

## SUMMARY

### THE BASICS OF APPLICATION SOFTWARE

#### Chapter Objective 1:

Describe what application software is, the different types of ownership rights, and the difference between installed and Web-based software.

#### Chapter Objective 2:

Detail some concepts and commands that many software programs have in common.

**Application software** is software designed to carry out a specific task. Common types of application software include games, Web browsers, word processing programs, multimedia software, and more. Many application software programs today are **commercial software** programs that are developed and sold for a profit. When a software program is purchased, individual users receive a **software license** authorizing them to use the software. Some commercial software is available in a *trial version*. Other software is available as **shareware**, **freeware**, or **public domain software**. **Open source software** is the term for programs whose source code is available to the general public. Most software is **installed software** on a local PC or network server; other software is **Web-based software**, which is also called **Software as a Service (SaaS)**. Organizations that provide Web-based software are referred to as *application service providers (ASPs)*.

Many office-oriented programs are sold bundled together as a **software suite**. One of the most widely used software suites is **Microsoft Office**. Although different in purpose, most application software programs share some of the same concepts and functions, such as similar document-handling operations and help features. For instance, documents are commonly *opened*, *saved*, *printed*, and *edited* in a similar manner; the **insertion point** typically identifies the current position in a document. Commands can be issued via a variety of methods, such as by using *menus*, *toolbars*, **keyboard shortcuts**, or the Office 2007 **Ribbon**. Many types of documents can be *formatted* to change their appearance, and online help is available in many programs. Handheld PCs and mobile devices require specially designed application software.

### WORD PROCESSING CONCEPTS

#### Chapter Objective 3:

Discuss word processing and explain what kinds of documents are created using this type of program.

**Word processing** refers to using a PC and **word processing software** to create, manipulate, and print written documents, such as letters, contracts, and so forth. When creating or editing a word processing document, the **word wrap** feature automatically moves the insertion point to the next line when the end of the screen line is reached. Common types of *formatting* include changing the *font face*, *font size*, or *font style* of selected text; adjusting *line spacing*, *margins*, *indentation*, *tabs*, and *alignment*; changing the top and bottom margins, and paper size; and adding *headers* and *footers*. Other enhancements found in most word processing programs include the ability to include graphical images and *tables*, and to use *styles*, *templates*, or *wizards* for more efficient document creation. Documents can also include hyperlinks and be saved as Web pages in many programs. Most word processors also include a spelling and grammar check feature and other useful tools.

### SPREADSHEET CONCEPTS

#### Chapter Objective 4:

Explain the purpose of spreadsheet software and the kinds of documents created using this type of program.

**Spreadsheet software** is used to create documents (**spreadsheets** or **worksheets**) that typically include a great deal of numbers and mathematical computations; a collection of worksheets stored in the same spreadsheet file is called a **workbook**. A worksheet is divided into **rows** and **columns** that intersect to form **cells**, each of which can be accessed through a *cell address*, such as B3. A rectangular group of cells is referred to as a *range*.

Content is entered into individual cells and may consist of **labels**, **constant values**, **formulas**, or **functions**. Formulas can be typed using *relative cell* or *absolute cell references*, depending on the type of computation required. Once created, the contents

of individual cells may be edited and formatted. *Numeric formats* are used to change the appearance of numbers, such as adding a dollar sign or displaying a specific number of decimal places. Spreadsheet programs commonly include a *charting* or *graphing* feature and the ability to perform *what-if analysis*. Some spreadsheet programs allow worksheets to be saved in the form of a Web page and the inclusion of hyperlinks in cells.

## DATABASE CONCEPTS

A *database management system (DBMS)* or **database software** program enables the creation of a **database**—a collection of related data stored in a manner so that information can be retrieved as needed. In a relational DBMS (the most common type found on PCs), a **field** or **column** is a collection of characters that make up a single piece of data, such as a name or phone number; a **record** or **row** is a collection of related fields; and a **table** is a collection of related records. One or more tables can be stored in a database file.

A relational database typically contains a variety of *objects*, such as tables, *forms* to input or view data, *queries* to retrieve specific information, and *reports* to print a formal listing of the data stored in a table or the results of a query. When a table is created, the table fields are specified along with their characteristics, such as *field name*, *field size*, and *data type*. After this *structure* has been created, data can be entered into the table. Both the data in the table and the table structure can be modified. Databases are commonly integrated into the Web, such as to keep track of inventory and to facilitate online ordering.

## PRESENTATION GRAPHICS CONCEPTS

**Presentation graphics** are images used to visually enhance the impact of information communicated to other people. **Presentation graphics software** can be used to create presentation graphics and *online slide shows* consisting of electronic **slides**. Individual slides are created, and then they can be edited and formatted, as can the overall appearance of the slides. Multimedia elements, such as images and video clips, can also be included. After all slides have been created for a presentation, the order of the slides can be rearranged and *transitions* between the slides can be specified. It is becoming increasingly common to find slide-based presentations available through the Web. Web-based slide shows can include multimedia elements, as well as hyperlinks and other navigational buttons.

## GRAPHICS AND MULTIMEDIA CONCEPTS

*Graphics* are graphical images, such as digital photographs, clip art, and original art. *Multimedia* refers to applications that include more than one type of media, typically text, graphics, animation, and interactivity. To create graphics, **graphics software**—such as a *painting*, a *drawing*, or an *image editing program*—can be used. *Audio editing*, *video editing*, and *DVD authoring software* are common types of multimedia programs, as are the *media player* programs used to play audio and video files. *CD* and *DVD burning software* can be used to burn songs or other data on a CD or DVD disc.

## OTHER TYPES OF APPLICATION SOFTWARE

Other types of application software include *desktop publishing* and *personal publishing* programs, *computer-aided design (CAD)* and other types of *design software*, *project management software*, *accounting software*, and *personal finance software*. The use of *collaboration*, *remote access*, *note taking*, and *personal productivity software* is growing. *Educational*, *entertainment*, and *reference software* are very popular with home users.

### Chapter Objective 5:

Identify some of the vocabulary used with database software and discuss the benefits of using this type of program.

### Chapter Objective 6:

Describe what presentation graphics and electronic slide shows are and when they might be used.

### Chapter Objective 7:

List some types of graphics and multimedia software consumers use frequently.

### Chapter Objective 8:

Name other types of application software programs and discuss what functions they perform.

