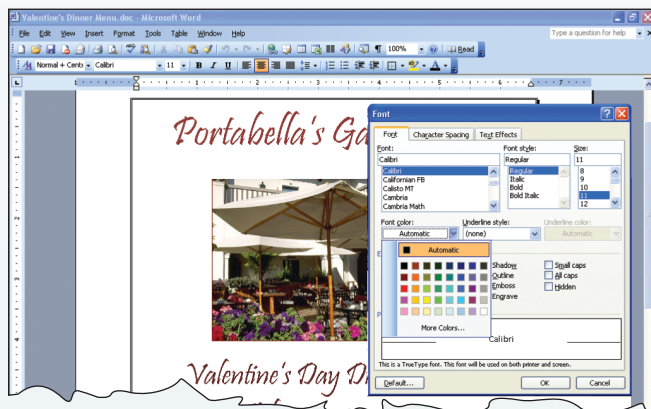


VISUAL SUMMARY

Application Software

APPLICATION SOFTWARE



The three categories of application software are **general purpose**, **specialized**, and **mobile**.

User Interface

You control and interact with a program using a **user interface**. A **graphical user interface (GUI)** uses icons selected by a mouse-controlled **pointer**. A **window** contains a document, program, or message. Software programs with a traditional GUI have:

- **Menus**—present commands listed on the **menu bar**.
- **Toolbars**—contain **buttons** for quick access to commonly used commands.
- **Dialog box**—provides additional information or requests user input.

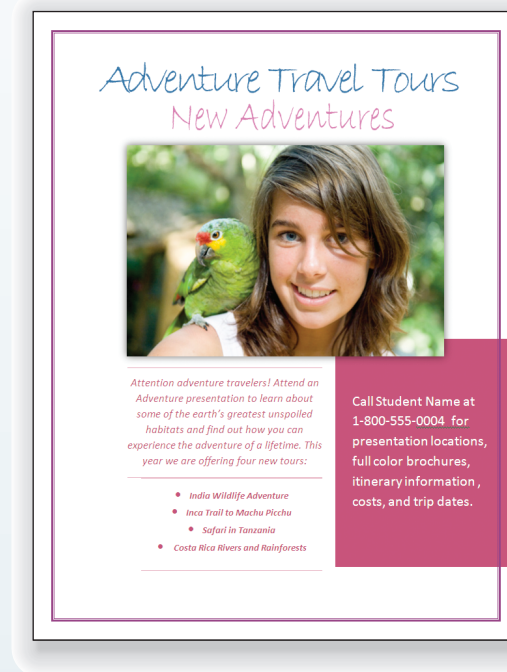
Software programs with a **Ribbon GUI** have:

- **Ribbons**—replace menus and toolbars.
- **Tabs**—divide ribbons into **groups**. **Contextual tabs** automatically appear when needed.
- **Galleries**—graphically display alternatives before they are selected.

Common Features

Common features include spell checkers, alignment, fonts and font sizes, tables, and reports.

GENERAL-PURPOSE APPLICATIONS



General-purpose applications include word processors, spreadsheets, database management systems, and presentation graphics.

Word Processors

Word processors create text-based documents. Individuals and organizations use word processors to create memos, letters, and faxes. Organizations also create newsletters, manuals, and brochures to provide information to their customers. Microsoft Word is the most widely used word processor. Others include Corel WordPerfect, Apple Pages, OpenOffice Writer, and Google Docs.

Spreadsheets

Spreadsheets organize, analyze, and graph numeric data such as budgets and financial reports. They are widely used by nearly every profession. Microsoft Excel is the most widely used spreadsheet program. Others include Apple Numbers and OpenOffice Calc.

To be a competent end user, you need to understand the capabilities of general-purpose and specialized application software. Additionally, you need to know about mobile applications and software suites.

GENERAL-PURPOSE APPLICATIONS

Employee Records

Employee ID:

First Name:
 Last Name:
 Address:
 City:
 State:
 ZIP Code:
 Home Phone:
 Gender:
 Birth Date:

Photo/Resume:

Record: M 41 of 55 | No Filter | Search

Database Management Systems

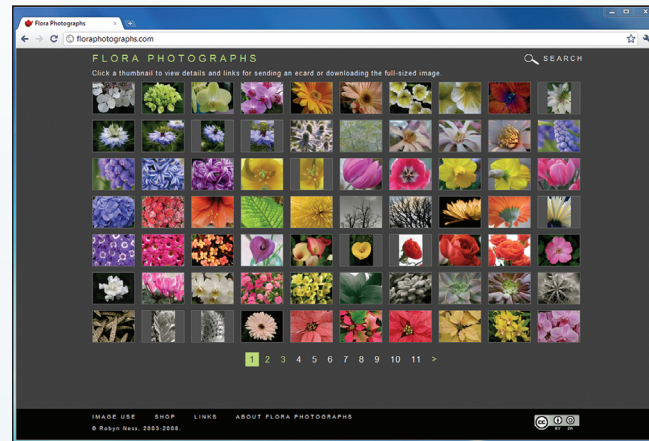
A database is a collection of related data. A database management system (DBMS) or database manager is a program that structures a database. It provides tools to enter, edit, and retrieve data from the database. Organizations use databases for many purposes including maintaining employee records. Two widely used database management systems designed for microcomputers are Microsoft Access and OpenOffice Base.

Presentation Graphics

Presentation graphics are programs that combine a variety of visual objects to create attractive, visually interesting presentations. They are excellent tools to communicate a message and to persuade people. People in a variety of settings and situations use presentation graphics programs to make their presentations more interesting and professional. Three of the most widely used presentation graphics programs are Microsoft PowerPoint, OpenOffice Impress, and Apple Keynote.



SPECIALIZED APPLICATIONS



Specialized applications are widely used within specific professions. They include graphics programs and web authoring programs.

Graphics Programs

Graphics programs are used by graphic arts professionals.

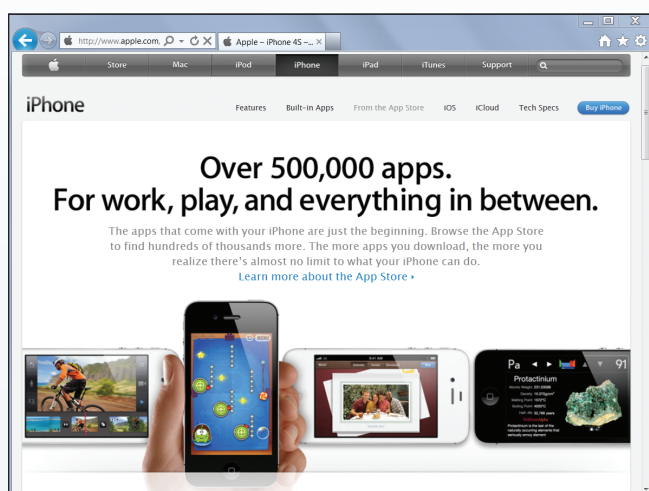
- Desktop publishing programs (page layout programs) mix text and graphics to create professional-quality publications.
- Image editors (photo editors) edit digital photographs consisting of thousands of dots or pixels that form **bitmap** or **raster** images.
- Illustration programs (drawing programs) create and edit vector images. **Vector images** (vector illustrations) use geometric shapes.
- Image galleries are libraries of electronic images. Two basic types are **stock photographs** and **clip art**.

Web Authoring Programs

Web authoring is the process of creating a website. Individuals create online diaries called **blogs**. Many sites have **animations** (moving graphics) and **Flash movies** (interactive animation). Website design is represented by a **graphical site map**.

Web authoring programs (web page editors, HTML editors) create sophisticated commercial websites. Some are **WYSIWYG** (what you see is what you get) editors.

MOBILE APPS



Mobile apps (mobile applications, apps) are add-on programs for a variety of mobile devices. Traditional applications include address books, to-do lists, alarms, and message lists. Recently mobile capabilities have exploded.

Apps

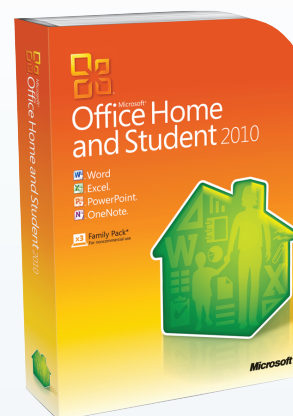
One of the fastest-growing apps is **QR code readers**. These readers allow mobile devices to use their digital cameras to scan QR codes. **QR codes (quick response codes)** are graphics that automatically link mobile devices to content, including games, text, videos, and websites.

App Stores

An **app store** is typically a website that provides access to specific mobile apps that can be downloaded either for a nominal fee or free of charge. Two of the best-known stores are Apple's App Store and Google Play.

App	Focus	Site
Apple App Store	iOS devices	www.appstore.com
Google Play	Android devices	play.google.com
BlackBerry App World	BlackBerry products	appworld.blackberry.com
Windows Phone Marketplace	Windows phones	windowsphone.com/marketplace

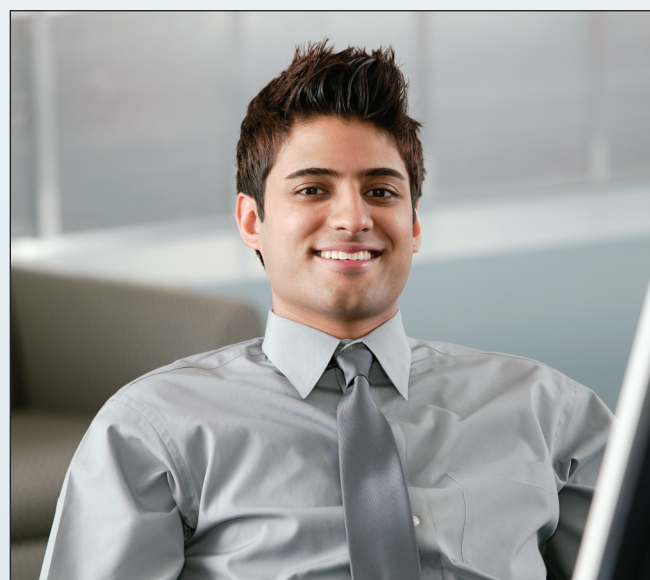
SOFTWARE SUITES



A **software suite** is a collection of individual application packages sold together.

- **Office suites (office software suites or productivity suites)** contain professional-grade application programs.
- **Cloud suites (online office suites)** are stored on servers and available through the Internet.
- **Specialized suites** focus on specific applications such as graphics.
- **Utility suites** include a variety of programs designed to make computing easier and safer.

CAREERS IN IT



Software engineers analyze users' needs and create application software. Bachelor's or advanced specialized associate's degree in computer science or information systems and extensive knowledge of computers and technology are required. Salary range is \$53,000 to \$97,000.

KEY TERMS

animation (78)
 app (78)
 application software (64)
 app store (80)
 bitmap (74)
 blog (77)
 button (64)
 clip art (77)
 cloud suite (81)
 contextual tab (65)
 database (71)
 database management system (DBMS) (71)
 database manager (71)
 desktop publishing program (73)
 dialog box (64)
 document (66)
 drawing program (74)
 Flash (78)
 gallery (65)
 general-purpose application (64)
 graphical site map (77)
 graphical user interface (GUI) (64)
 group (65)
 HTML editor (78)
 icon (64)
 illustration program (74)
 image editor (74)
 image gallery (74)
 menu (64)
 menu bar (64)
 mobile app (64, 78)
 mobile application (78)
 office software suite (81)
 office suite (81)
 online office suite (81)
 page layout program (73)
 photo editor (74)
 pixel (74)
 pointer (64)
 presentation graphics (71)
 productivity suite (81)
 QR code (80)
 QR code reader (80)
 quick response code (80)
 raster (74)
 ribbon (65)
 Ribbon GUI (65)
 software engineer (82)
 software suite (81)
 specialized application (64)
 specialized suite (82)
 spreadsheet (69)
 stock photograph (77)
 system software (64)
 tab (65)
 toolbar (64)
 user interface (64)
 utility suite (82)
 vector illustration (74)
 vector image (74)
 web authoring (77)
 web authoring program (78)
 web page editor (78)
 window (64)
 word processor (66)
 WYSIWYG (what you see is what you get) editor (78)

To test your knowledge of these key terms with animated flash cards, visit our website at www.computing2014.com and enter the keyword **terms3**. Or use the free *Computing Essentials 2014* app.

MULTIPLE CHOICE

Circle the correct answer.

1. This type of software works with end users, application software, and computer hardware to handle the majority of technical details.
 - a. application
 - b. general purpose
 - c. system
 - d. utility
2. A rectangular area that can contain a document, program, or message.
 - a. dialog box
 - b. form
 - c. frame
 - d. window
3. Programs that create text-based documents.
 - a. DBMS
 - b. suites
 - c. spreadsheets
 - d. word processors
4. Programs that organize, analyze, and graph numerical data such as budgets and financial reports.
 - a. DBMS
 - b. suites
 - c. spreadsheets
 - d. word processors
5. Program that allows you to mix text and graphics to create publications of professional quality.
 - a. database
 - b. desktop publishing
 - c. presentation
 - d. productivity
6. The type of image that consists of geometric shapes.
 - a. bitmap
 - b. raster
 - c. ribbon
 - d. vector
7. An online diary or commentary.
 - a. bitmap
 - b. blog
 - c. HTML
 - d. vector
8. Programs that combine a variety of visual objects to create attractive, visually interesting presentations.
 - a. DBMS
 - b. presentation graphics
 - c. spreadsheet
 - d. word processor
9. Graphics that typically appear as black and white boxes that automatically link mobile devices to various content.
 - a. Flash
 - b. animation
 - c. vector
 - d. QR codes
10. Also known as an online suite.
 - a. cloud
 - b. integrated
 - c. office
 - d. utility

For an interactive multiple-choice practice test, visit our website at www.computing2014.com and enter the keyword **multiple3**. Or use the free *Computing Essentials 2014* app.

MATCHING

Match each numbered item with the most closely related lettered item. Write your answers in the spaces provided.

- | | |
|-------------------|---|
| a. buttons | ___ 1. Toolbars typically appear below the menu bar and include small graphic elements called ____. |
| b. cloud | ___ 2. Simplifies the process of making a selection from a list of alternatives by graphically displaying the effect of alternatives before being selected. |
| c. database | ___ 3. A general-purpose program that creates text-based documents. |
| d. galleries | ___ 4. Program that organizes, analyzes, and graphs numerical data. |
| e. image editor | ___ 5. A collection of related data. |
| f. map | ___ 6. Also known as a photo editor, this specialized graphics program edits or modifies digital photographs. |
| g. spreadsheet | ___ 7. The overall site design for a website is commonly represented in a graphical site ____. |
| h. store | ___ 8. A website that provides access to specific mobile apps is known as an app ____. |
| i. utility | ___ 9. A type of suite that is stored at a server on the Internet and is available anywhere you can access the Internet. |
| j. word processor | ___ 10. A type of specialized suite that includes a variety of programs designed to make computing easier and safer. |

For an interactive matching practice test, visit our website at www.computing2014.com and enter the keyword **matching3**. Or use the free *Computing Essentials 2014* app.

OPEN-ENDED

On a separate sheet of paper, respond to each question or statement.

1. Explain the difference between general-purpose and specialized applications. Also discuss the common features of application programs, including those with traditional and ribbon graphical user interfaces.
2. Discuss general-purpose applications, including word processors, spreadsheets, database management systems, and presentation graphics.
3. Discuss specialized applications, including graphics programs, web authoring programs, and other professional specialized applications.
4. Describe mobile apps, including QR code readers and app stores.
5. Describe software suites, including office suites, cloud suites, specialized suites, and utility suites.