

LEARNING MADE EASY



6th Edition

Computers

FOR SENIORS

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computer and go online

Shop, bank, email, and
share photos online safely

Updated to reflect the
newest technology

Faithe Wempen, MA

Computer Technology Instructor



Computers For Seniors

6th Edition

by Faithe Wempen, MA

for
dummies[®]
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Computers For Seniors For Dummies®, 6th Edition

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Introduction

Computers for consumers have come a long way in just 40 years or so. They're now at the heart of the way many people communicate, shop, and learn. They provide useful tools for tracking information, organizing finances, and being creative.

During the rapid growth of the personal computer, you might have been too busy to jump in and learn the ropes, but you now realize how useful and fun working with a computer can be. In fact, for seniors, the computer opens up a world of activities and contacts they never had before.

This book can help you get going with computers quickly and painlessly.

About This Book

This book is specifically written for mature people like you — folks who are relatively new to using a computer and want to discover the basics of buying a computer, working with software, and getting on the Internet. In writing this book, I've tried to take into account the types of activities that might interest a 55-plus-year-old who's discovering the full potential of computers for the first time.

Foolish Assumptions

This book is organized by sets of tasks. These tasks start from the very beginning, assuming you know little about computers, and guiding you through the most basic steps in easy-to-understand language. Because I assume you're new to computers, the book provides explanations or definitions of technical terms to help you out.

All computers are run by software called an *operating system*, such as Windows, macOS, or Linux. Because Microsoft Windows-based personal computers (PCs) are the most common type of computer,

I am assuming that you have a desktop or laptop PC running Windows. Windows 11 is the latest version, but many people still use Windows 10, so I cover both in this book. There are also various types of mobile computers available, such as tablets and smartphones, but this book doesn't cover them.

Windows is updated periodically, and each time there are minor feature changes. This book is based on the late 2021 versions of Windows 10 and Windows 11. You may encounter minor differences between what you see onscreen and what you read about in this book, but they should not prevent you from getting things done.

Icons Used in This Book

Sometimes, the fastest way to go through a book is to look at the pictures — in this case, icons that draw your attention to specific types of useful information. I use these icons in this book:



WARNING

The Warning icon points to something that can prevent or cause problems.



REMEMBER

The Remember icon points out helpful information. (Everything in this book is helpful, but this stuff is even *more* helpful.)



TIP

The Tip icon points out a hint or trick for saving time and effort or something that makes Outlook easier to understand.



TECHNICAL
STUFF

The Technical Stuff icon marks background information you can skip, although it may make good conversation at a really dull party.

Beyond the Book

In addition to the material in the print or e-book you're reading right now, this product also comes with some access-anywhere goodies on the web. Check out the free Cheat Sheet for a checklist for buying a computer, computer care and maintenance tips, and Windows key-stroke shortcuts. To get this Cheat Sheet, simply go to www.dummies.com and type **Computers For Seniors For Dummies Cheat Sheet** in the Search box.

Where to Go from Here

Whether you need to start from square one and buy yourself a computer or you're ready to just start enjoying the tools and toys your current computer makes available, it's time to get going, get online, and get computer savvy.

1

Get Going!

IN THIS PART . . .

Buying a computer

Finding your way around Windows

Buying and setting up a printer

IN THIS CHAPTER

- » Seeing what you can do with computers
- » Getting an overview of hardware
- » Understanding the roles of input and output devices
- » Appreciating operating systems and applications
- » Deciding on a personal computer type
- » Comparing display types
- » Evaluating your storage options
- » Considering your Internet options
- » Shopping for your ideal PC

Chapter 1

Buying a Computer

If you've never owned a computer and now face purchasing one for the first time, deciding what to get can be a somewhat daunting experience. There are lots of technical terms to figure out and various pieces of **hardware** (the physical pieces of your computer such as the monitor and keyboard) and **software** (the brains of the computer that help you create documents and play games, for example) that you need to understand.

In this chapter, I introduce you to the world of activities your new computer makes available to you, and I provide the information you need to choose just the right computer for you.

Remember as you read through this chapter that figuring out what you want to do with your computer is an important step in determining which computer you should buy. You have to consider how much money you want to spend, how you'll connect your computer to the Internet, and how much power and performance you need from your computer.

What Can You Can Do with a Computer?

Perhaps your friends and family have been telling you that you need a computer, but have they explained why? Today's computers can do some pretty amazing things. Not only can they connect you to the wide world of the Internet, but they can run applications that let you store and organize photos, write your memoirs, make your own greeting cards, play all kinds of games, track your investments, and so much more.

The following list walks you through some of the things a computer will enable you to do. Depending on what activities are important to you, you can make a more-informed purchasing choice.

» **Keep in touch with friends and family.** The Internet makes it possible to communicate with other people via email; share video images using built-in video recorders or webcams (tiny video cameras that capture and send your image to another computer); and make phone and video calls using your computer and Internet connection to place calls with services such as Zoom and Skype. You can also chat with others by typing messages and sending them through your computer using a technology called **instant messaging** (IM). These messages are exchanged in real time, so that you and your grandchild, for example, can see and reply to text or share images immediately. Part 3 of this book explains these topics in more detail.

- » **Research any topic from the comfort of your home.** Online, you can find many reputable websites that help you get information on anything from expert medical advice to the best travel deals. You can read news from around the corner or around the world. You can visit government websites to get information about your taxes and Social Security benefits, and go to entertainment sites to look up your local television listings or movie reviews.
- » **Create greeting cards, letters, or home inventories.** Whether you're organizing your holiday card list, tracking sales for your home business, or figuring out a monthly budget, computer programs can help. For example, Figure 1-1 shows a graph that the Excel application created from data in a spreadsheet.
- » **Pursue hobbies such as genealogy or sports.** You can research your favorite team online or connect with people who have the same interests. The online world is full of special-interest discussion groups where you can talk about a wide variety of topics with others.
- » **Play interactive games with others over the Internet.** You can play everything from shuffleboard to poker and even participate in action games in virtual worlds. Love backgammon? Got you covered. Online bridge league? There are hundreds. Any game that you love offline, you can play online. You can play games with the computer, with total strangers, or (my favorite) with family and friends.
- » **Share and create photos, drawings, and videos.** If you have a digital camera or smartphone, you can transfer photos to your computer (called *uploading*) or copy photos off the Internet (if their copyright permits it) and share them in emails or use them to create your own greeting cards. If you're artistically inclined, you can create digital drawings. Many popular websites make sharing your homemade videos easy, too. If you have a digital video camera or smartphone and editing software, you can use editing tools to make a movie and share it with others via video-sharing sites such as YouTube or by email. Steven Spielberg, look out!

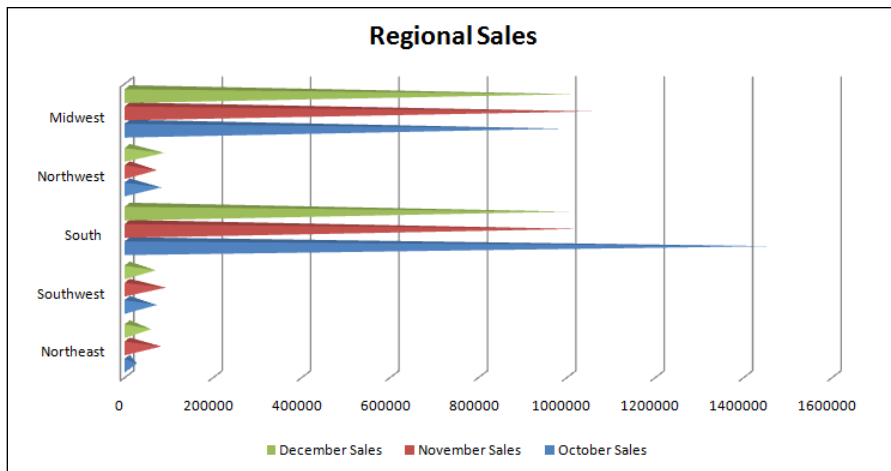


FIGURE 1-1

» **Shop online and compare products easily, day or night.** You can shop for anything from a garden shed to travel deals or a new camera. Using handy shopping site features, you can easily compare prices from several stores or read customer product reviews. Many websites, such as pricegrabber.com, list product prices from a variety of vendors on one web page, so you can find the best deals. Beyond the convenience, all this information can help you save money.

» **Manage your financial life.** You can do your banking or investing online and get up-to-the-minute data about your bank account, credit card balances, and investments. For example, Figure 1-2 shows Quicken, an application that enables you to track and view all your bank accounts and investments in one place.

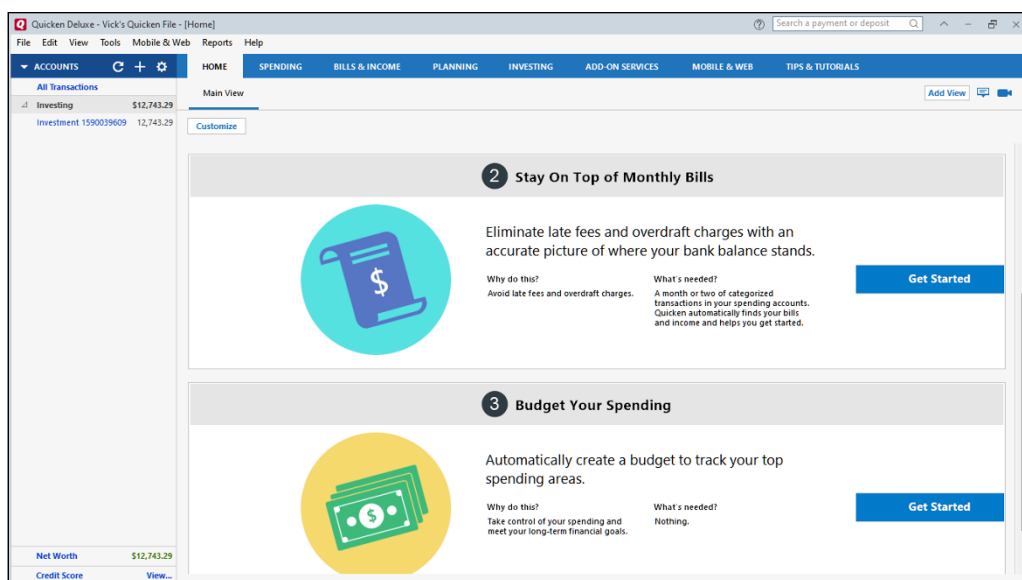


FIGURE 1-2

Get Up to Speed on Hardware

Your computing experience consists of interactions with hardware and software. I will explain both of those things, but let's start with hardware. The *hardware* is all the tangible computer equipment — the parts you can see and touch.



REMEMBER

You should know a little something about computer hardware before you buy your first computer because the various components are available in a variety of quality and performance levels, and the component choices affect both a computer's price and its suitability for certain tasks.



WARNING

It's not always a good value to buy a top-of-the-line computer. In fact, unless you want to do something really specific and high-end, like professional graphic arts or movie production, high-end computers aren't usually worth the price. If all you want to do is write letters, share photos, and surf the Internet, don't waste your money. Get a moderately priced model that has the components you need.

In this and the next few sections, I break down the major hardware components you need to be aware of and explain how they affect your computing experience. When shopping for a computer, you'll see many different models with different amounts, speeds, and quality levels of the essential internal parts. The best internal parts cost more money, but offer better performance and perhaps will become obsolete less quickly.

All computers consist of some type of metal-framed case. Within the case is a collection of parts that make the computer work its magic for you. All those internal parts are connected together by a large circuit board inside the case called a **motherboard**. There are three main functions of the internal components:



TIP

» **Processing:** The computer's ability to receive input, perform an operation on it, and deliver output. The component in charge of processing is the **central processing unit (CPU)**. It's a small, very high-tech semiconductor chip mounted on the motherboard. Some people call the entire computer case the CPU, but that's not accurate.

CPU speed is rated in billions of hertz (**gigahertz**). The higher the GHz, the faster the processor. Generally speaking, the faster your CPU, the faster most applications run. That's not always true, though, because other components can cause bottlenecks, like slow Internet speeds, that can make a computer seem slow when its processor is just fine. The speed and features of the CPU make a big difference in the price of the computer.

There are lots of highly technical features that distinguish one CPU from another, but you don't need to worry about those for the most part; they're mostly of interest to people who are a lot geekier than you. For a basic home computer any of the CPUs available in new PCs today will be fine.

» **Memory:** The computer's ability to juggle the digital data that is active while the computer is running. Another name for memory is **random access memory (RAM)**. Its capacity is measured in billions of bytes (**gigabytes**). A **byte** is a group of eight binary digits (**bits**).



REMEMBER

The more RAM a computer has, the more things it can do simultaneously. For example, a computer with a lot of RAM can run several complicated applications at once without bogging down. More RAM is better, but can also drive up the price of the system. The absolute minimum amount of RAM I would consider in a new PC is 8 gigabytes (GB). By the time you read this, though, the minimum might be higher — perhaps 16 GB.

» **Storage:** The computer's ability to keep a lot of data and many applications permanently on hand, ready to be copied into memory and used at a moment's notice. Every computer has at least one permanent storage component inside its case, known generically as a **hard drive** (or hard disk drive).

There's a PC for every budget and every set of needs — with prices to match. Before making your PC purchase, you need to think about how you'll use the computer and what specs it should have in order to enable you to do all the things you want to do with it.



TIP

Unless you are a big-time gamer who is super-serious about kicking butt in some graphics-intensive game, or you are a filmmaker or a professional artist, any modern CPU should be fine for your needs. Don't spend a lot of money on the fastest CPU available. Most people won't notice the difference.



TIP

For the average home PC user, a far greater performance enhancer is the amount of RAM (memory) in the computer. The more RAM, the better. So if your budget allows you to have a fabulous CPU or a greater amount of RAM, definitely go with the RAM.



REMEMBER

A hard drive's capacity is measured in gigabytes (billions of bytes) or terabytes (trillions of bytes). More capacity costs more. The more storage you have, the more applications can be installed on your computer, and the more data you can save (photos, documents, videos, and so on).

Hard drives can also use different technologies, which offer different data access speeds. Traditional hard drives (often referred to as **hard disk drives**, or HDDs) use a mechanical and magnetic storage system; they are slower and cost less for the same amount of capacity. **Solid-state drives** (SSDs) use storage media that is technologically similar to RAM, and they are faster, quieter, more reliable, cooler, and more expensive.



UNDERSTANDING HOW COMPUTERS STORE AND USE DATA

Computers store all data and programs digitally — in other words, using digits. At their most basic level, computers employ only two digits: 0 and 1. A number system with just those two digits is called a **binary** system. Each individual stored digit is called a **bit** (which is short for binary digit).

Computers work with binary data in a variety of different ways. For example, memory chips like RAM hold data using capacitors that can either store or not store a tiny electrical charge. A stored charge is a 1, and a lack of stored charge is a 0. Data is stored in memory using patterns of charge/no charge. This type of data storage is called **solid state** because there are no moving parts.

Solid-state storage can be either temporary (**dynamic**) or permanent (**static**). For example, the main RAM in a computer system is dynamic RAM, which is only temporary storage. The data stays in dynamic RAM only as long as the computer remains powered up. The instant it loses power, all the capacitors revert back to 0 (no charge). Dynamic RAM serves as a temporary work area for the computer whenever it is powered up. In contrast, solid-state drives store data in capacitors that don't lose their charge when the power goes out.

There are other ways that some older kinds of permanent computer storage holds its data. For example, hard disk drives store data magnetically, in patterns of positive and negative magnetic polarity. Optical discs such as CDs and DVDs store data in patterns of greater and lesser reflectivity on a shiny surface.

Input Devices: Putting Stuff In

Any computer system must provide at least one way for you to convey your wishes — in other words, to provide **input**. Almost all computers today offer at least two methods of accepting input: a keyboard and some type of pointing device.



REMEMBER

» A **keyboard** is similar to a typewriter keyboard. In addition to typing text, you can press certain key combinations to quickly issue commands for common activities such as selecting, copying, and pasting text.

All personal computers come with a keyboard. A desktop computer may have a detachable keyboard that you can replace with a different model if you want. There are some spiffy third-party keyboards you can get nowadays that have extra features and are designed to be more comfortable to use. A laptop keyboard is built-in, and you can't swap it out for a different one. (You can, however, connect a second, external keyboard to a laptop and use it instead of the built-in one.)

» A **pointing device** is a device that moves an on-screen **pointer** (usually shaped like an arrow). A pointer enables you to point at what you want and then select it by pressing a button on the pointing device. The three most popular types of pointing devices are:

- **Mouse:** A mouse is a little device about the size and shape of a bar of bath soap, with an LED and optical sensor on its underside. You slide the mouse across a flat surface with your hand, and that moves the pointer around onscreen. A mouse can be either wired (that is, have a cord that attaches to the computer) or wireless, operating via radio frequency (RF) signals.
- **Trackball:** A trackball is like an upside-down mouse. It has a stationary base with a ball on top, and you roll the ball with your fingers to move the onscreen pointer.

- **Touchpad:** On a laptop PC, a touch-sensitive rectangular pad in front of the keyboard serves as a pointing device. You move your finger across the touchpad to move the onscreen pointer, and tap the touchpad to select things. Figure 1-3 shows a touchpad.



FIGURE 1-3



REMEMBER

All computers come with either a mouse (on a desktop PC) or a touchpad (on a laptop). You can buy third-party pointing devices that you might like better than the default ones you get with your computer.

There are many specialty pointing devices available. Some monitors have touchscreen capabilities; if you have one of these, you can move your finger across the monitor screen to move the pointer or select things, like you might do on a touchpad.

Output Devices: Getting Stuff Out

It would be a pretty one-sided and unsatisfying experience if you never got anything back from your computer, right? The most common way a computer provides feedback is through the **display** screen.

The **display** is the graphical panel where you see the operating system interface, the applications you run, the websites you visit, and the data files you create, such as documents, spreadsheets, and messages. When a display is a separate unit from the computer, it's often referred to as a **monitor**.

A **printer** is another popular output device. A printer turns onscreen data to a paper copy that you can share with others. Chapter 6 covers printers in detail.

Yet another output device is a **speaker** (or a set of speakers). A computer speaker works basically the same way the speaker on your stereo system works — it enables you to hear the sound effects your computer generates as it operates, such as dings and beeps that accompany error messages. It also enables you to listen to music and watch videos that include sound using your computer. Chapter 18 explains how to play music on your computer.

What Is Software?

Software is what makes computer hardware work and lets you get things done, such as writing documents with Microsoft Word or playing a game of solitaire. A computer uses two types of software: operating systems and applications.

All computers have an **operating system (OS)**, which is system software that starts up the computer and keeps it running as you use it. Examples for desktop and laptop computers include Microsoft Windows, macOS (for computers made by Apple), and Linux (a free operating system popular with techie-types). A lot of the upcoming chapters in this book explain how to interact with Microsoft Windows; I picked Windows to talk about in this book because it's the overwhelming favorite, with something like a 95 percent market share.

Mobile devices like tablets and smartphones have different operating systems. The most popular operating systems for mobile devices are iOS for Apple devices (iPhones and iPads) and Android for most other phones and tablets.

The operating system is responsible for the **graphical user interface (GUI)**, which is pronounced *gooey*). The pictures, text, menus, boxes, and other items you see on the computer's screen are all part of the GUI. It also handles various housekeeping tasks like saving and opening files, talking to the hardware on your behalf, and starting and exiting applications.

An **application** (sometimes called an app or a program) is software that does something that's directly useful or beneficial to the human using the computer. For example, Microsoft Word is an application that helps you write letters and other documents, and Microsoft Edge is a web browser application that helps you view web pages.

Each operating system comes with a few basic apps. For example, Microsoft Windows comes with a simple word processing program called WordPad, a simple drawing program called Paint, and a digital music player called Windows Media Player. Chapter 10 showcases several of these built-in Windows apps.

An operating system also comes with **utilities**, which are applications designed to perform tasks that keep your computer in top shape. For example, antivirus apps protect your computer from viruses (covered in Chapter 20) and Windows Update keeps Windows current.



TIP

You can actually do quite a bit with just the free apps that come with Windows (which I cover in Chapter 10), but if you ever want more, “more” is certainly available. For example, Microsoft Office is a suite of professional-quality business applications that you can subscribe to for about \$100 a year, and use it on up to 5 computers. Chapter 8 covers applications in detail, and explains how to acquire, install, update, and remove them.



REMEMBER

Each app is written for one specific operating system; you can't mix and match them. However, most of the popular apps are available for multiple operating systems, so you just have to make sure you are getting the version of the app that is for your OS.