

COMPUTERS ARE YOUR **FUTURE**

BRIEF

2005

2004

2003

2002

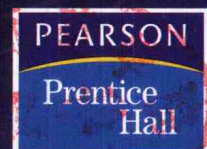
BILL DALEY

BRIEF EDITION

COMPUTERS ARE YOUR **FUTURE**

2005

BILL DALEY



Upper Saddle River, New Jersey

Computers Are Your Future 2005
Brief edition / William Daley

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Preface

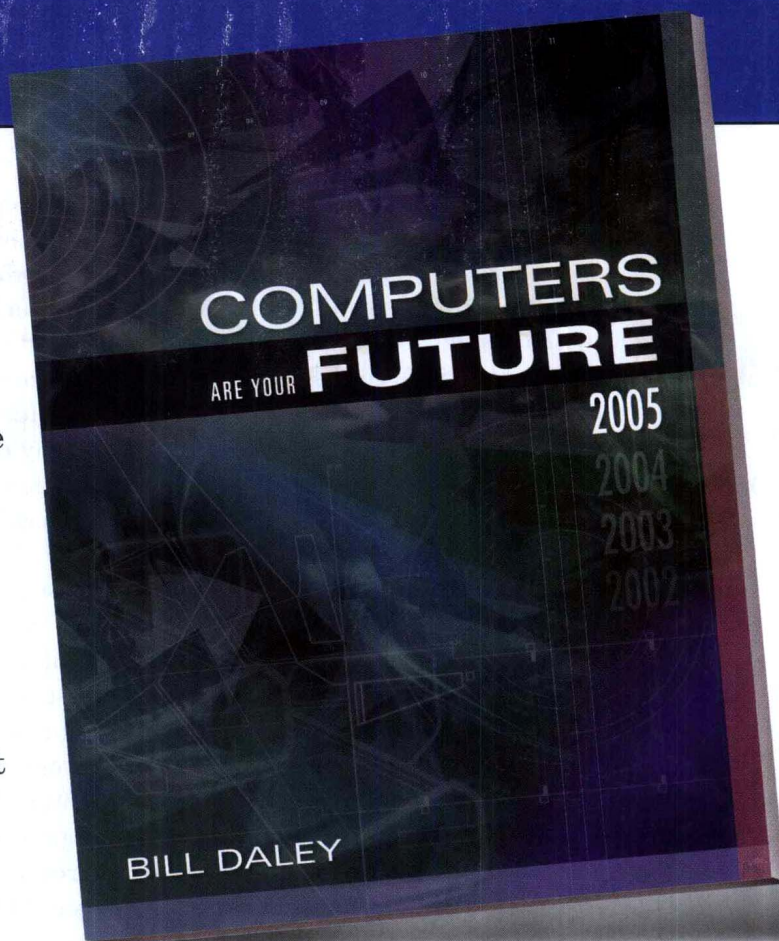
About This Edition

We've worked to produce a book that will meet your needs and the needs of your students.

We listened to our reviewers, we listened at roundtable discussions, and most important, we dedicated our best people

and resources to this project. Here are some things we think you should know about the revision of *Computers in Your Future*:

- Title change: *Computers Are Your Future*. You want a book to reflect the diverse students you now teach. Students today aren't wowed by technology—it's part of their daily lives. From the time they're in grade school, they look at a computer like a toaster—just another common home appliance. We've revised the book to match what we believe they already know with what you've told us they should know.
- You want the new edition to be more current and streamlined than the sixth edition—but without forcing changes in the way you're teaching the course. We've significantly reorganized the table of contents, cut redundancy across chapters, and focused on producing a vibrant and active flow to the content.
- You want new chapters on wired and wireless communications, and on enterprise computing. We've conducted the research and written Chapters 8 and 14.
- You want a concepts book with great learning tools that hold your students' interest and reinforce critical material—but without causing them to lose focus. We've removed the encyclopedic dryness and condensed the key terms down to those that are truly "key."
- You want a text-specific, interactive Web site that enhances your students' learning with valuable additional resources and practice exercises—and for your students to be led intuitively to key information that is concise, intelligent, and clearly laid out. Wait until you experience what we've created!



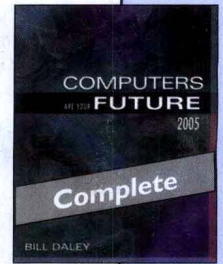
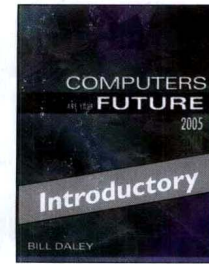
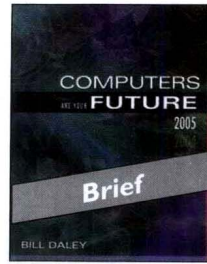
Now available as an annual edition, *Computers Are Your Future 2005* brings a new design, new and updated coverage, new *Spotlight*, *Currents*, and *Impacts* features, and an updated accompanying Web site. This text is ready for the challenge of teaching even your most diversified class—without sacrificing quality, integrity, or choice. *Computers Are Your Future 2005* comes in three versions—Brief (Chapters 1–8), Introductory (1–12), or Complete (1–14)—to meet the needs of your classroom.

The 2005 edition offers you flexibility and currency.

TechTV links and references appear in every chapter. TechTV provides Web-based VIDEOS that are current, rich, and interesting. These are the same videos found on the 24-hour TechTV cable news channel.

SPOTLIGHT sections highlight innovative thinking in each subject area—for example, emerging technologies, ethics, crime, and security; as well as buying and upgrading your computer system and file management.

IMPACTS boxes offer chapter-by-chapter insights on societal implications of computing. Students are introduced to thought-provoking bites of information to stimulate class discussion or team debates on all aspects of technology's impact on life today.



CURRENTS boxes examine issues in computing as well as cutting-edge computer technology. Students learn about what's going to change the face of computing by the time they become professionals. Currents boxes include: emerging technologies, ethics, privacy, piracy, communications, and wireless technology.

Computer FLUENCY continues to be emphasized in the 2005 edition. It's one thing to be computer literate, but it's quite another to be computer fluent. Computer-literate people are skilled computer and Internet users; computer-fluent people are able to navigate the digital world easily. Their knowledge of the underlying concepts and principles of computers and the Internet gives them tremendous advantage.

The more computer-fluent people work with computer technology, the deeper and richer their understanding grows. They also understand enough about computing to recognize the risks, as well as the benefits, of technology.

CUTTING-EDGE topics covered include: Microsoft Office 2003, ethics, e-commerce, security, privacy, communications trends and infrastructure, and multimedia.

Chapters are significantly UPDATED. Chapter 1 is revised to engage the student and to provide a vivid outline of the book's content. Chapters 2 through 4 are revised and updated. Chapters 5 and 6 combine content that used to be distributed in other chapters. Chapters 7 through 9 are heavily revised, with additional coverage of privacy, security, and intellectual property issues. Chapters 10 through 12 are updated to include the latest practices in programming, managing data, and systems. Chapter 13 is totally revised and updated. And Chapter 14, on enterprise computing, is brand new.

For the Instructor

INSTRUCTOR RESOURCES

The new and improved Prentice Hall Instructor's Resource CD-ROM includes the tools you expect from a Prentice Hall Computer Concepts text, like:

- The Instructor's Manual in Word and PDF formats
- Solutions to all questions and exercises from the book and Web site
- Multiple, customizable PowerPoint slide presentations for each chapter
- Computer concepts animations
- TechTV videos
- Image library of all of the figures from the text

This CD-ROM is an interactive library of assets and links. This CD writes custom "index" pages that can be used as the foundation of a class presentation or online lecture. By navigating through this CD, you can collect the materials that are most relevant to your interests, edit them to create powerful class lectures, copy them to your own computer's hard drive, and/or upload them to an online course management system.

TESTGEN SOFTWARE

TestGen Software: TestGen is a test generator that lets you view and easily edit testbank questions, transfer them to tests, and print in a variety of formats suitable to your teaching situation. The program also offers many options for organizing and displaying testbanks and tests. A built-in random number and text generator makes it ideal for creating multiple versions of tests that involve calculations and provides more possible test items than testbank questions. Powerful search and sort functions let you easily locate questions and arrange them in the order you prefer.

QuizMaster, also included in this package, allows students to take tests created with TestGen on a local area network. The QuizMaster utility built into TestGen lets instructors view student records and print a variety of reports. Building tests is easy with TestGen, and exams can be easily uploaded into WebCT, Blackboard, and CourseCompass.

TRAINING AND ASSESSMENT

<http://www.phgenit.com>



Prentice Hall offers performance-based training and assessment in one product—Train&Assess IT. The training component offers computer-based training that a student can use to preview, learn, and review Microsoft Office application skills. Web- or CD-ROM-delivered, Train IT offers interactive, multimedia, computer-based training to augment classroom learning. Built-in prescriptive testing suggests a study path based not only on student test results but also on the specific textbook chosen for the course.

The assessment component offers computer-based testing that shares the same user interface as Train IT and is used to evaluate a student's knowledge about specific topics in Word, Excel, Access, PowerPoint, Outlook, the Internet, and computing concepts. It does this in a task-oriented environment to demonstrate students' proficiency as well as comprehension of the topics. More extensive than the testing in Train IT, Assess IT offers more administrative features for the instructor and additional questions for the student.

Assess IT also allows professors to test students out of a course, place students in appropriate courses, and evaluate skill sets.

TOOLS FOR ONLINE LEARNING

Companion Web Site

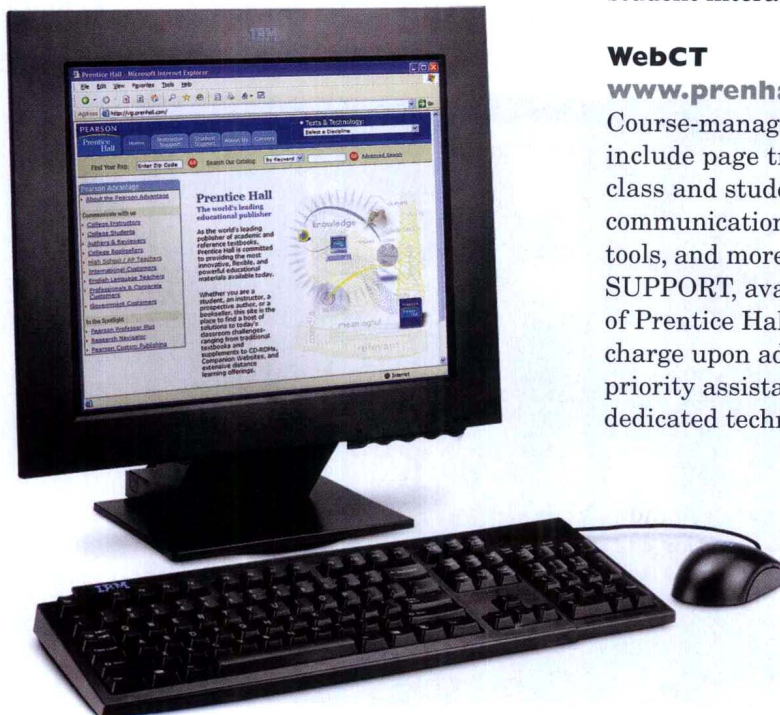
www.prenhall.com/cayf2005

This text is accompanied by a companion Web site at www.prenhall.com/cayf2005. Features of this new site include an interactive study guide, downloadable supplements, online end-of-chapter materials, additional Internet exercises, TechTV videos, Web-resource links such as Careers in IT and crossword puzzles, plus technology updates and bonus chapters on the latest trends and hottest topics in information technology. All links to Web exercises will be constantly updated to ensure accuracy.

EXPLORE IT

<http://www.prenhall.com/exploreitlabs>

Prentice Hall offers computer-based training just for computer literacy. Designed to cover some of the most difficult concepts, as well as some current topical areas—EXPLORE IT is a Web- and CD-ROM-based product designed to complement a course. Available for free with any Prentice Hall title, our new lab coverage includes: troubleshooting, programming logic, mouse and keyboard basics, databases, building a Web page, hardware, software, operating systems, building a network, and more!



ONLINE Courseware for Blackboard, WebCT, and CourseCompass

Now you have the freedom to personalize your own online course materials!

Prentice Hall provides the content and support you need to create and manage your own online course in WebCT, Blackboard, or Prentice Hall's own CourseCompass. Content includes lecture material, interactive exercises, e-commerce case videos, additional testing questions, and projects and animations.

CourseCompass

www.coursecompass.com

CourseCompass is a dynamic, interactive online course-management tool powered exclusively for Pearson Education by Blackboard. This exciting product allows you to teach market-leading Pearson Education content in an easy-to-use, customizable format.

Blackboard

www.prenhall.com/blackboard

Prentice Hall's abundant online content, combined with Blackboard's popular tools and interface, results in robust Web-based courses that are easy to implement, manage, and use—taking your courses to new heights in student interaction and learning.

WebCT

www.prenhall.com/webct

Course-management tools within WebCT include page tracking, progress tracking, class and student management, a grade book, communication tools, a calendar, reporting tools, and more. GOLD LEVEL CUSTOMER SUPPORT, available exclusively to adopters of Prentice Hall courses, is provided free of charge upon adoption and provides you with priority assistance, training discounts, and dedicated technical support.



TechTV is the San Francisco-based cable network that showcases the smart, edgy and unexpected side of technology. By telling stories through the prism of technology, TechTV provides programming that celebrates its viewers' passion, creativity and lifestyle.

TechTV's programming falls into three categories:

- 1. Help and Information**, with shows like *The Screen Savers*, TechTV's daily live variety show featuring everything from guest interviews and celebrities to product advice and demos, *Tech Live*, featuring the latest news on the industry's most important people, companies, products and issues, and *Call for Help*, a live help and how-to show providing computing tips and live viewer questions.
- 2. Cool Docs**, with shows like *The Tech Of...*, a series that goes behind the scenes of modern life and shows you the technology that makes things tick, *Performance*, an investigation into how technology and science are molding the perfect athlete, and *Future Fighting Machines*, a fascinating look at the technology and tactics of warfare.
- 3. Outrageous Fun**, with shows like *X-Play*, exploring the latest and greatest in videogaming, and *Unscrewed with Martin Sargent*, a new late-night series showcasing the darker, funnier world of technology.

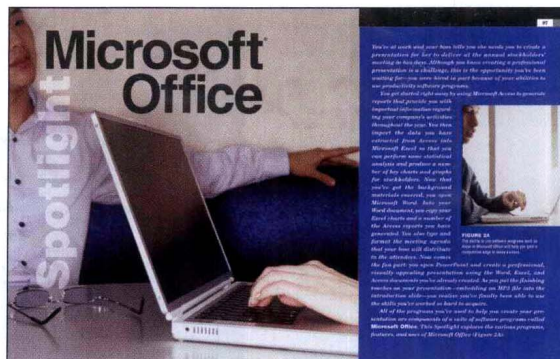
For more information, log onto www.techtv.com or contact your local cable or satellite provider to get TechTV in your area.



For the Student

Welcome to *Computers Are Your Future 2005*! The following pages are designed to help you get the most out of the material and make the learning process rewarding. We call your attention to areas that may help you as you read through the book. Please read on, and enjoy!

TP3



SPOTLIGHT sections highlight important ideas about computer-related topics and provide indepth, useful information to take your learning to the next level.

Spotlight Ethics

STANDARDS OF INFORMATION AGE CONDUCT

Avoiding Computer-Related Legal Problems

Ethics is the branch of philosophy concerned with determining what's right and wrong. By laying down commonly accepted rules, or ethical principles, ethicists work to construct a framework into which we can place dilemmas to help us make good decisions. It sounds simple enough, but the difficulty of making ethical decisions lies in untried circumstances. People must try to figure out how the existing rules, or ethical principles, apply to a new situation.

As we discussed in Chapter 1, information technology changes very rapidly. Since computer users encounter new situations on a daily basis, ethics is especially important in the world of computers. The result of this moral gray area is a new branch of philosophy called computer ethics. Computer ethics deals with computing-related moral dilemmas and also defines ethical principles for computer professionals. This Spotlight examines some of the most common issues in computer ethics, from legal problems, in which ethics are determined by law, to moral dilemmas where the difference between right and wrong isn't so easy to discern.

Every day, newspapers carry stories about people getting into trouble by using their computers to conduct personal business while they're at work. In many cases, the offenders used company computers to browse the Web and send personal e-mail on company time, or to commit crimes such as cyberstalking or distributing pornography. While most companies have an acceptable computer use policy, you should be aware that using a computer for nonbusiness-related tasks is generally banned within an organization.

What other kinds of things can cause computer users problems? Let's start with a problem that gets many college students into serious trouble: plagiarism.



IMPACTS

Milestones

How "Human" Can Robots Become?

Robots have come a long way since the term was first used to describe man-made laborers in a 1921 play by Czech author Karel Capek. Once found only in scientific labs, today robots paint cars for auto manufacturers, help surgeons conduct surgery, and make trips to outer space.

Robots are entering our homes, too. Can't have a pet in your dorm room? How about AIBO, the doglike "Entertainment Robot" from Sony (Figure 1.13a)? According to Sony, AIBO has "the five instincts of love, curiosity, movement, hunger, and sleep" as well as the "emotions of happiness, sadness, anger, surprise, fear, and dislike." How can you tell what AIBO is "feeling"? According to the Japanese company, AIBO conveys its "feelings" through melodies, body language, and lights in its eyes and on its tail. You can even train AIBO to do tricks. Best of all, AIBO doesn't need to be house-trained!

Even more humanlike is the Japanese-made PaPeRo (short for Partner-type Personal Robot) (Figure 1.13b). PaPeRo's colorful, rounded canister shape may not look huggable at first, but when treated with kindness, it's irresistible. PaPeRo can welcome you home after a long day, and when you're away, it wanders around looking for human companionship. If it doesn't find any, it takes a nap. PaPeRo even has the ability to recognize voice patterns; if these patterns are unfriendly, it runs away.

While PaPeRo is a humanlike toy, robots are taking the place of humans in industry in many ways. In 2001, IBM conducted an experiment

in which robots participated in simulated trading of commodities such as pork bellies and gold.

By using specially designed algorithms, the robots performed the same tasks as human commodity brokers—and made seven percent more money than their human counterparts! Can you imagine a future in which robots make economic decisions? It would certainly give the stock exchange floor a new look. (And speaking of which, are robots capable of insider trading? Would you need a "robot," or just a computer?)

Researchers are also working on a robot that changes its shape to accomplish a specific task. The shape-changing robot has pieces that are moved around by a computer-managed algorithm. Such shape-changing robots will one day walk, crawl, carry tools, and fit into tight spaces humans can't.

Lockstep logic is wonderful for a machine, but humans rely on intuitive and often illogical decisions. Will robots ever act nonrationally? A team of researchers at MIT is working on a "sociable humanoid robot" able to learn from and interact with humans. Called Kismet, the big-eyed robot uses algorithms based on what we know about child development to react in a human way. According to MIT's research team, Kismet can perceive a variety of social cues from its "parent" through its eyes and ears, and can then deliver feedback through its facial expression, posture, and "voice." So will robots ever act illogically? With humans as surrogate parents, anything is possible.



FIGURE 1.13 (a) AIBO and (b) PaPeRo are popular home robots.

these words aren't in its massive, built-in dictionary. But many correctly spelled words, such as proper nouns (the names of people and places), aren't likely to be found in the computer's dictionary. For this reason, the program won't make any changes without asking you to confirm them.

Storage Once you've corrected the spelling in your document, you save the revised document to disk.

(her into of m

CURRENTS boxes in each chapter examine cutting-edge issues in computing and computer technology.



CURRENTS

Debates

Platform Passion: Macs versus PCs

As you almost certainly know, as a computer user, you have two major platforms to choose from: Macintosh and PC. The debate over which platform is best has raged on for years, and if market power is anything, PCs are winning by a landslide. But Apple hangs in there with its slew of adherents who choose to "think different." What's the difference between the platforms? Although you'd never know from listening to people who love or hate Macs, there's not much difference, really. At least not in terms of power capacity. Still, the debate goes on.

On the one side, Mac lovers say their machines are easier to set up and use. Macs come with everything you need built right in—all you have to do is plug them in and you're on your way. Mac lovers also point to the fact that Apple has developed some incredibly advanced technology. (Even PC users will agree to that.) Apple offers its users cutting-edge, easy-to-use applications such as iMovie, iTunes, iPhoto, and iDVD. And Mac's FireWire technology has spread to PCs: first it was available as an option and now it may be becoming a standard.

It's not just the system and the software Mac users love. Most Macophiles love their one-button mice as well as their many shortcut keys. Not to mention the Apple design; many Mac adherents love the look of the Mac above all else. Today, you'll find Macs being used in most primary and elementary schools in the United States. (OS X is virtually crash-proof!) In addition, certain professions, such as publishing, advertising, and design, rely almost exclusively on Macs.

On the other hand, PCs still dominate, and the race isn't even close. PCs claim the largest chunk of the marketplace and are the choice of corporate America. And thanks to economies of scale, they also tend to be cheaper, in terms of both their hardware and software. Indeed, software is a big plus for PC users, who have far more to choose from than their Mac counterparts. Because so many more people buy the software, it tends to be better, and it is often developed and published more quickly than similar software for Macs. And as much as Mac lovers claim the one-button mouse is the way to go,

PC users love their two-button mouse, which offers more choices in hand.

And as for design? Step aside, Mac. Make way for new PCs on the market. In the fall of 2002, Gateway introduced its new all-in-one computer that hopes to steal market share from Apple's iMac G4 (Figure 2.8).

In recent years, Apple has tried to woo PC users by playing on the idea that Macs are easier to use. Meanwhile, Mac's OS X could improve the number of software products developed for

Macs, and that includes games, one reason PCs lead in the marketplace. However, as Apple moves into the PC market with its recent UNIX innovations, it may make itself more vulnerable to the viruses that have been mostly a PC headache in the past. In any case, Macs have a long way to go to catch up to PCs—and few users from either camp see that happening any time soon.

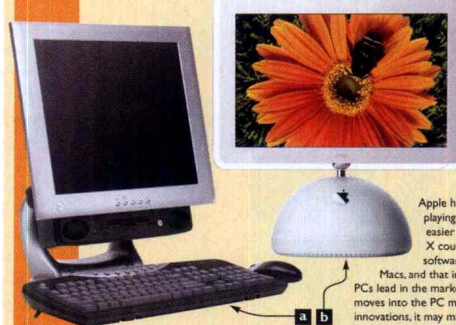


FIGURE 2.8 Gateway claims its all-in-one computer (a) is better and cheaper than its Mac counterpart (b).

TECHTALK margin notes define commonly used computer jargon.

DESTINATIONS margin notes direct you to related Web sites where you can explore chapter topics in more depth.



FIGURE 1.10 The most common storage devices are (a) a hard disk drive, (b) a floppy disk drive, and (c) a CD-ROM or DVD-ROM drive.



very simple processing operations at very high speeds. To check your document's spelling, the program begins by constructing a list of all the words in your document. Then it compares these words, one by one, with a huge list of



Techtalk

peripheral
A computer device that is not an essential part of the computer; that is, any device that is not the memory or microprocessor. Peripheral devices can be external—such as a mouse, keyboard, printer, monitor, external Zip drive, or scanner—or internal, such as a CD-ROM drive, CD-R drive, or internal modem.

Computer Fundamentals

Learning computer and Internet concepts is partly about learning new terms. So let's start with the most basic term of all: *computer*.

UNDERSTANDING THE COMPUTER: BASIC DEFINITIONS

A **computer** is a machine that performs four basic operations: input, processing, output, and storage (Figure 1.4). Together, these four operations are called the **information**

processing cycle. Input, processing, output, storage—that's what computers do. The processing function relies upon input, output is dependent upon the results of processing, and storage is where output may be kept for later use. Since these operations are dependent upon each other, the information processing cycle is always performed in order.

You'll often hear the term *computer system*, which is normally shortened to *system*. This term is more inclusive than *computer*. A **computer system** is a collection of related components that have been designed to work together smoothly. These components can be broken down into two major categories: hardware and software. A computer system's **hardware** includes the physical components of the



Destinations

To learn more about the time line of computer development, see the excellent Timeline of Computer History at www.computer.org/computer/timeline/

Information Processing Cycle

document
paring a list of misspelled words
rds
document

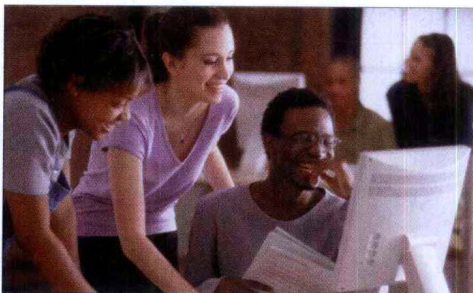
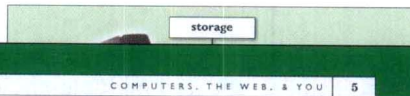


FIGURE 1.2 Workers with computer and Internet skills tend to make more money and have more satisfying careers than do workers without such skills.

decisions you make will be major life decisions; others will have minor consequences. But there will always be facts to gather, opinions to hear, and choices to weigh. Learning about and understanding computers and technology will help you make informed choices.

How can you judge the direction and speed with which technology is moving? What knowledge can you gain that will prepare you to capitalize on technological advancements? What current knowledge in your life can you use for perspective?

Consider this: You were most likely born in the mid-1980s. Many of your parents were born in the mid-1960s. Think of the changes that have occurred as a result of technological innovation during the most recent 40 years. When your parents were born there were no telephone answering machines, no cell phones, no calculators, and no personal computers. People wrote letters by hand or with a typewriter, kept track of numbers and data in ledgers, and communicated in person or through the use of the telephone. In fact, telephones were physically connected—there were no wireless phones until the 1970s or cell phones until the 1980s.

When you were born the Internet (including e-mail) was restricted to use by the United States government and to institutions of higher education, cell phones were just beginning to be used, and fax

machines were the fastest way for most people to share documents throughout the world. The World Wide Web would not come into existence until after you started grade school, and e-commerce didn't exist until you were almost 10. Today, millions of people use the Internet not only in their professional lives in business, government, and education but also in their personal lives. Cell phones are a seemingly necessary part of everyday life, fax machines are becoming obsolete, and e-commerce was responsible for more than three billion dollars in transactions last year.

Today it's becoming harder and harder to find an activity that doesn't involve computers and technology (Figure 1.1). Clearly, you'd be wise to learn all you can about computers, the Internet, and the World Wide Web. You should know how to use a computer, the Internet, and popular software such as Microsoft Word or Excel. At work, computer and Internet skills are needed to succeed in almost every occupational area. Studies consistently show that workers with computer and Internet skills tend to make more money and have more satisfying careers than do workers who don't have such skills (Figure 1.2).

But skills alone aren't enough. To be a fully functioning member of today's computerized world, you also should learn the concepts that underlie computer and Internet technology, such as the distinction



techTV

To learn more about technology and your future, see the video clip with futurist Alvin Toffler at: www.prenhall.com/cayf2005



TECHTV margin notes give you links to our Web site, where you can view video clips on chapter-specific subjects.

Key Terms and Concepts

account	45	providing the user interface	48	operating system (OS)	42
archive	59	graphical user interface (GUI)	49	pages	47
authentication (login)	44	desktop environment	49	power-on self test (POST)	44
background application	46	dialog box	49	preemptive multitasking	46
bad sector	59	icons	49	profile	44
BIOS (basic input/output system)	43	IRQ conflict	48	registry	44
boot disk (emergency disk)	60	interrupt handlers	48	safe mode	60
booting	43	interrupt request (IRQ)	48	setup program	43
cold boot	43	interrupts	48	single-tasking operating system	45
warm boot (warm start)	43	IRQ conflict	48	swap file	47
CMOS (complementary metal-oxide semiconductor)	44	kernel	43	system software	42
command-line user interface	51	Linux	54	system utilities (utility programs)	56
crash	46	load	44	antivirus software	57
disk cleanup utility	59	Mac OS	52	backup software	56
driver	44	memory	46	disk defragmentation programs	59
foreground application	46	menu-driven user interface	49	disk scanning programs	59
full backup	56	Microsoft Windows	51	file compression utilities	59
functions of the operating system	43	Microsoft Windows CE	52	file manager	58
starting the computer	43	Microsoft Windows NT	52	search utility	58
managing programs	45	Microsoft Windows XP	52	UNIX	53
managing memory	46	MS-DOS (DOS)	53	user interface	48
handling input and output	47	multitasking	45	virtual memory	48
		operating system	45		
		open-source software	54		



Go to www.prenhall.com/cayf2005 to review this chapter, answer the questions, and complete the exercises.

Matching

Match each key term in the left column with the most accurate definition in the right column.

- | | |
|----------------------------|---|
| 1. operating system | a. an essential part of safe, efficient computer usage |
| 2. multitasking | b. a utility that can detect and resolve physical and logical problems on a disk |
| 3. Linux | c. a file that helps the operating system manage input and output devices |
| 4. dialog box | d. enables a single user to work with two or more programs |
| 5. OS X | e. essential portions of an operating system |
| 6. disk scanner | f. signals that inform the operating system that something has happened |
| 7. emergency disk | g. an open-source operating system |
| 8. interrupts | h. the program that is active when one or more programs are running at the same time |
| 9. kernel | i. manages programs, parcels out memory, deals with input and output devices, and provides a means of communicating with the user |
| 10. foreground application | j. describes a disk or file whose data is scattered |
| 11. file manager | k. allows users to supply additional information to a program |
| 12. driver | l. contains a reduced version of the operating system that can be used for troubleshooting purposes |
| 13. icon | m. a utility program that enables you to deal with the data stored on your disk |
| 14. backup utilities | n. the most current operating system for the Macintosh |
| 15. fragmented | o. graphical representation of a computer resource |

Go to www.prenhall.com/cayf2005 to review this chapter, answer the questions, and complete the exercises.

END-OF-CHAPTER MATERIAL includes updated multiple-choice, matching, fill-in, and short-answer questions, as well as Web research projects so you can prepare for tests.

A Closer Look

- Considering the operating systems you use most often, and the functions that need to be performed by an operating system, what future improvements can you envision? If you have used several versions of the same operating system, what improvements have you seen implemented when new versions are released? Go to www.microsoft.com and choose a link or search for "operating systems." Now scroll around or search for Microsoft's operating system comparison section. Did you learn anything? How does the operating system you use stack up?
- Experiment with both a Macintosh computer and a PC. What version of each operating system did you use? Is it the latest release of the operating system? How are the two operating systems similar? Can you determine the strengths of each system? Which operating system do you prefer? Why?
- Despite its cryptic commands, UNIX has remained a popular operating system for about 30 years. Many educational institutions have computers running this operating system, and, in fact, most Internet servers run UNIX. If you have used a UNIX computer, explain how and why you used it. Does your school have computers that use UNIX? If so, do you have an account? Can you get an account, or are the accounts restricted on these computers? Do you have an Internet service provider (ISP)? If you do, identify your provider and whether it uses UNIX to support customer Web sites.
- See how much you can learn about your computer system. Choose Start, All Programs, Accessories, and System Tools. Now choose the System Information choice. How much memory is installed on your computer? How much virtual memory is defined?
- Have you considered the purchase of a PDA? What companies manufacture PDAs? Some of these devices require special operating systems and application software. Go to a local computer store and "take one out for a test drive." Specifically, try out the operating system. Do these computers use a special version of Windows? If they use Windows, what version and release is it? How does this operating system compare with ones on a desktop or laptop computer? What are some of the differences between the two operating systems? Now that you have "kicked the keyboard" and taken a PDA out for a spin, explain why you would or would not purchase one.



Go to www.prenhall.com/cayf2005 to review this chapter, answer the questions, and complete the exercises.

On the Web

- We discussed several system utility programs in this chapter. In this exercise, we'll examine file compression. Have you used a file compression program?
 - If you have, identify the brand name and version of this software application. Which operating system were you using? Did you find the file compression program simple or complicated to use? Would you recommend this product to someone else? Why or why not?
 - If you have not, visit the sites of two popular file compressors, WinZip at www.winzip.com, and StuffIt at www.stuffit.com. For which operating systems does each work? What are the current versions and manufacturers' suggested retail prices for each? Are free or evaluation versions available? Would you purchase one of these products? Explain why or why not.
- We also discussed other system utility programs, such as antivirus programs, in this chapter. In this exercise, we'll examine these applications. Have you ever had to disinfect a file that was infected by a virus?
 - If you have, identify the brand name and version of the antivirus application you used and which operating system you were using. Were you able to disinfect the file successfully? Did you find the use of this program simple or complicated? Would you recommend this product to someone else? Why or why not?
 - If you have not, visit the sites of the two most popular antivirus applications, Norton AntiVirus at www.symantec.com/nav, and McAfee VirusScan at www.mcafee.com/anti-virus. For which operating systems does each work? What are the current versions and manufacturers' suggested retail prices for each? Are there free or evaluation versions available? Would you purchase one of these products? Explain why or why not.
- So that you can answer the following questions, visit Microsoft's Windows XP site at microsoft.com/windows/default.asp for information on the newest version of Windows.
 - Why would users of Windows NT/2000 upgrade to XP?
 - Why would users of Windows 95/98 upgrade to XP?
 - What other types of users will benefit from XP?
 - What are the minimum hardware requirements for XP?
 - What are the purchase and upgrade prices for XP?
 - Would you consider purchasing XP? Why or why not?
- Use your browser to visit the site www.cnet.com. Review an article that compares Mac OS with the most current Windows operating environment. Which operating system did CNET conclude is the best one? Do you agree or disagree with its conclusion? Explain why.
 - What is the primary objective of this tutorial?
 - What is a dual-boot system, and what are the advantages and disadvantages of creating one? Why would or wouldn't you create a dual-boot system?
 - What is another name for the "root" user, and what is the purpose of having one?
 - What is the command to change your password?
 - What is the command to go to the home directory, and what is the command to see what is located in it?
 - What type of files are located in the `bin`, `etc`, and `usr` directories?
 - Spend some time exploring the remainder of the tutorial. Do you feel that the tutorial met its primary objective? Explain why you would or would not install a UNIX system.

Go to www.prenhall.com/cayf2005 to review this chapter, answer the questions, and complete the exercises.

EXPLORE IT LABS present you with an interactive look into the world of computer concepts. These labs bring challenging topics in computer concepts to life through interactivity and assess your knowledge via a Quiz section, which can be e-mailed, saved to disk, or printed.

Multimedia Prentice Hall

Introduction explore quiz

The object of this interaction is to try and guess the situation these people are about to face. After each choice, a new layer of media will be added.

"I can't believe this is happening to us "



- Sad Couple
- Happy Couple


Navigation icons: back, forward, search, close, home

Multimedia Prentice Hall

Introduction explore quiz

MULTIMEDIA

Multimedia generally means using some combination of text, graphics, animation, video, music, voice, and sound effects to communicate. When you watch a TV program, you're viewing a multimedia product. Today, most computers are capable of both viewing and creating multimedia presentations, something that you will do right now! Let's look at the next section to see how layering different forms of media complements the meaning and the intent of the author.



Navigation icons: back, forward, search, close, home

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