University of AL-Mustansiriyah

College Of Pharmacy

Chapter 4

Computer Software

Section I

Application Software: End User Applications

Present by

L.A. Mr. Hussein Salim Qasim

Learning Objectives

- Describe several important trends occurring in computer software.
- Give examples of several major types of application and system software.

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Learning Objectives (continued)

- Explain the purpose of several popular software packages for end user productivity and collaborative computing.
- Outline the functions of an operating system.

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Learning Objectives (continued)

- Describe the main uses of software programming languages and tools.

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Section I

Application Software: End User Applications

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Software

- Types of software
  - Application software
  - System software

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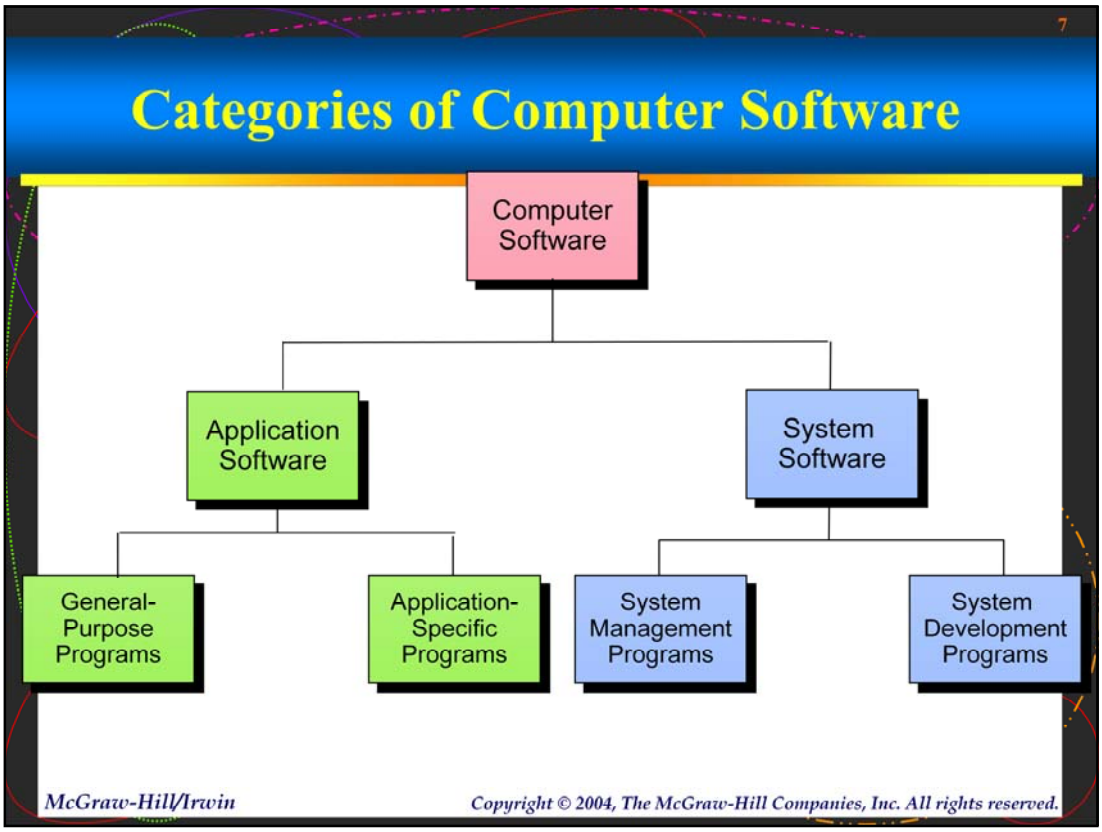

Information systems depend on software resources to help end users use computer hardware to transform data into information products. Software handles the input, processing, output, storage, and control activities of information systems. Computer software is typically classified into two major types of programs:

Systems Software. These are programs that manage and support the resources and operations of a computer system.

A. System Management Programs. These programs help run the hardware and communicate critical information throughout the IS. Examples are operating systems, operating environments (such as GUI interfaces), database management systems, and telecommunications monitors.

B. System Development Programs. These programs are used to build new application programs or specific information systems applications. Examples include programming language translators, programming environments, and CASE packages.

Applications Software. These are programs that direct the performance of a particular use, or application, of computers to develop specific information products by end users.

A. General-Purpose Application Programs. These programs allow end users to create a great many different information products within a general knowledge category. Examples include word processing, spreadsheets, database managers, graphics, and integrated packages.

B. Application-Specific Programs. These programs are dedicated to very specific functions within a knowledge area. Examples include programs for accounting, generating marketing plans, or handling financing.

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Software (continued)

- Application software for end users
  - Application-specific
  - General-purpose
    - Perform common information processing jobs
    - Sometimes known as productivity packages

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Software Suites and Integrated Packages

- Suites are a number of productivity packages bundled together
  - Microsoft Office
  - Lotus SmartSuite
  - Corel WordPerfect Office
  - Sun StarOffice

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Software Suites and Integrated Packages (continued)

- Advantages of suites
  - Cost
  - Similar graphical user interface
  - Share common tools
  - Programs are designed to work together
- Disadvantages of suites
  - Large size
  - Many features never used by many end users

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Software Suites and Integrated Packages (continued)

- Integrated Packages
  - Combine SOME of the features of several programs.
  - Offer enough function and features for many computer users.
  - Providing some of the advantages of software suites in a smaller package.

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Web Browsers

- Key software interface to the hyperlinked resources of the World Wide Web and the rest of the Internet
  - Internet Explorer
  - Netscape Communicator
- Simple And limited, but now powerful an feature-rich.
- Limited to surfing the web.
- Using search engines to find information
- Sometime called universal client

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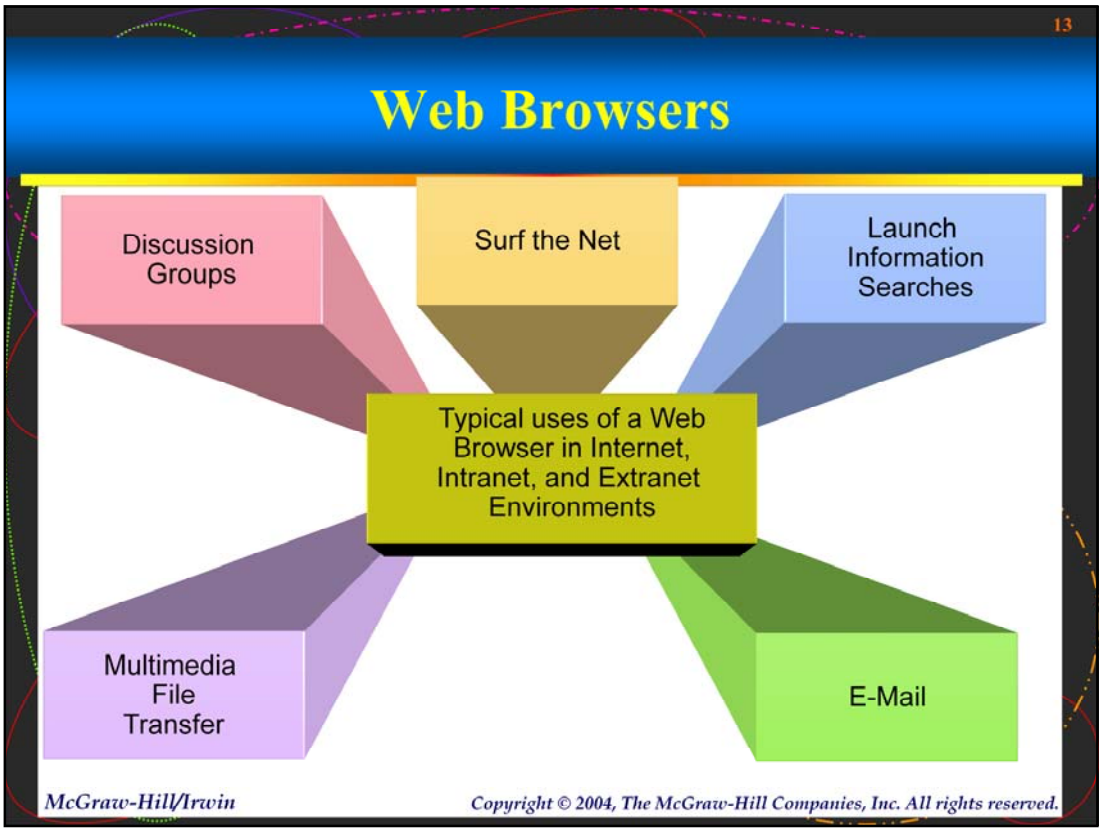

Let's take a moment to examine a couple of other important types of application software in some more detail.

Web Browser: The most important software component for many computer users today is the powerful and feature-rich web browser. A browser is a key software interface you use to point and click your way through the hyperlinked resources of the World Wide Web and the rest of the Internet, as well as corporate intranets and extranets. Two popular browsers include: Netscape Navigator, Microsoft Explorer.

Web Browser as the Universal Client: Industry experts are predicting that the web browser will be the model for how most people will use networked computers into the next century. Browsers are being called the universal client, that is, the software component installed on the workstation of all the clients (users) in client/server networks throughout an enterprise.

Web browsers have evolved into suites of communication and collaboration software including: discussion forums, databases, audio and data conferencing, chat, Internet telephone, group scheduling, calendaring, and web page editor.

Teaching Tips

This slide relates to the material on pp. 111

Electronic Mail and Instant Messaging

- E-Mail
  - Has changed the way people work and communicate
  - Stored on network server, can composed, send
- Instant Messaging
  - An e-mail/computer conferencing hybrid technology
  - Allows real time communication / collaboration

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Word Processing and Desktop Publishing

- Word Processing
  - Has computerized the creation, editing, revision, and printing of documents.
  - Advanced features
- Desktop Publishing
  - Design and print newsletters, brochures, manuals, and books
  - Page design process

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Electronic Spreadsheets

- Used for business analysis, planning, and modeling
- Involves designing its format and developing the relationships (formulas)

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Electronic Spreadsheets (continued)

- Allows end users to perform:
  - What-if
  - Goal-seeking
  - Sensitivity analysis
- Strength
  - Computation and calculation

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Presentation Graphics

- Helps convert numeric data into graphic displays
- Helps prepare multimedia presentations
- Easy to use

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Personal Information Managers

- For end user productivity and collaboration
  - Store, organize, and retrieve information
    - Information about customers
    - Appointments
    - Contact lists
    - Task lists
    - Schedules

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Groupware

- Collaboration software
- Helps workgroups and teams work together to accomplish group assignments by virtual team
- Combines a variety of software features and functions
  - E-mail
  - Discussion groups and databases
  - Scheduling
  - Task management
  - Audio and videoconferencing
  - Data sharing

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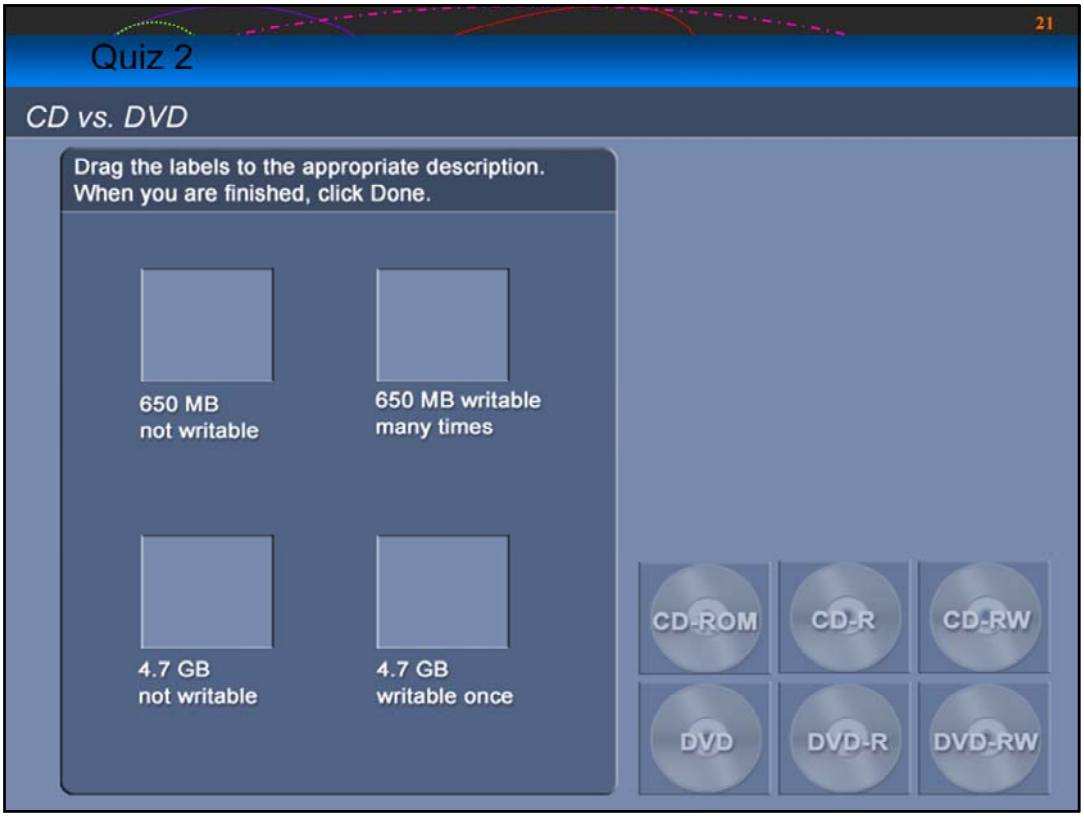
21
Quiz 2
CD vs. DVD
Drag the labels to the appropriate description.
When you are finished, click Done.
650 MB
not writable
650 MB writable
many times
4.7 GB
not writable
4.7 GB
writable once
CD-ROM
CD-R
CD-RW
DVD
DVD-R
DVD-RW