

Discovering Computers

Technology in a World of Computers,
Mobile Devices, and the Internet

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

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 and
disk management
tools

Programs and Apps

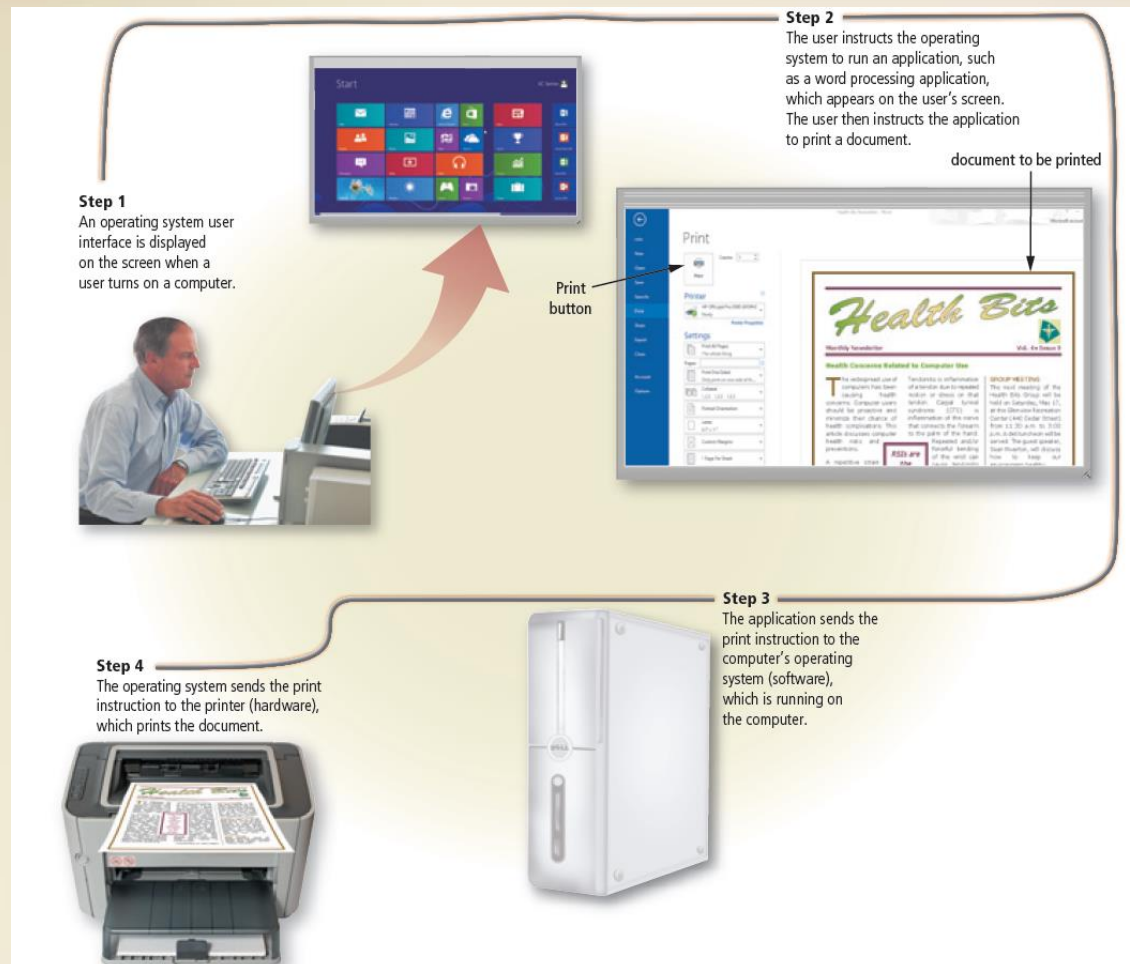
- A **program**, or **software**, consists of a series of related instructions, organized for a common purpose, that tells the computer what tasks to perform and how to perform them
- An **application**, or **app**, sometimes called application software, consists of programs designed to make users more 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
 - System software

Programs and Apps

Table 4-1 Programs and Apps by Category

Category	Types of Programs and Apps	
Productivity (Business and Personal)	<ul style="list-style-type: none"> • Word Processing • Presentation • Spreadsheet • Database • Note Taking • Calendar and Contact Management • Project Management • Accounting • Personal Finance • Legal • Tax Preparation • Document Management • Support Services • Enterprise Computing 	
Graphics and Media	<ul style="list-style-type: none"> • Computer-Aided Design (CAD) • Desktop Publishing • Paint/Image Editing • Photo Editing and Photo Management • Clip Art/Image Gallery • Video and Audio Editing • Multimedia and Website Authoring • Media Player • Disc Burning 	
Personal Interest	<ul style="list-style-type: none"> • Lifestyle • Medical • Entertainment • Convenience • Education 	
Communications	<ul style="list-style-type: none"> • Blogging • Browser • Chat Room • Discussion Forum • Email • FTP • Instant Messaging • VoIP • Videoconference • Web Feeds • Wireless Messaging 	
Security	<ul style="list-style-type: none"> • Personal Firewall • Antivirus • Malware Removers • Internet Filters 	
File and Disk Management	<ul style="list-style-type: none"> • File Manager • Search • Image Viewer • Uninstaller • Disk Cleanup • Disk Defragmenter • Screen Saver • File Compression • PC Maintenance • Backup and Restore 	

Programs and Apps



Programs and Apps

- Software is available in a variety of forms:

Retail	Custom	Web app
Mobile app	Mobile web app	Open source
Shareware	Freeware	Public domain

Programs and Apps

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



Productivity Applications

- With productivity applications, users often:



Create a
project

Edit a
project

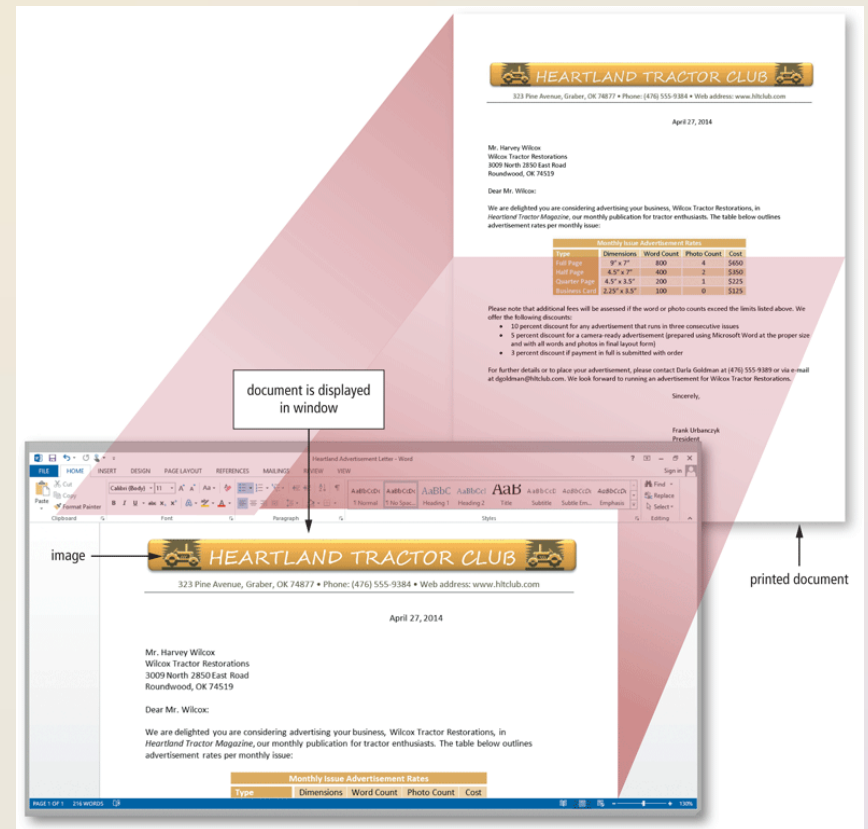
Format a
project

Save a
project

Distribute
a project

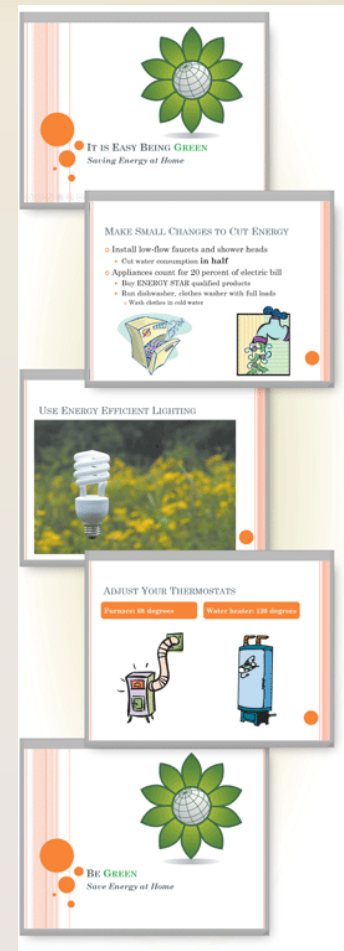
Productivity Applications

- **Word processing software** allows users to create and manipulate documents
- **Clip art** is a collection of drawings, photos, and other images



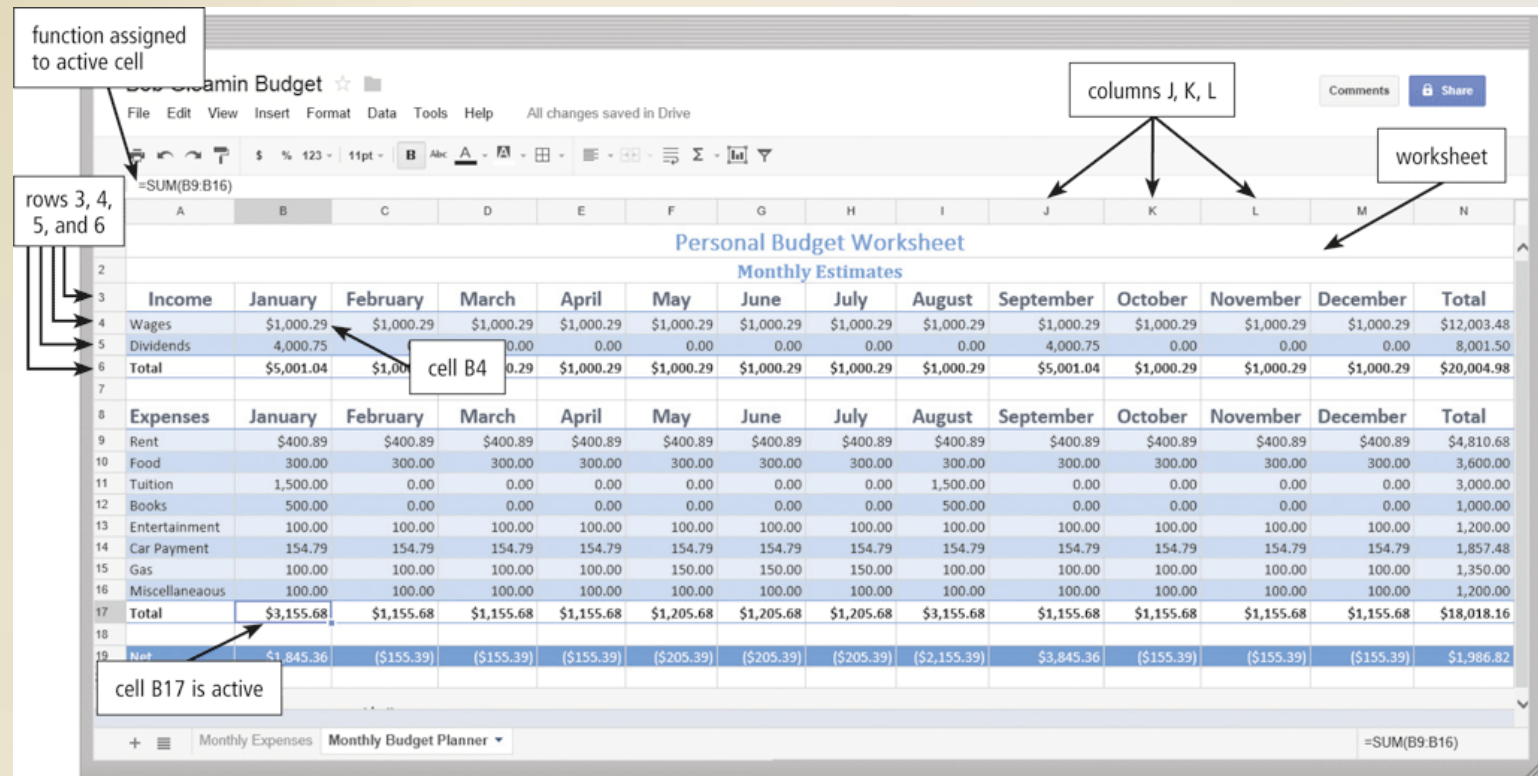
Productivity Applications

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



Productivity Applications

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



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

Customer table

fields

records

Book Rep table

common BR # field relates the Customer table to the Book Rep table

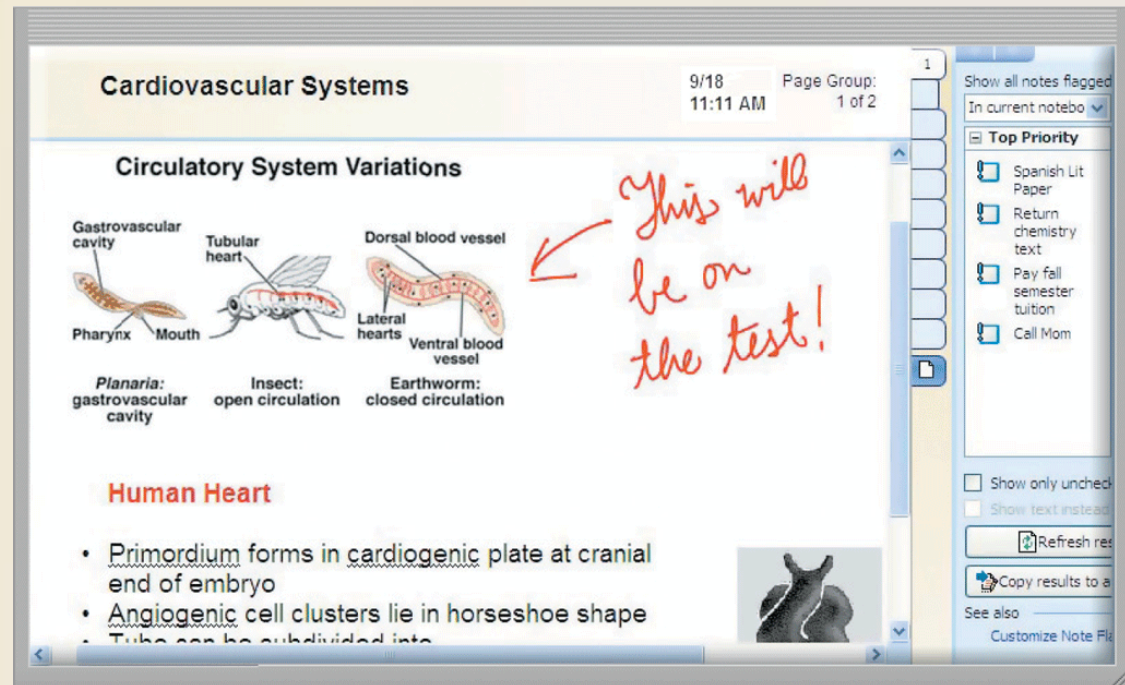
CU #	Customer Name	Street	City	State	Postal Code	Amount Paid	Current Due	Returns	BR #	Click to Add
ASU37	Applewood State University	300 University Ave.	Greer	PA	19158	\$41,530.98	\$38,812.66	\$12,008.02	42	
BCJ21	Brodin Junior College	4806 Park Dr.	Greer	PA	19158	\$0.00	\$6,081.98	\$0.00	42	
CSD25	Cowpens ISD	829 Wooster Ave.	Gossett	PA	19157	\$12,750.00	\$13,275.00	\$2,000.00	53	
CSU10	Camellia State University	725 Camellia St.	Pleasantburg	NJ	07025	\$63,246.88	\$69,847.76	\$14,967.98	53	
DCC34	Dart Community College	3827 Burgess Dr.	Chambers	NJ	07037	\$21,345.50	\$23,467.75	\$4,496.80	65	
FSC12	First State College	7300 Cedar Rd.	Quaker	DE	19719	\$34,557.25	\$23,875.98	\$7,234.99	65	
FSU23	Farnham State University	1445 Hubert St.	Gaston	DE	19723	\$18,268.00	\$22,024.50	\$3,496.23	42	
HSD05	Hammonds County ISD	446 Lincoln Blvd.	Chesnee	NJ	07053	\$18,424.75	\$0.00	\$0.00	53	
KCC78	Key Community College System	7523 Penn Ave.	Adelphia	PA	19159	\$21,288.65	\$11,367.49	\$2,256.98	65	
MCC45	Mauldin Community College	72 Montrose St.	Chesnee	NJ	07053	\$9,500.00	\$5,000.00	\$0.00	53	
MEC56	Mehitable College	202 College St.	Gaston	DE	19723	\$9,111.19	\$7,310.76	\$574.25	42	
PU22	Pratt Institute	236 Ashton Ave.	Pleasantburg	NJ	07025	\$17,229.45	\$11,769.75	\$3,450.50	53	
CC77	Stallone Community College	1200 Franklin Blvd.	Adelphia	PA	19156	\$7,525.98	\$2,515.78	\$0.00	42	
EC19	Seaborn College	345 Mather Rd.	Quaker	DE	19719	\$9,225.34	\$10,496.89	\$2,017.67	65	
SC02	Tri-State Consortium	3400 Metro Pkwy.	Adelphia	PA	19156	\$34,578.90	\$9,432.56	\$943.34	65	

BR #	Last Name	First Name	Street	City	State	Postal Code	Start Date	Salary	Bonus Rate	Click to Add
42	Perez	Melina	261 Porter Dr.	Adelphia	PA	19156	5/14/2012	\$31,500.00	0.20	
48	Statnik	Michael	3135 Simpson Dr	Pleasantburg	NJ	07025	1/15/2013	\$29,000.00	0.20	
53	Chin	Robert	265 Maxwell St.	Gossett	PA	19157	6/1/2013	\$26,250.00	0.19	
65	Rogers	Tracy	1827 Maple Ave.	Adelphia	PA	19159	7/1/2014	\$7,750.00	0.18	
								\$0.00	0.00	

Customer Number (three uppercase letters followed by 2-digit number)

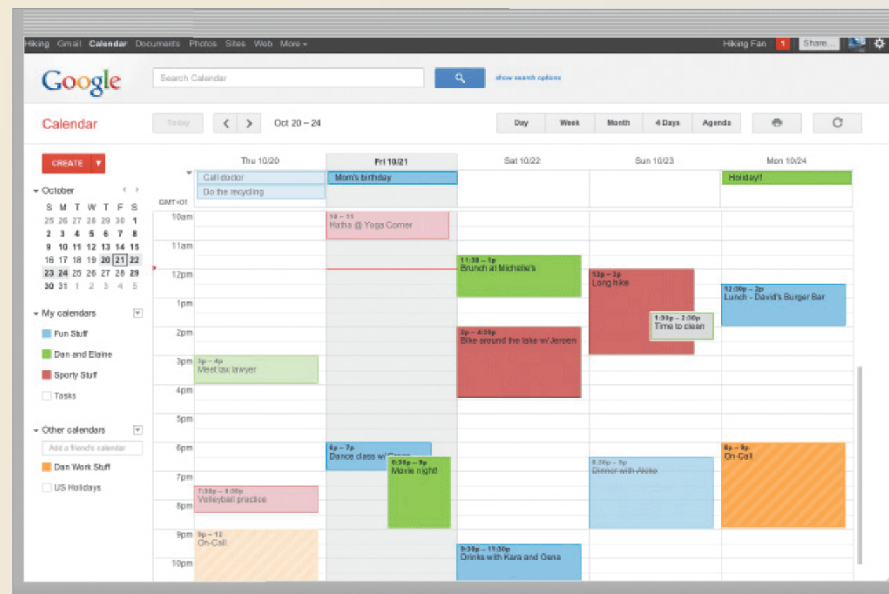
Productivity Applications

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



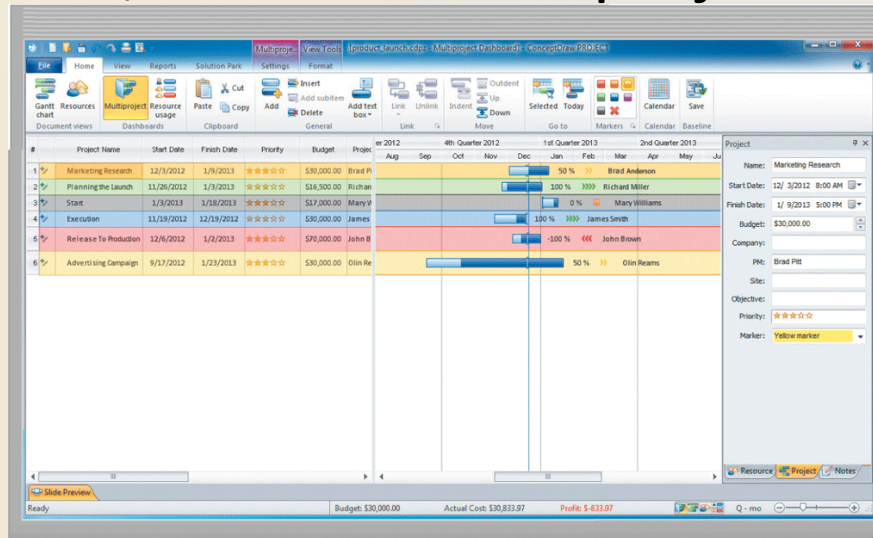
Productivity Applications

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



Productivity Applications

- A **software suite** is a collection of individual programs 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



Productivity Applications

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

The screenshot displays the QuickBooks Accountant 2013 [US] - [Create Invoices] window. The interface includes a menu bar (File, Edit, View, Lists, Favorites, Accountant, Company, Customers, Vendors, Employees, Banking, Reports, Window, Help) and a toolbar with various icons for navigation and actions. The main window is titled "Sample Rock Castle Construction - QuickBooks Accountant 2013 [US] - [Create Invoices]".

The "Customer" dropdown is set to "Abercrombie, Kristy". The "CLASS" is "Remodel" and the "TEMPLATE" is "Rock Castle". The "Invoice" is marked as "PAID 12/15/2017". The "DATE" is "12/10/2017" and the "INVOICE # 1091". The "BILL TO" address is "Kristy Abercrombie, 5647 Cypress Hill Rd, Bayshore, CA 94326". The "SHIP TO" address is "Ship To 1, 5647 Cypress Hill Rd, Bayshore, CA 94326". The "TERMS" are "Net 30" and the "DUE DATE" is "01/09/2019".

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	TAX
Removal	Removal labor	16		45.50	728.00	Non
Subs Tile & C...	Install tile or counter			825.00	825.00	Non
Subs Electrical	Electrical work			275.00	275.00	Non
Subs Painting	Painting			154.00	154.00	Non
Subs Plumbi...	Plumbing			550.00	550.00	Non

The "ONLINE PAY" dropdown is set to "Off". The "TAX" is "San Tomas" (7.75%) and the "TAX AMOUNT" is "0.00".

The "SUMMARY" section shows:

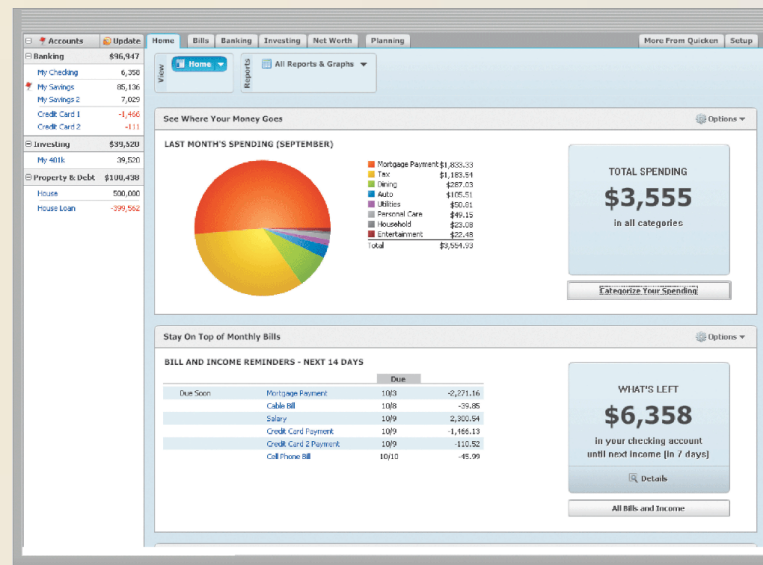
- Phone: 415-555-6579
- Email: kristy@samplename.com
- Open balance: 0.00
- Active estimates: 1
- Sales Orders to be invoiced: 0
- Unbilled time and expenses: 1,910.00

The "RECENT TRANSACTION" section shows:

- 12/15/17 Payment: 7,633.28
- 12/12/17 Estimate: 7,076.13
- 12/10/17 Invoice - Paid: 4,522.00
- 12/01/17 Credit Memo: 711.15
- 11/25/17 Invoice - Paid: 3,111.28

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



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

The screenshot displays the 'MyAttorney HOME & BUSINESS' web application. The top navigation bar includes links for 'Get Started', 'Choose Docs', 'Create Docs', 'Manage Docs', 'Advice', 'Library', and 'Finances'. The main content area is titled 'Interview: Bill of Sale - Motor Vehicle' and features buttons for 'Show Preview', 'Show Help', and 'Close Interview'. A form titled 'What motor vehicle is being sold?' contains input fields for 'Year', 'Make', 'Model', and 'VIN'. Below the form, an example is provided: 'For example, 1990, Toyota, Camry, 289A5436BH5868'. Navigation buttons 'First', 'Back', 'Next', and 'Bookmark' are located at the bottom of the form. A preview window on the right shows the 'Bill of Sale - Motor Vehicle' document, which includes a definition of the document and instructions for signing. The bottom section of the interface displays the title 'BILL OF SALE - MOTOR VEHICLE' and the beginning of the legal text: 'For the consideration of \$5,250.00, Sara Albertson (the "Seller"), of 2887 Fourth Place, Harrington, Indiana 46322, does hereby sell, assign and transfer to Jesse Martinez (the "Buyer"), of 7761 Cedar Road, Riverton, Indiana 46323, the following described motor vehicle (the

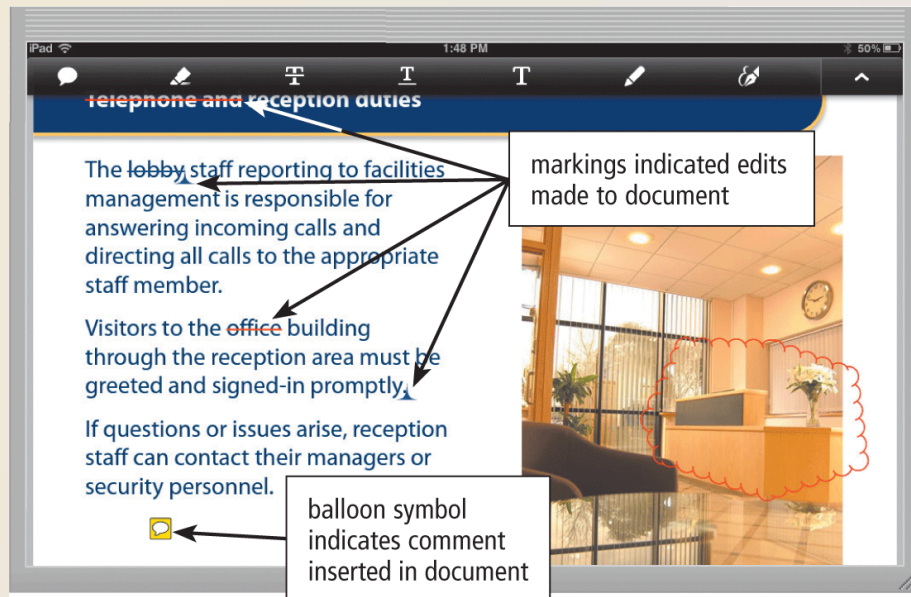
Productivity Applications

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

The screenshot displays a tax preparation application window. On the left, a tree view lists various tax forms and schedules, including Form 1040, Form 1040EZ, Form 1040-SS, Form 1040V, Form 1040-ES, Form 1040X, Schedule A, Schedule B, Schedule C, Schedule D, Schedule E, Schedule F, Schedule H, Schedule J, Schedule R, Schedule SE, Form 1045, Form 1045-S, Form 1116, Form 1310, Form 2106, Form 2120, Form 2210, and Form 2210-F. The main window displays the 'Federal Form 1040' interface, which includes a header for the Department of the Treasury - Internal Revenue Service, a section for 'Your first name' and 'Spouse's first name', a section for 'Home address (number and street)', 'City, town or post office', 'State', 'ZIP Code', 'Foreign country name', 'Foreign province/county', and 'Foreign postal code'. The 'Filing Status' section shows options for 'Single', 'Married filing joint return (even if only one had income)', 'Married filing separate return. Enter SSN above and full name', 'Head of household (with qualifying person)', and 'Qualifying widow(er) with dependent child'. The 'Student Status' section includes a checkbox for 'Check to indicate whether the taxpayer or spouse were enrolled some part of any 5 calendar months (not necessarily consecutive)'. The 'Disability Status' section includes a checkbox for 'Check to indicate whether the taxpayer or spouse were permanently and totally disabled'. The 'Exemptions' section includes a checkbox for 'Check here if someone can claim you as a dependent'.

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



Productivity Applications

- A variety of desktop, mobile, and web apps provide a service intended to make business or personal tasks easier to accomplish

Reference
applications

Travel
applications

Retail
applications

Productivity Applications

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

Human resources
software

Accounting
software

Engineering or
product
development
software

Manufacturing
software

Marketing software

Sales software

Distribution
software

Customer service
software

Software for
information
technology staff

Graphics and Media Software



**Computer-aided design
(CAD) software**



**Desktop publishing
software**



**Paint/Image editing
software**

Graphics and Media Software



Photo editing software



Clip Art / Image Gallery



**Video and audio editing
software**

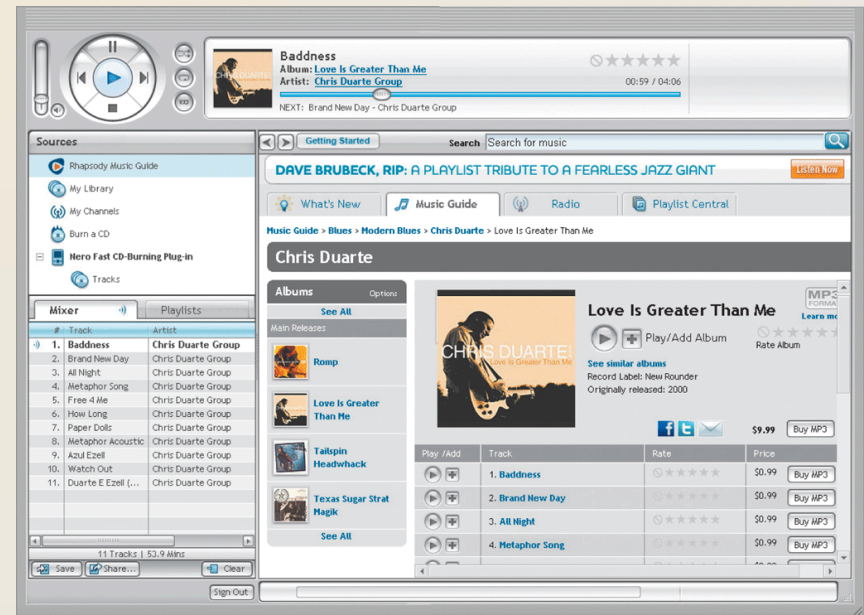
Graphics and Media Software

- **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



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



Personal Interest Applications

Lifestyle
applications

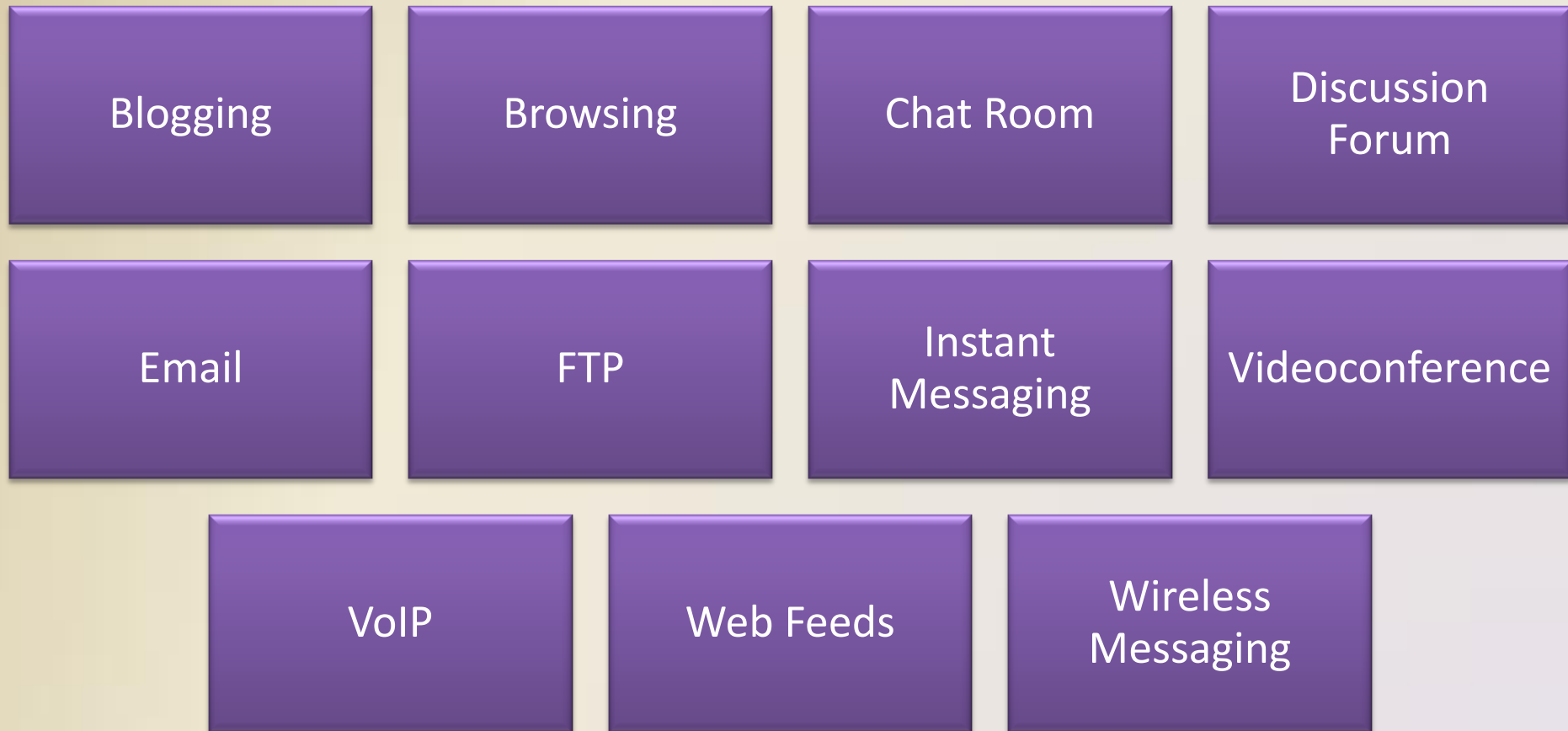
Medical
applications

Entertainment
applications

Convenience
applications

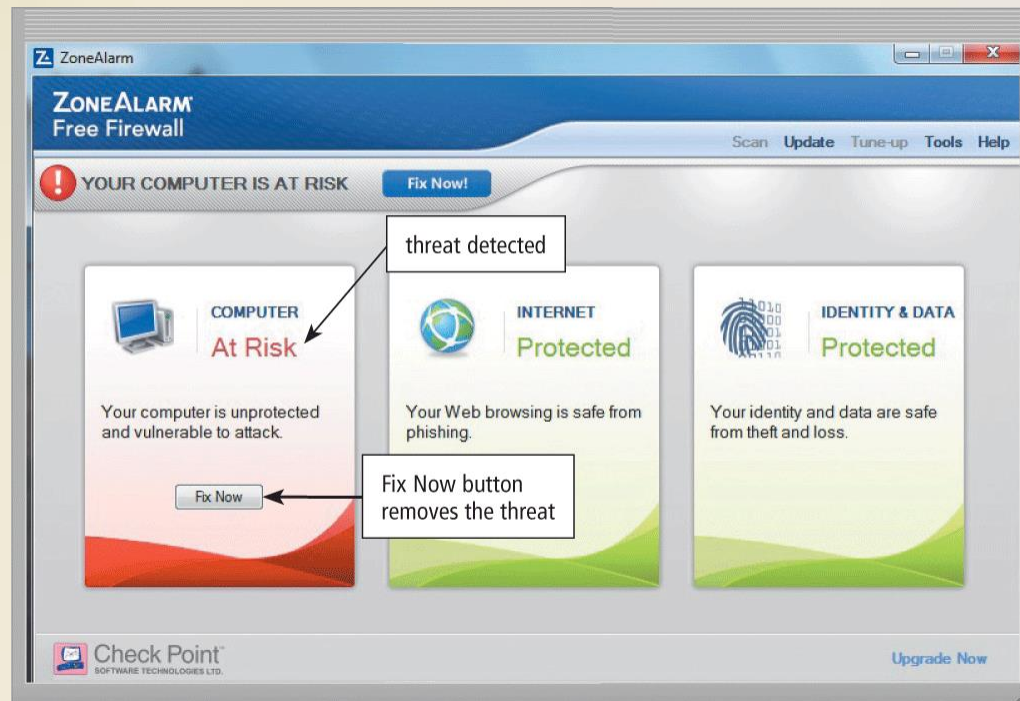
Education
applications

Communications Applications



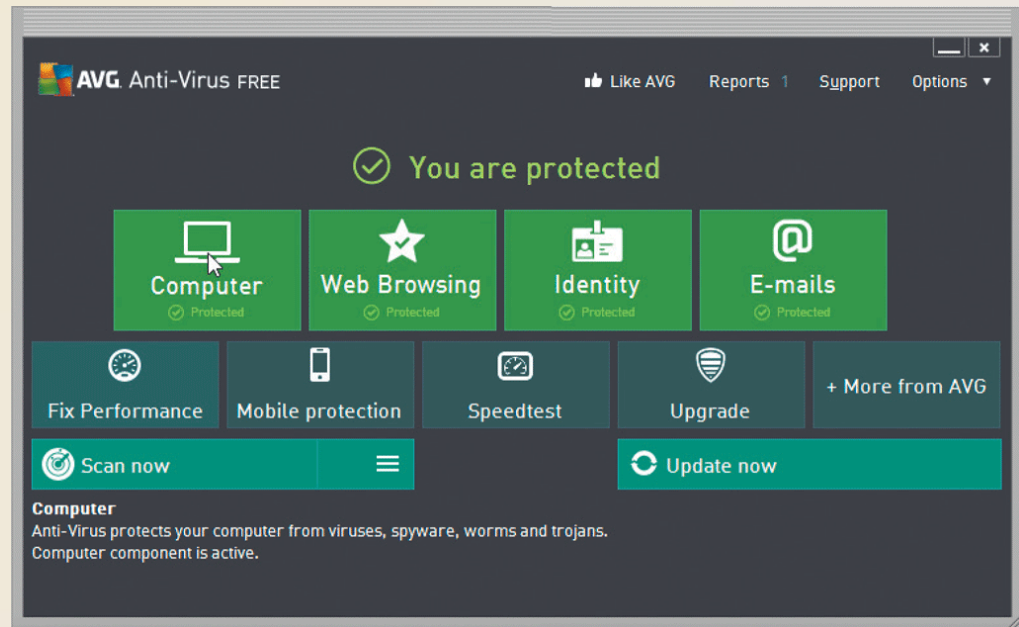
Security Tools

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



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



Security Tools

- Spyware is a 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 program that displays an online advertisement in a banner or pop-up window on webpages, email messages, or other Internet services

Security Tools

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

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

Security Tools

Internet
filters

Anti-spam
programs

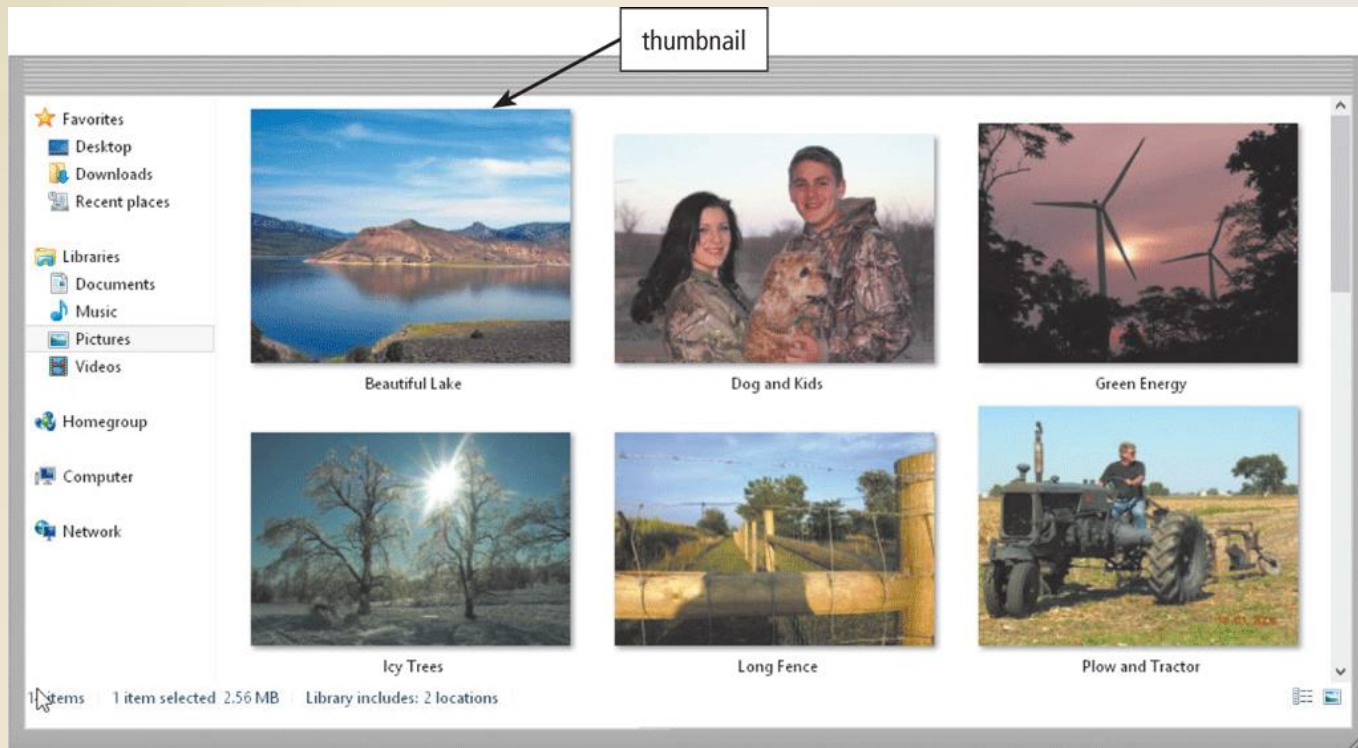
Web
filters

Phishing
filters

Pop-up
blockers

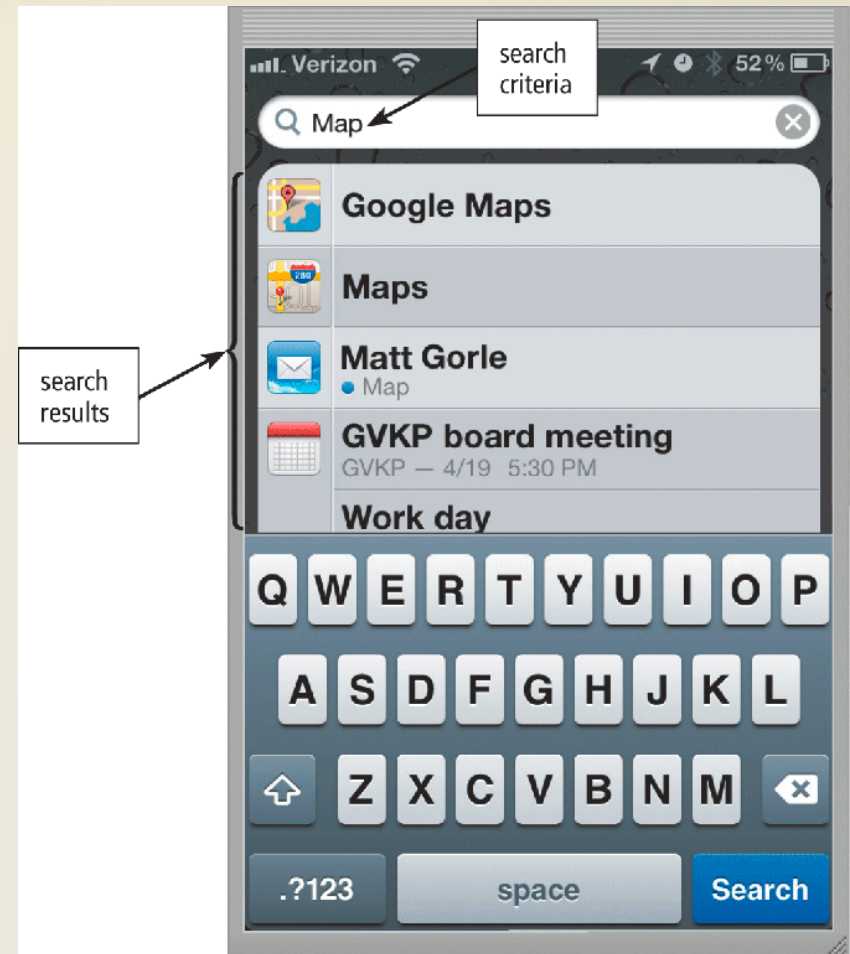
File and Disk Management Tools

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



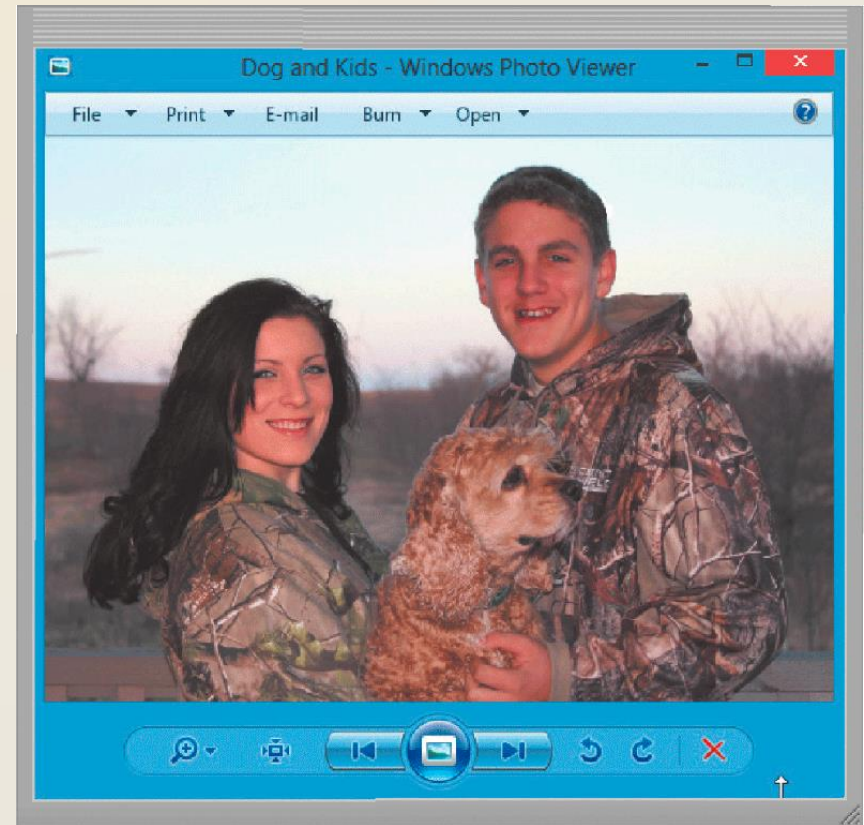
File and Disk Management Tools

- A **search tool** is a program, usually included with an operating system, that attempts to locate a file on your computer or mobile device based on criteria you specify



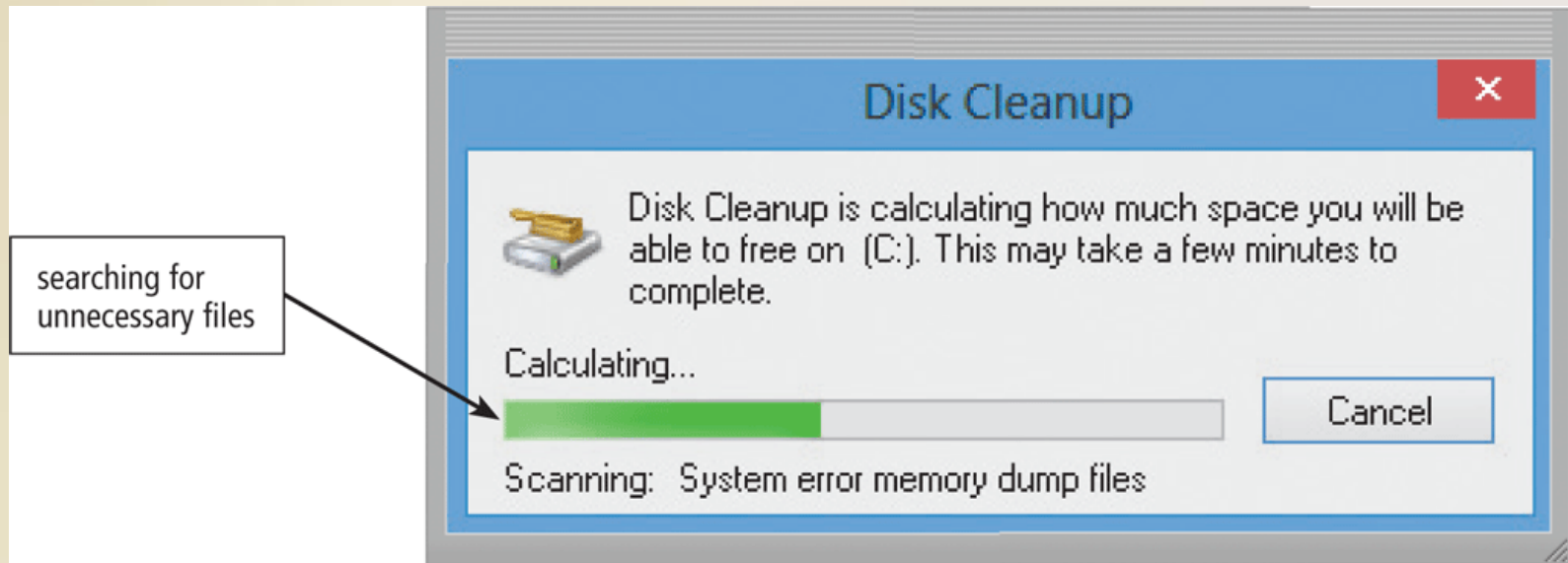
File and Disk Management Tools

- 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



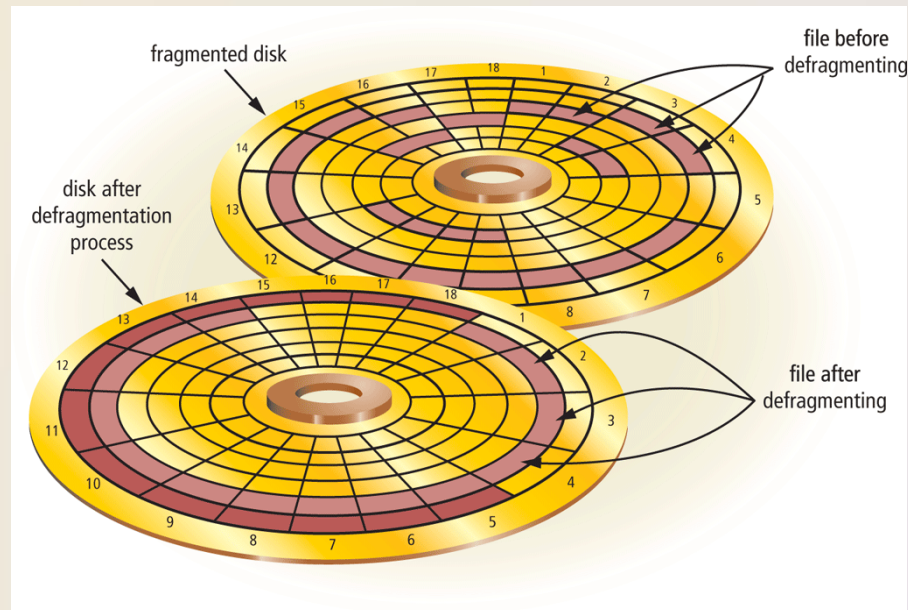
File and Disk Management Tools

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



File and Disk 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**



File and Disk Management Tools

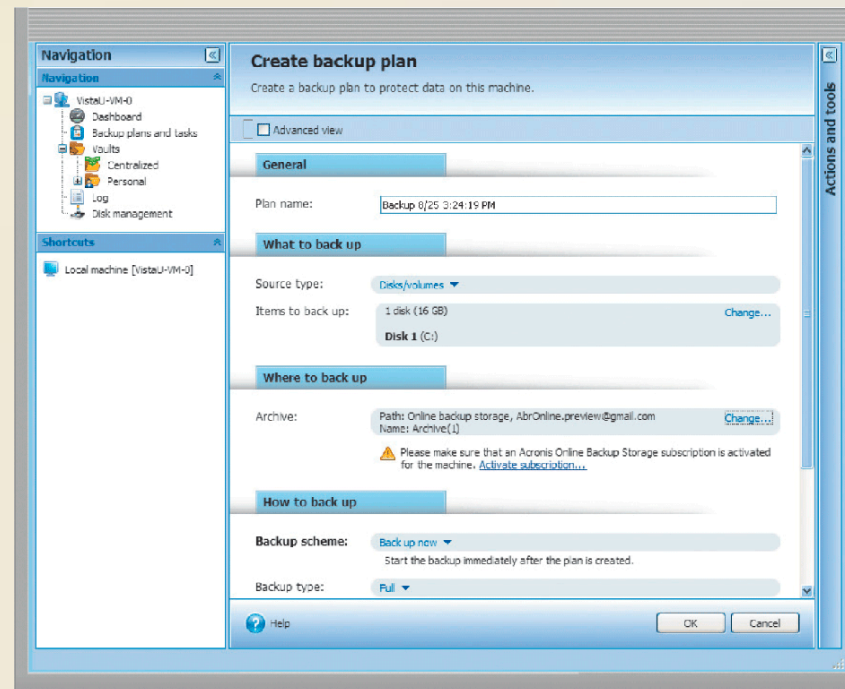
A **screen saver** is a tool that causes a display device's screen to show a moving image or blank screen if no keyboard or mouse activity occurs for a specified time

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 disk problems, and includes the capability of improving a computer's performance

File and Disk 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



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
and disk management
tools

Discovering Computers

Technology in a World of Computers,
Mobile Devices, and the Internet

Chapter 4

Programs and Apps

Chapter 4 Complete

