in and popularity of the Internet is the powerful software tool called the World Wide Web, or the Web. The Web wipes out some of the technical and geographic hurdles that have been limiting most users from using the 'net for anything more than electronic mail. The Web also makes it easy for anyone to publish information that others can use.

To access information on the Web, you need to use a Web browser program, of which there are many to choose from. The most popular product today is Netscape, whch is covered in Chapter 8. A year ago, the most popular browser was Mosaic, and there will be several more browsers introduced in the coming year. They all employ the same concept—hypertext.

In an onscreen display, certain words are underlined, or a button may appear. When you select or click underlined words or buttons, a new display appears. The display may even be multimedia, meaning that it may include graphics, motion video, and sound. However, the extent of what you can view or hear will depend on the Web browser being used and the type of computer you are using. If you access the Internet from home, the type of connection and the speed of the modem you use will also affect how effectively you can browse the Web. Eventually, access to the Web will become an integral part of computer usage at home, school, and business.

It is tempting, therefore, to think that all you need to learn to use the Internet is to learn how to use a Web browser. This is becoming more and more true, but it is not completely true yet; you must not limit your knowledge of the Internet to the Web alone.

For a quick preview of the Web, just do the following:

Look at the Program Manager window for the following Netscape icon, then double-click on it.

From the File menu, select Open Location or press CTRL-L.

In the Open Location text box, type* www.whitehouse.gov *and click on Open. If you do not see graphics, click on the Images button found just under the menu.

You are now looking at the electronic information provided by the White House. To search this information space, you must be very intuitive—various words will be highlighted and underlined, and you can click on those words to find out more about specific information. As mentioned, you will learn more about navigating through Web documents like this in Chapter 8.

When you are done, open the File menu and select Exit.