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Tools, Apps, Devices, and the Impact of Technology

Chapter 4

Programs and Apps



Objectives Overview

- Identify the general categories of programs and apps
- Describe how an operating system interacts with applications and hardware
- Differentiate among the ways you can acquire programs and apps
- Identify key features of productivity applications
- Identify the key features of graphics and multimedia applications

See Page 158
for Detailed Objectives

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Objectives Overview

Identify the uses of personal interest applications

Identify the purpose of software used in communications

Identify the key features of security tools

Identify the key features of file, disk, and system management tools

See Page 158
for Detailed Objectives

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Programs and Apps

- A **program**, or **software**, consists of a series of related instructions, organized for a common purpose, that tells the computer what tasks to perform and how to perform them
- An **application**, or **app**, sometimes called application software, consists of programs designed to make users more productive and/or assist them with personal tasks
- An operating system is a set of programs that coordinates all the activities among computer or mobile device hardware
  - Tools and activities
  - System software

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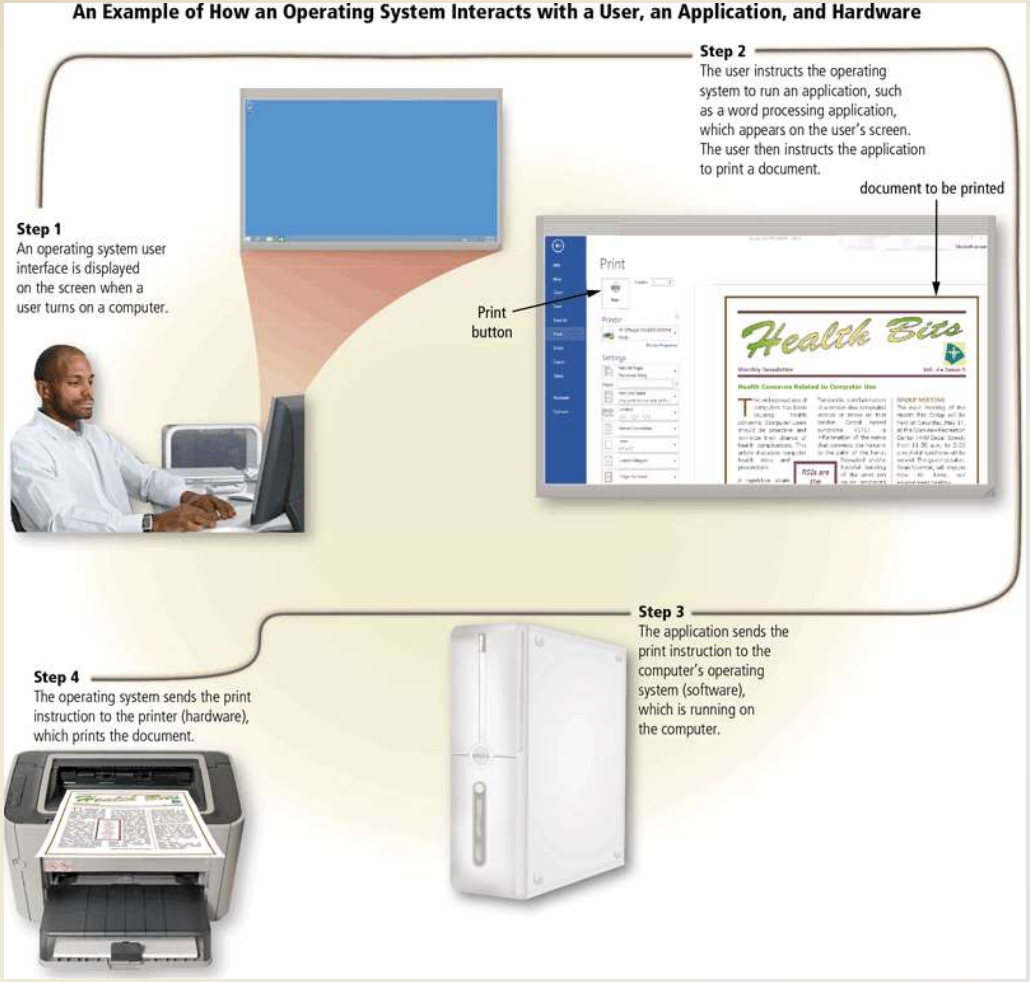
Programs and Apps



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Figure 4-1

Programs and Apps



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Figure 4-2

Programs and Apps

- Software is available in a variety of forms:



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Productivity Applications

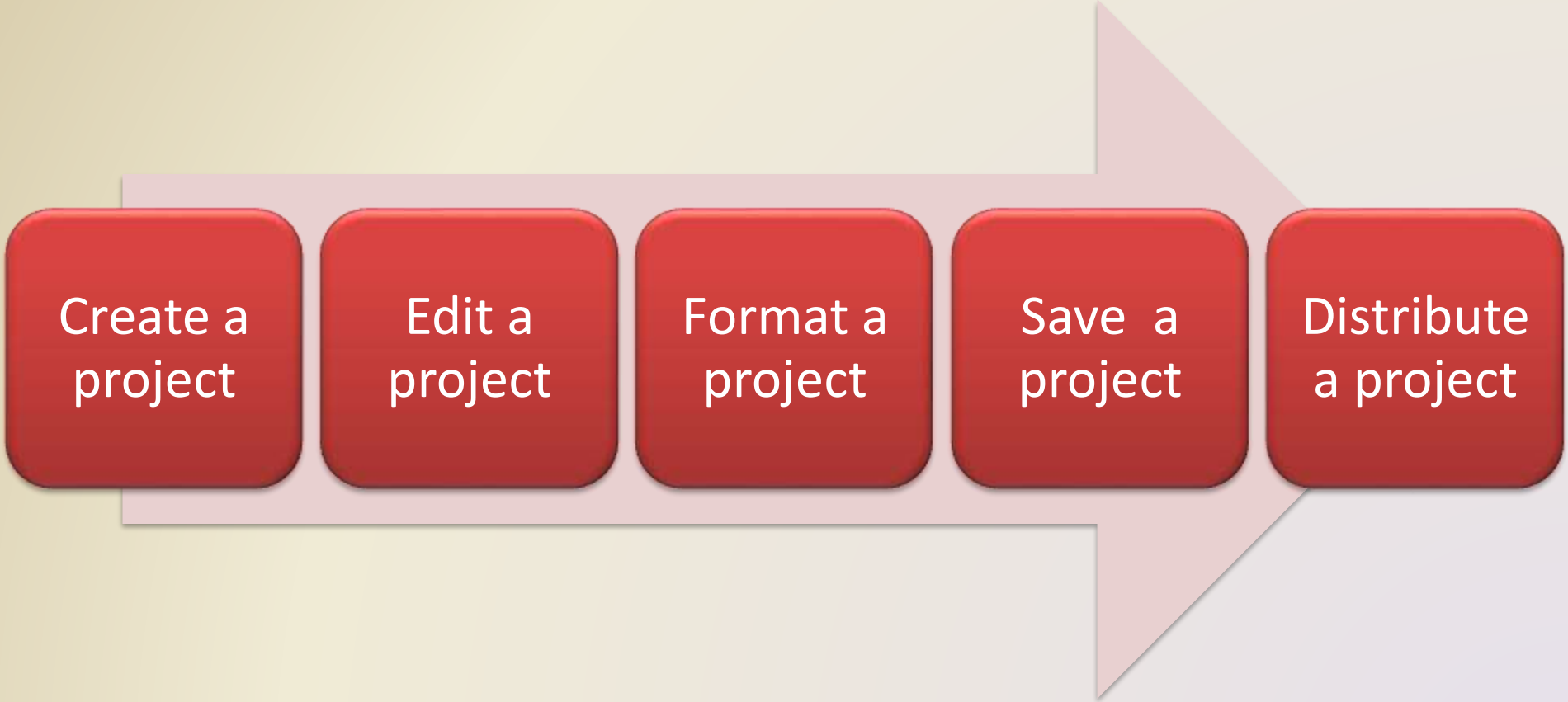
- Productivity applications can assist you in becoming more effective and efficient while performing daily activities at work, school, and home



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Productivity Applications

- With productivity applications, users often:

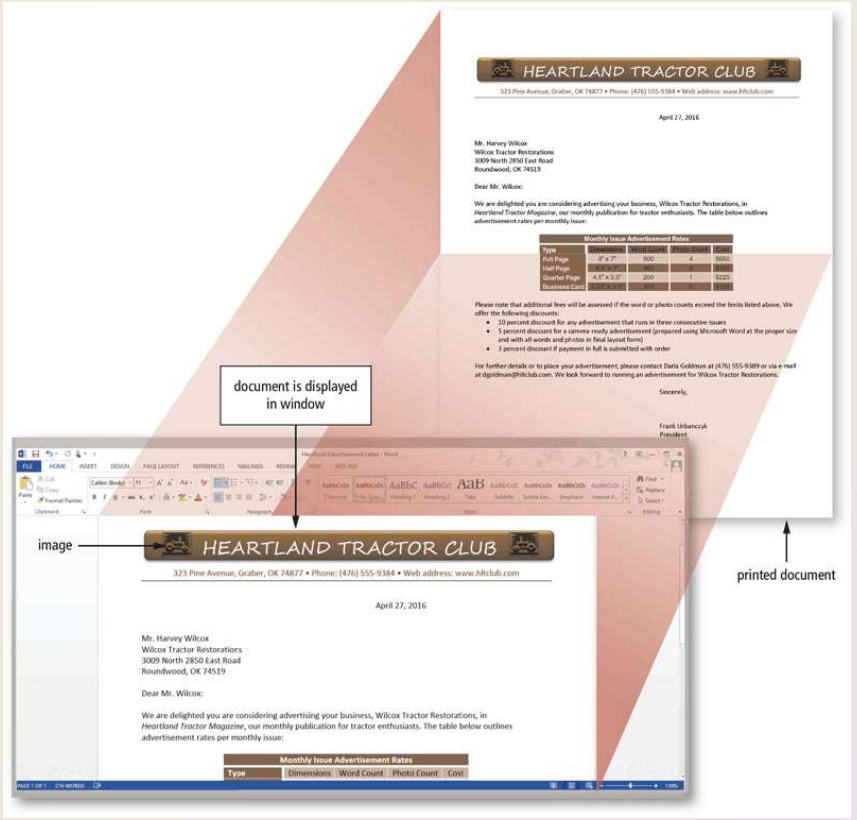


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Productivity Applications

- **Word processing software** allows users to create and manipulate documents
- A major advantage of using word processing software is that it enables users to change their written words easily

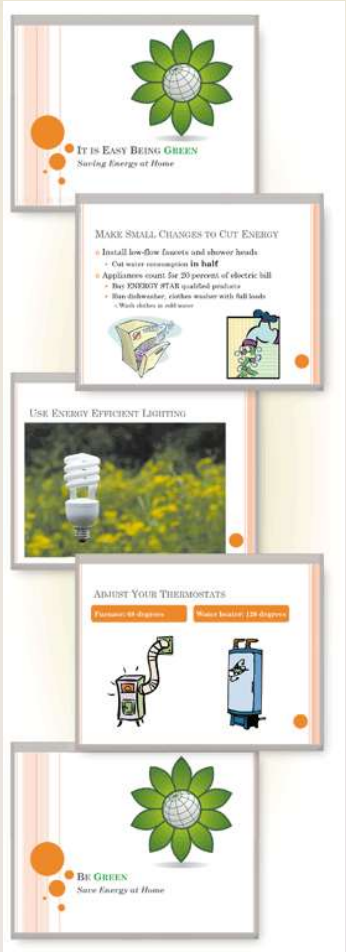


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Figure 4-5

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Productivity Applications

- **Presentation software** allows users to create visual aids for presentations to communicate ideas, messages, and other information to a group

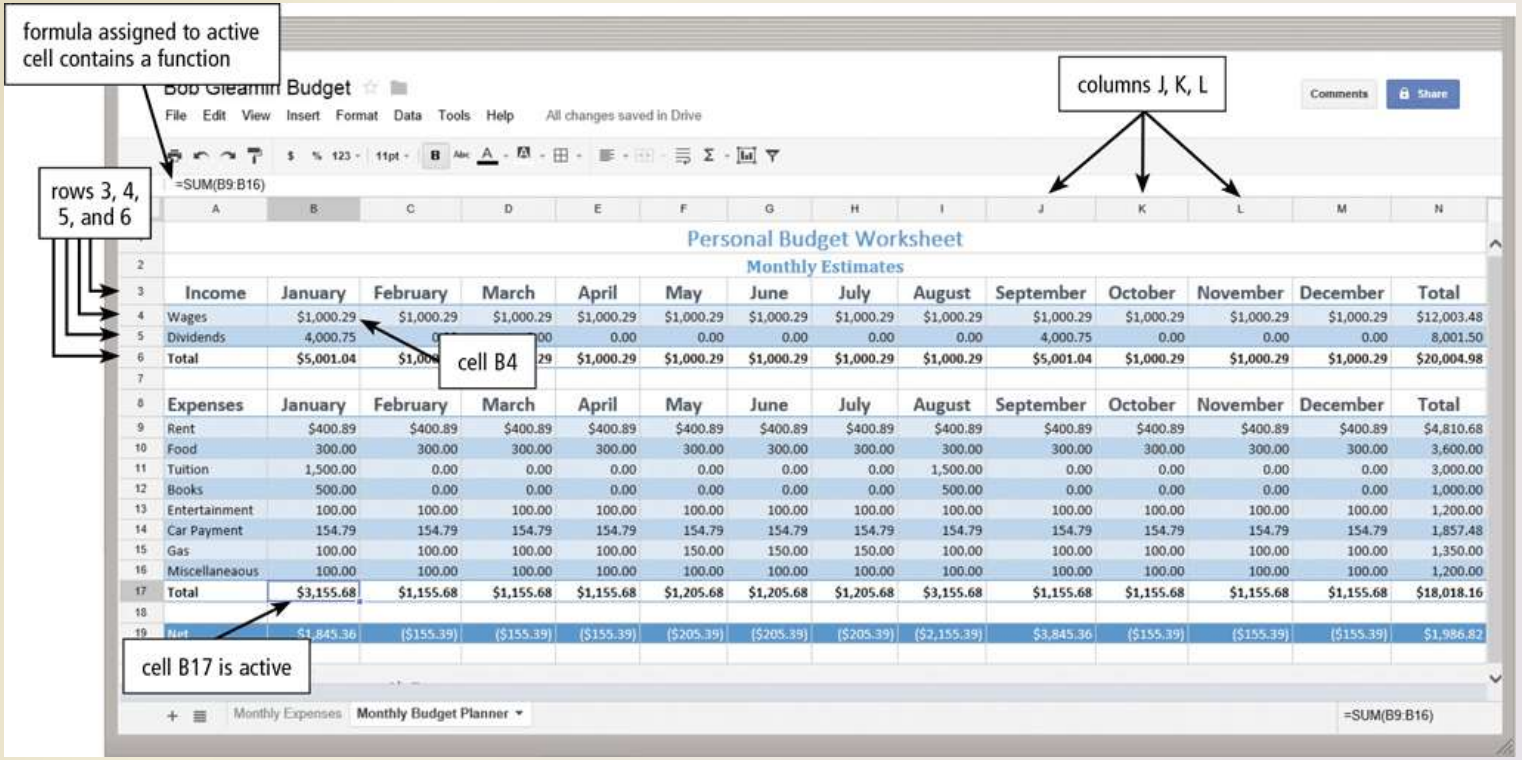


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Figure 4-6

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Productivity Applications

- **Spreadsheet software** allows users to organize data in columns and rows and perform calculations on the data

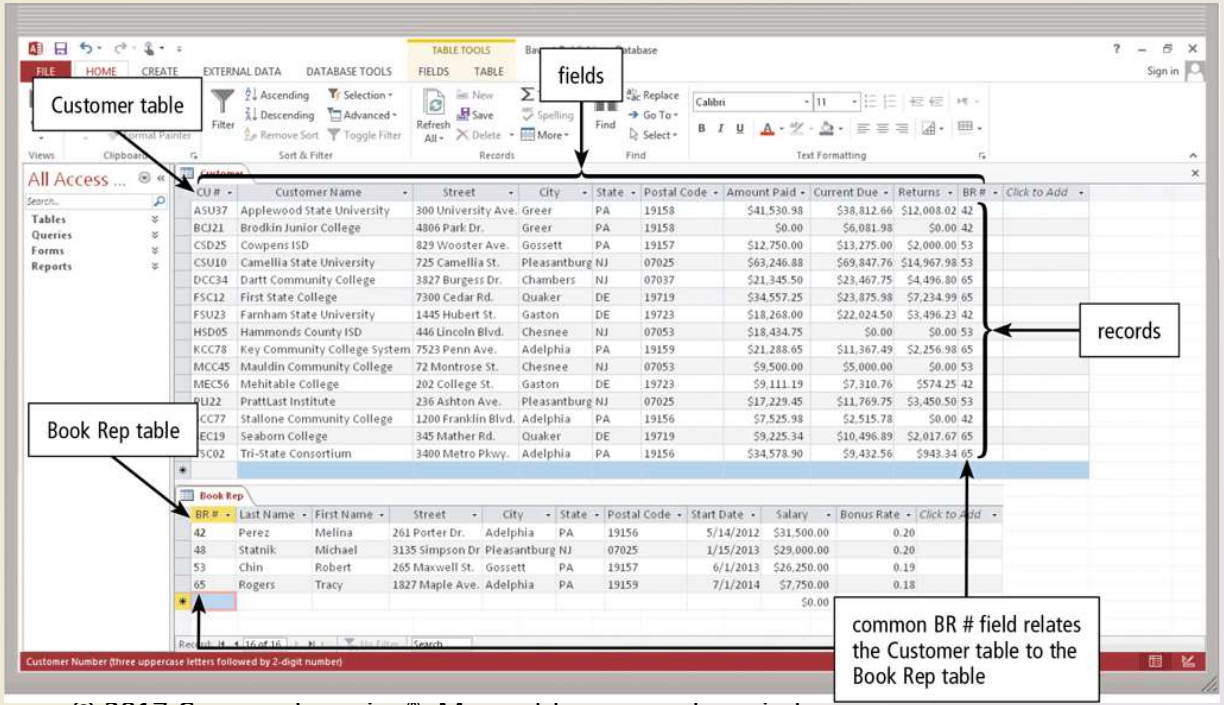


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Figure 4-7

Productivity Applications

- A **database** is a collection of data organized in a manner that allows access, retrieval, and use of that data
  - **Database software** allows users to create, access, and manage a database

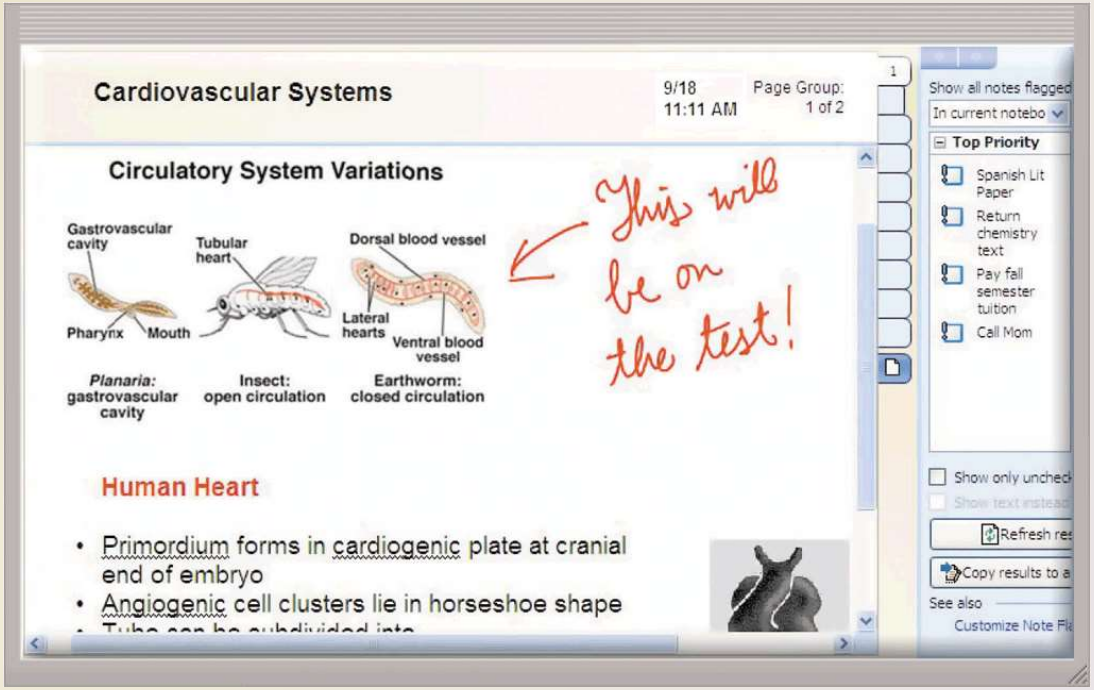


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Figure 4-8

Productivity Applications

- **Note taking software** is an application that enables users to enter typed text, handwritten comments, drawings, sketches, photos, and links anywhere on a page

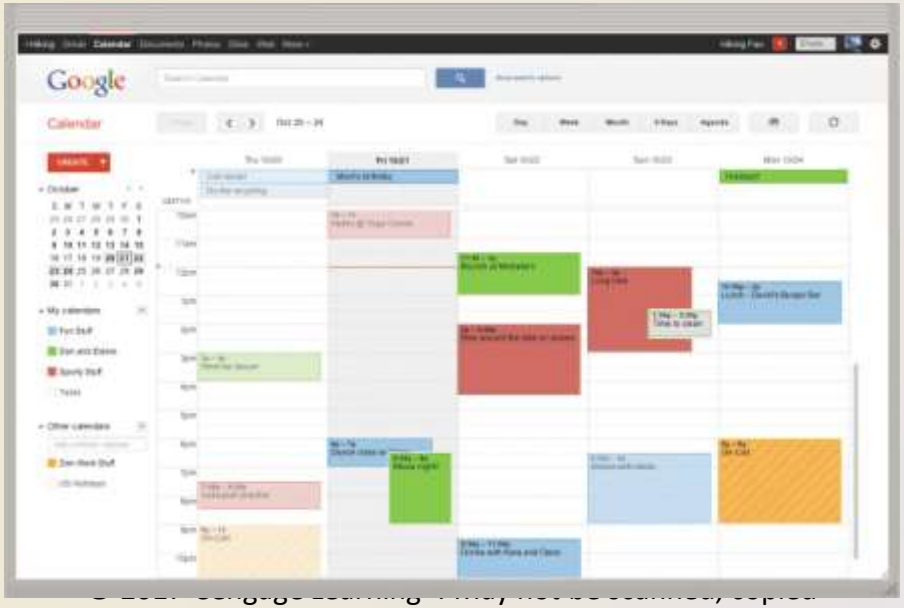


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Figure 4-9

Productivity Applications

- **Calendar and contact management software** is an application that helps you organize your calendar, keep track of contacts, and share this information with other users



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Figure 4-10

Productivity Applications

- A **software suite** is a collection of individual related applications available together as a unit
- **Project management software** is an application that allows a user to plan, schedule, track, and analyze the events, resources, and costs of a project

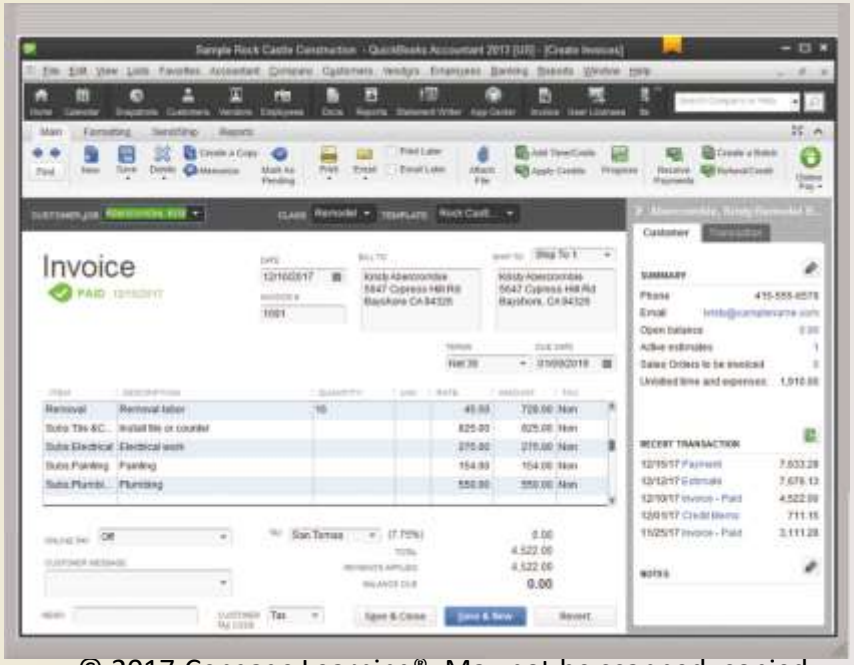


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Figure 4-11

Productivity Applications

- **Accounting software** is an application that helps businesses of all sizes record and report their financial transactions

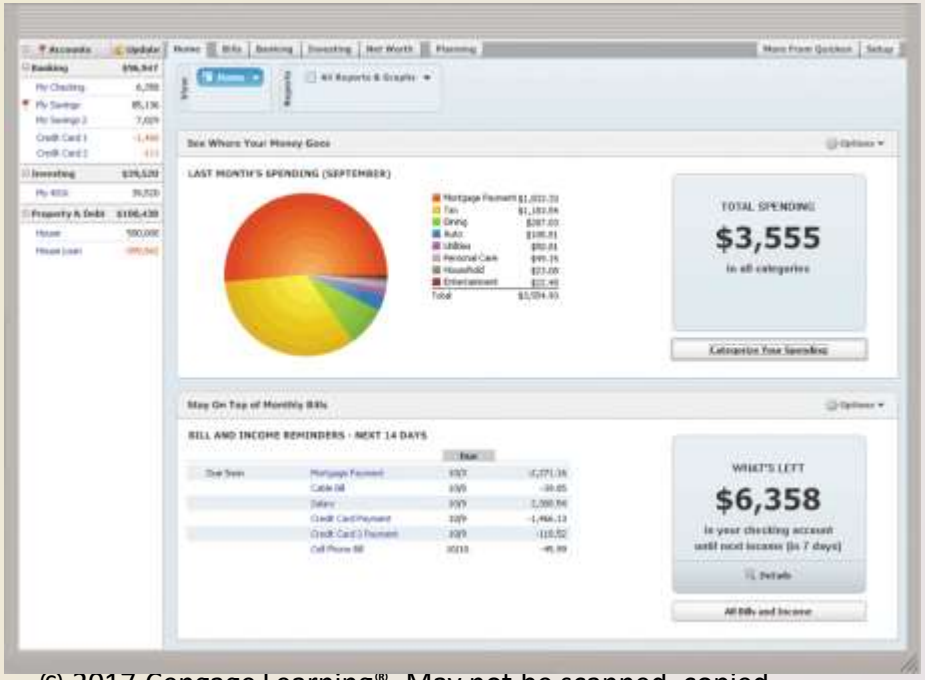


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Figure 4-12

Productivity Applications

- **Personal finance software** is a simplified accounting application that helps home users and small/home office users balance their checkbooks, pay bills, track personal income and expenses, verify account balances, transfer funds, track investments, and evaluate financial plans

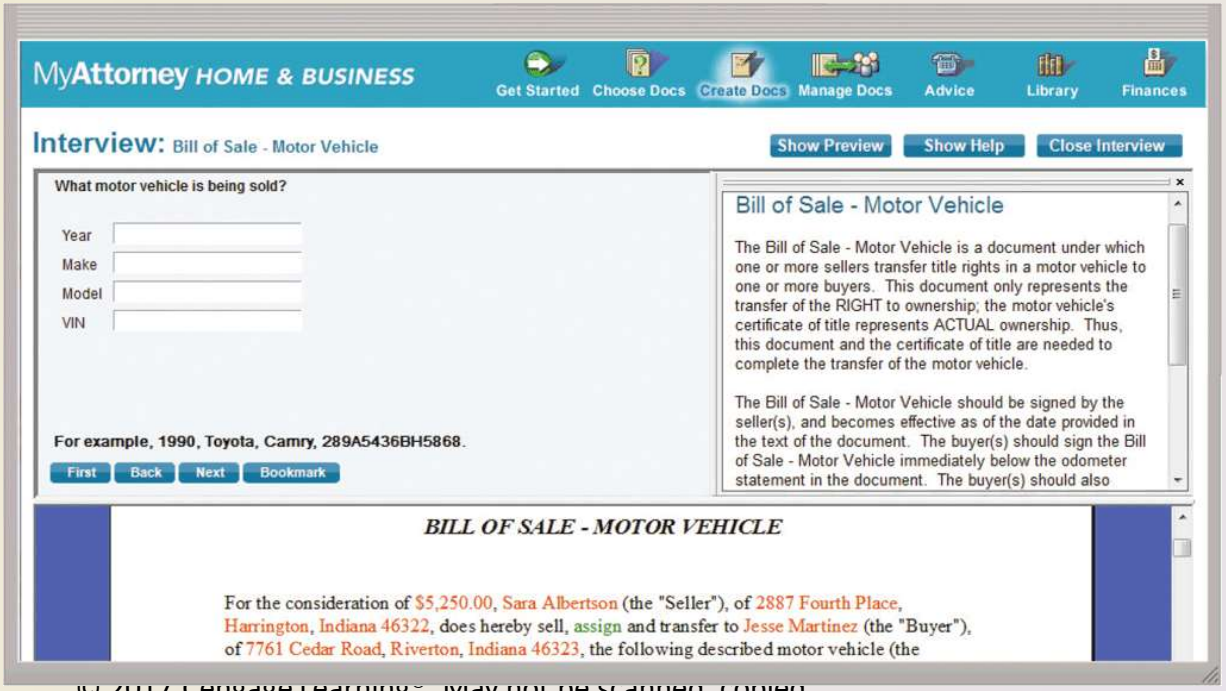


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Figure 4-13

Productivity Applications

- **Legal software** is an application that assists in the preparation of legal documents and provides legal information to individuals, families, and small businesses

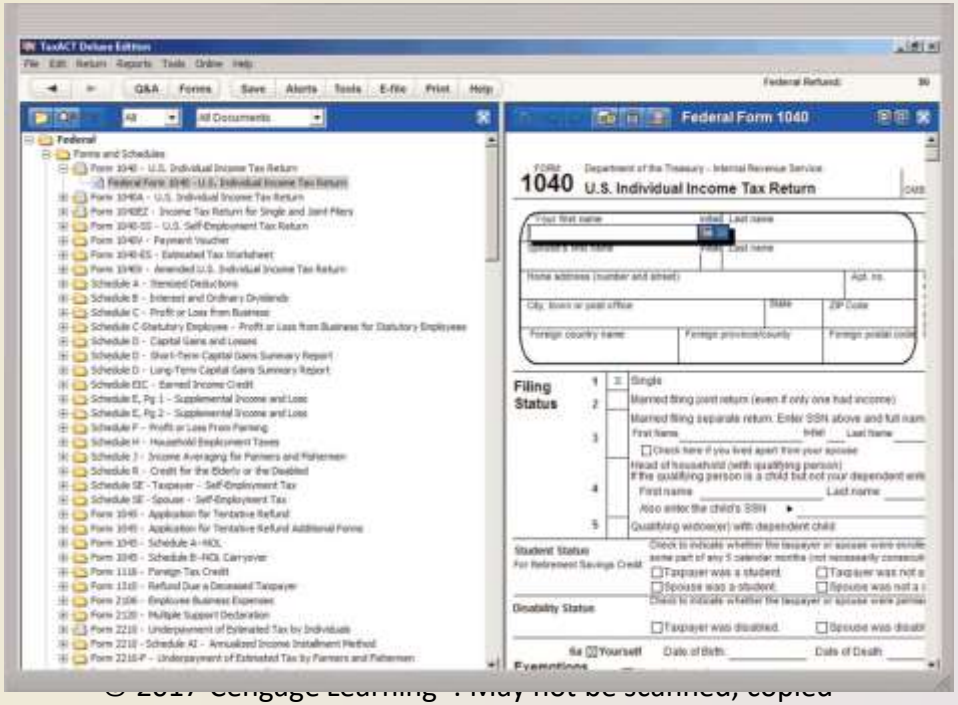


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Figure 4-14

Productivity Applications

- **Tax preparation software** is an application that can guide individuals, families, or small businesses through the process of filing federal and state taxes

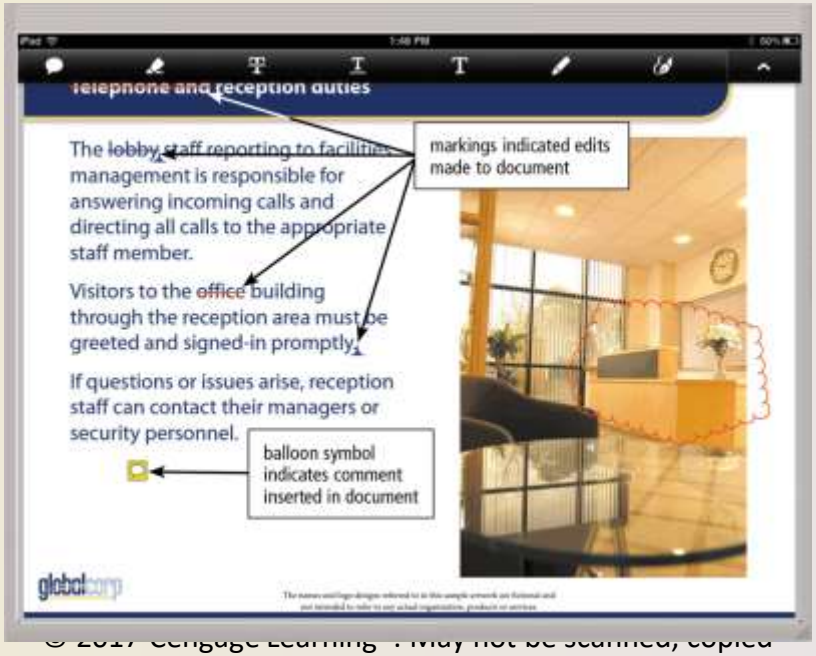


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Figure 4-15

Productivity Applications

- **Document management software** is an application that provides a means for sharing, distributing, and searching through documents by converting them into a format that can be viewed by any user

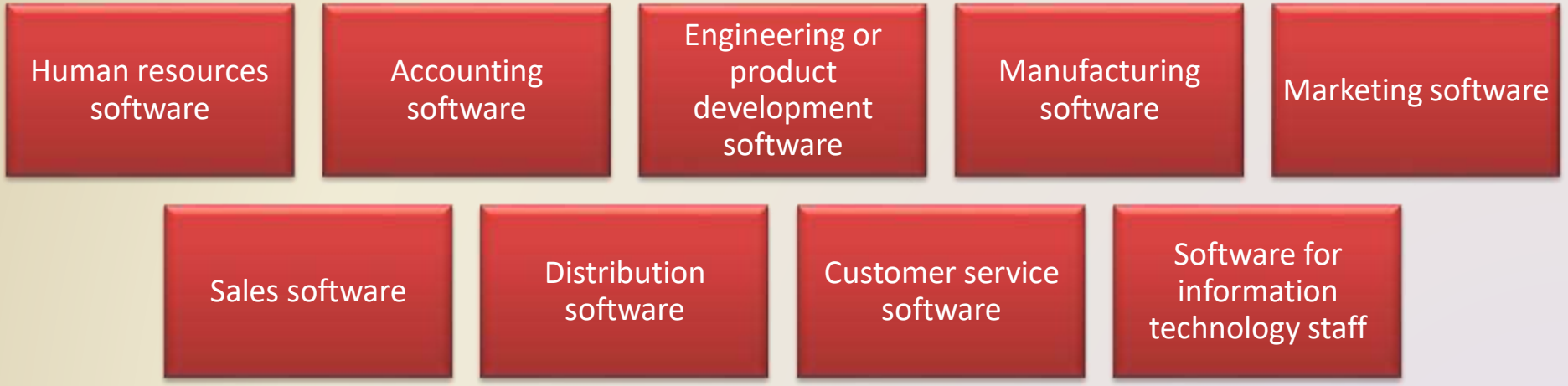


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Productivity Applications

- A large organization, commonly referred to as an enterprise, requires special computing solutions because of its size and geographic distribution



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Graphics and Media Software



Computer-aided design (CAD) software



Desktop publishing software



Paint/Image editing software

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Graphics and Media Software



Photo editing and **photo management software**



Video and **audio editing software**

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Graphics and Media Software

- **Multimedia authoring software** allows users to combine text, graphics, audio, video, and animation in an interactive application
- **Website authoring software** helps users of all skill levels create webpages that include graphics, video, audio, animation, and special effects with interactive content



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Figure 4-22

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Graphics and Media Software

- A **media player** is a program that allows you to view images and animations, listen to audio, and watch video files on your computer or mobile device
- **Disc burning software** writes text, graphics, audio, and video files on a recordable or rewritable disc



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Figure 4-23

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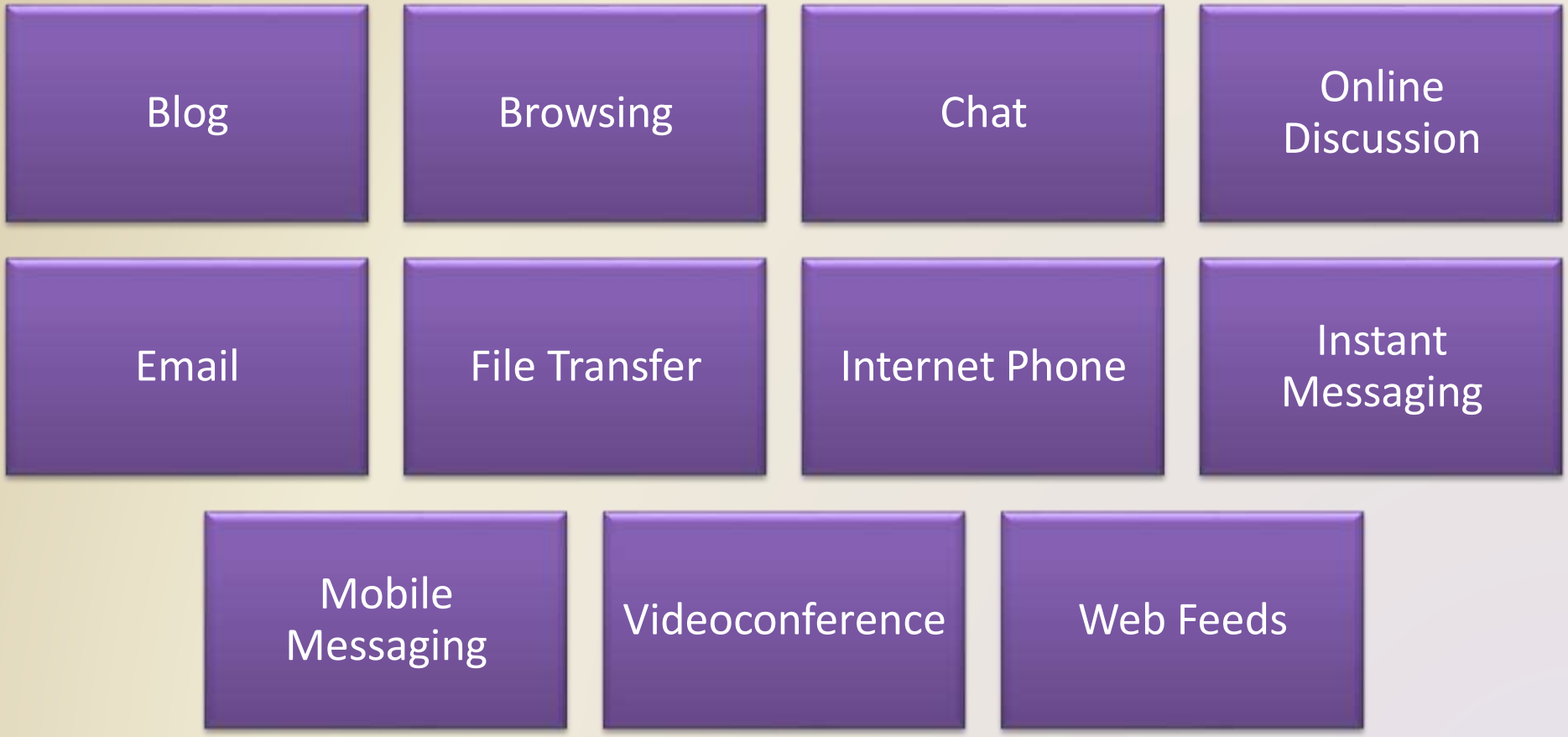
Personal Interest Applications

- Lifestyle applications
- Medical applications
- Entertainment applications
- Convenience applications
- Education applications

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Communications Applications



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Security Tools

- A **personal firewall** is a security tool that detects and protects a personal computer and its data from unauthorized intrusions

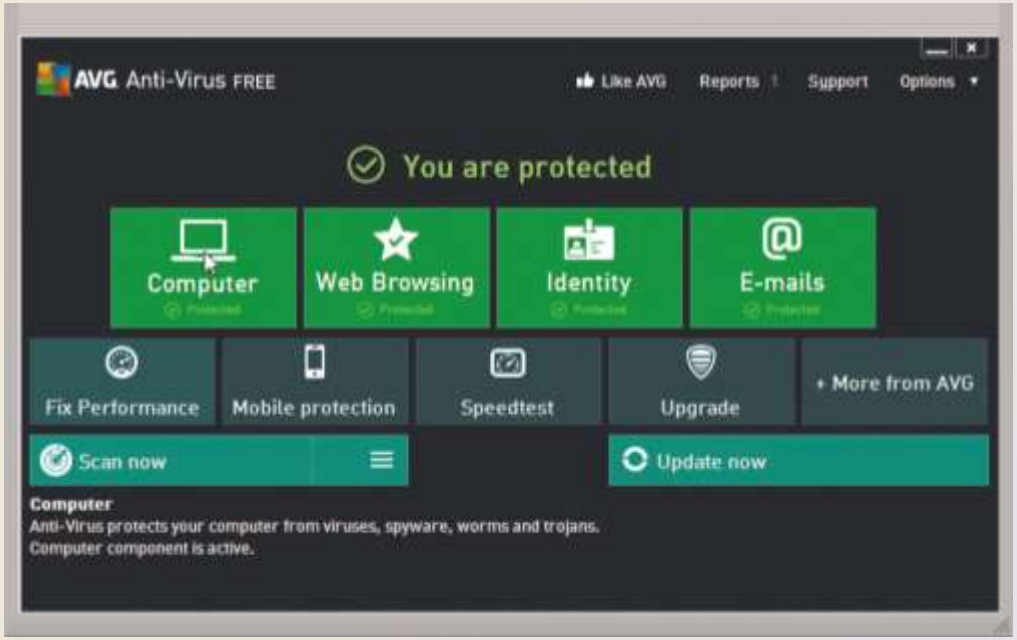


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Security Tools

- An **antivirus program** protects a computer against viruses by identifying and removing any computer viruses found in memory, on storage media, or on incoming files



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Figure 4-25

Security Tools

- Spyware is a type of program placed on a computer or mobile device without the user's knowledge that secretly collects information about the user and then communicates the information it collects to some outside source while the user is online
- Adware is a type of program that displays an online advertisement in a banner or pop-up or pop-under window on webpages, email messages, or other Internet services

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Security Tools

A **spyware remover** is a type of program that detects and deletes spyware and similar programs

An **adware remover** is a program that detects and deletes adware

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Security Tools

- Anti-spam programs
- Web filtering software
- Phishing filters
- Pop-up and pop-under blockers

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File, Disk, and System Management Tools

- A **file manager** is a tool that performs functions related to file management



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Figure 4-27

File, Disk, and System Management Tools

- A **search tool** is a program, usually included with an operating system, that attempts to locate a file, contact, calendar event, app, or any other item stored on your computer or mobile device based on criteria you specify

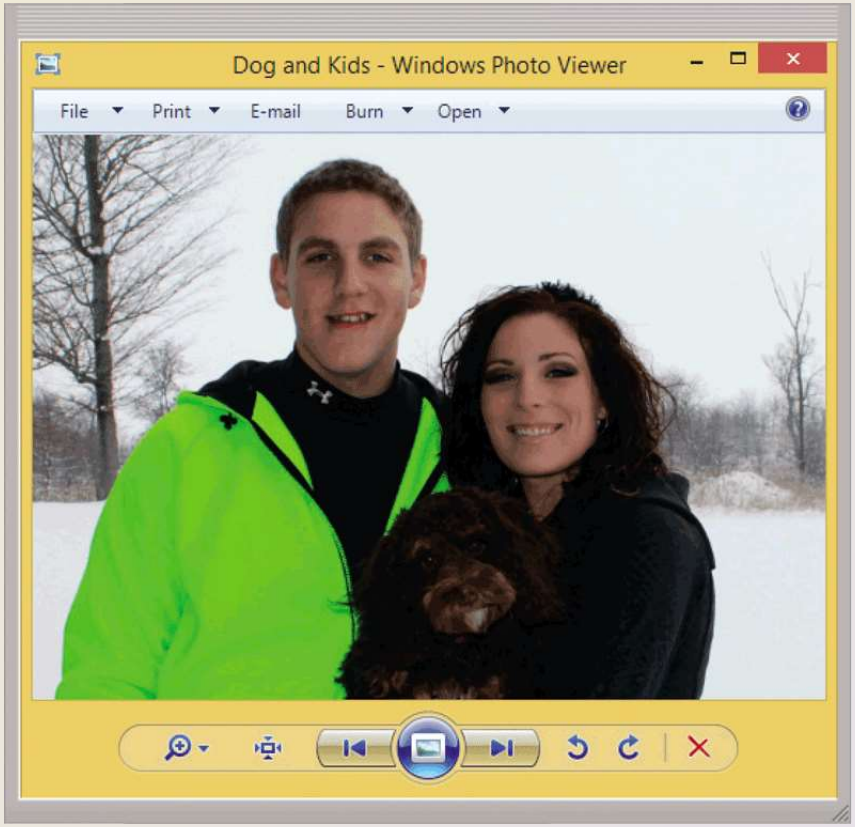


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File, Disk, and System Management Tools

- An **image viewer** is a tool that allows users to display, copy, and print the contents of a graphics file, such as a photo
- An **uninstaller** is a tool that removes a program, as well as any associated entries in the system files

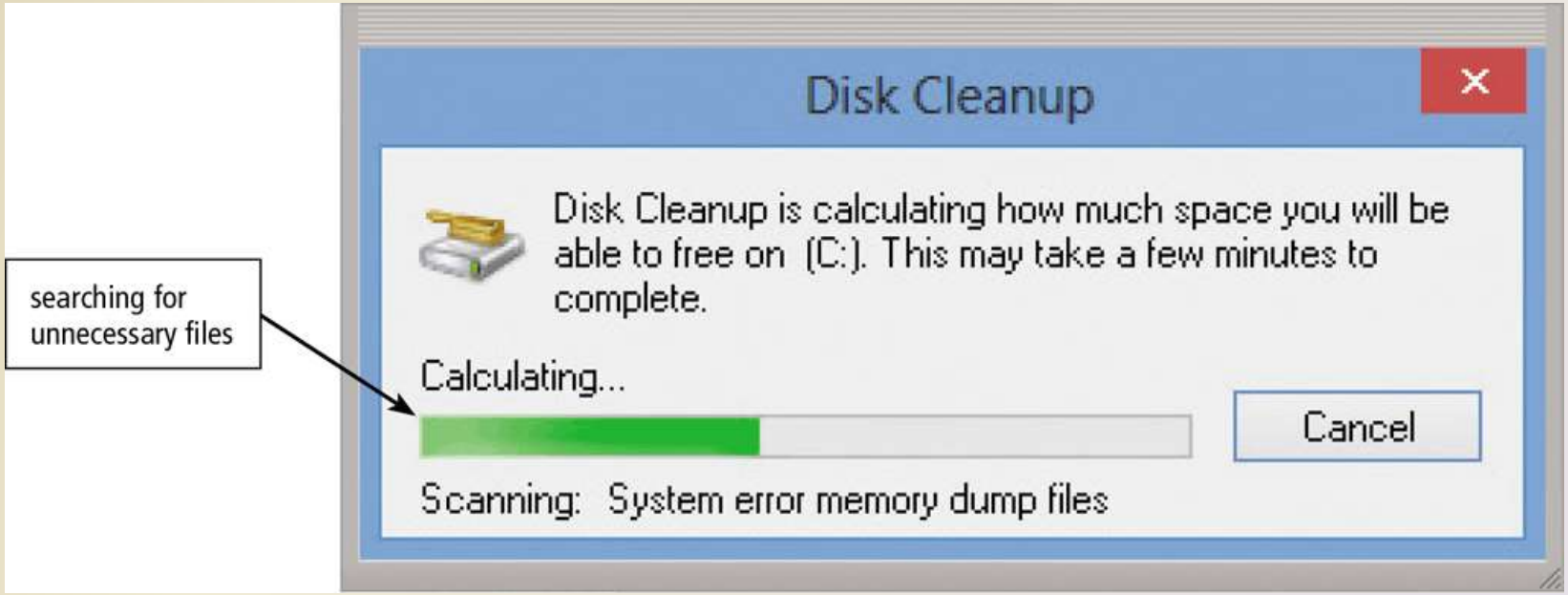


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File, Disk, and System Management Tools

- A **disk cleanup** tool searches for and removes unnecessary files

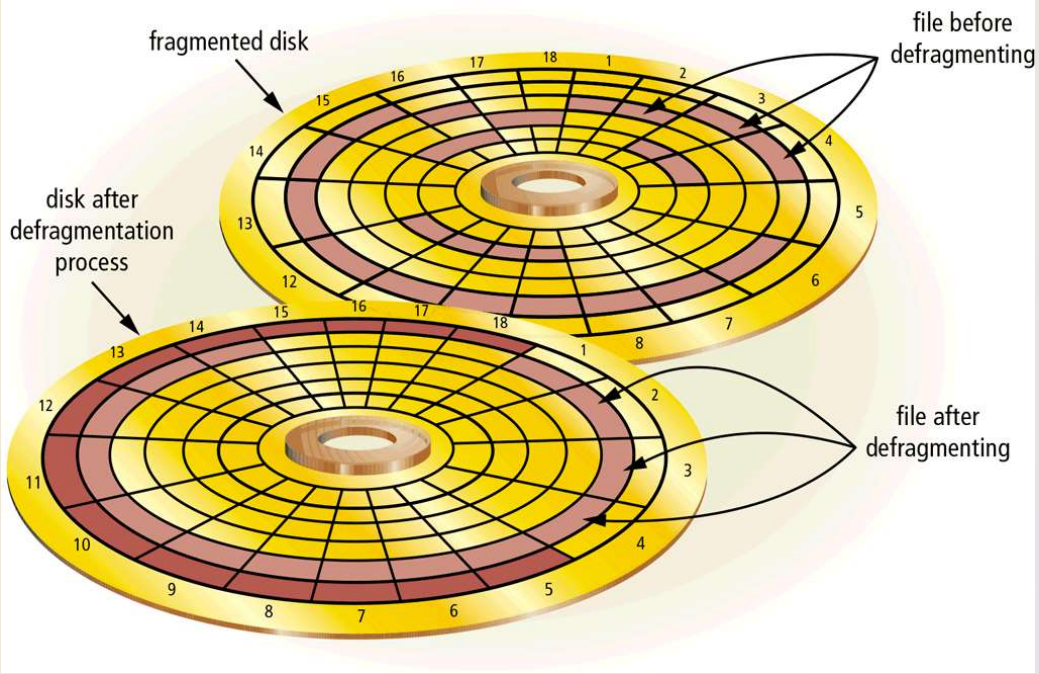


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File, Disk, and System Management Tools

- A **disk defragmenter** is a tool that reorganizes the files and unused space on a computer's hard disk so that the operating system accesses data more quickly and programs run faster
  - Defragmenting



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Figure 4-31

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File, Disk, and System Management Tools

A **screen saver** is a tool that causes a display device's screen to show a moving image or blank screen if no keyboard or mouse activity occurs for a specified time

A **file compression tool** shrinks the size of a file(s)

A **PC maintenance tool** is a program that identifies and fixes operating system problems, detects and repairs drive problems, and includes the capability of improving a computer's performance

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File, Disk, and System Management Tools

- A **backup tool** allows users to copy, or back up, selected files or the contents of an entire storage medium to another storage location
- A **restore tool** reverses the process and returns backed up files to their original form



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Summary

- Programs and apps available for computers and mobile devices
- Role of the operating system and the various ways software is distributed
- Features of a variety of applications
- Communications applications
- Security tools and file, disk, and system management tools

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Tools, Apps, Devices, and the Impact of Technology



Chapter 4

Programs and Apps

Chapter 4 Complete