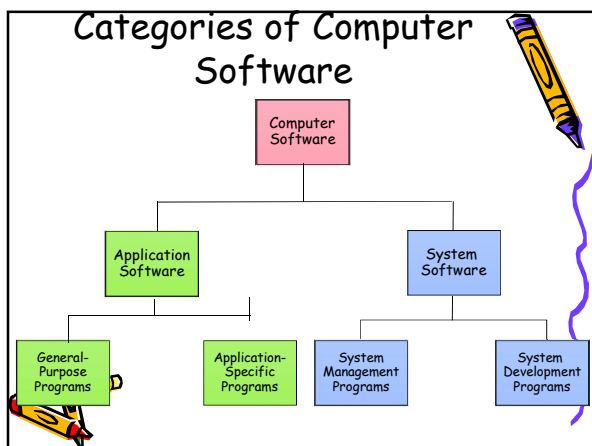Application Software

Competencies

- Discuss common features of most software applications
- Discuss word processors & their features
- Describe spreadsheets & their features
- Discuss database management systems & their features
- Describe presentation graphics & their features
- Discuss integrated suites and software suites

Application software

- There are two major categories of software:
- System software
- Application software

Application software includes:

- General-purpose applications
- Specialized applications

Categories of Computer Software

Computer Software

Application Software

System Software

General-Purpose Programs

Application-Specific Programs

System Management Programs

System Development Programs

General-purpose applications

- These are also known as **productivity software** and describes a category of computer software that aims to support users in performing a variety of common tasks..
- Examples include:
  - Word processors
  - Spreadsheets
  - Database management systems
  - Presentation graphics

Specialized applications:

- These are intended to serve a specific purpose.
- <u>Examples</u> include:
  - Graphics programs
  - Audio/video editors
  - Multimedia creation
  - Web authoring
  - Virtual reality

Word processors

- Used to
  - create and
  - edit

  documents such as memos, letters, faxes, newsletters, manuals, brochures, and reports
- Common word processing programs include Microsoft Word, Corel Word Perfect, and Lotus Word Pro

Features

- **Search/Replace:** A search command allows users to find any word or number that users know exists in the document
- The replace command automatically replaces the word users search for with another word.
- The search and replace commands are useful for finding and fixing errors.

Features Cont'

- **Mail Merge:** This feature allows users to merge different names and addresses so that users can mail out the same form letter to different people.
- **Thesaurus:** This programs enable users to quickly find the right word or an alternative word by presenting users with an on-screen thesaurus.

Features Cont'

- **Spelling Checker:** A spelling- checker program can check spelling errors in a document automatically.
- **Desktop Publishing:** This feature enables users to mix text and graphics to produce newsletters and other publications of nearly professional quality
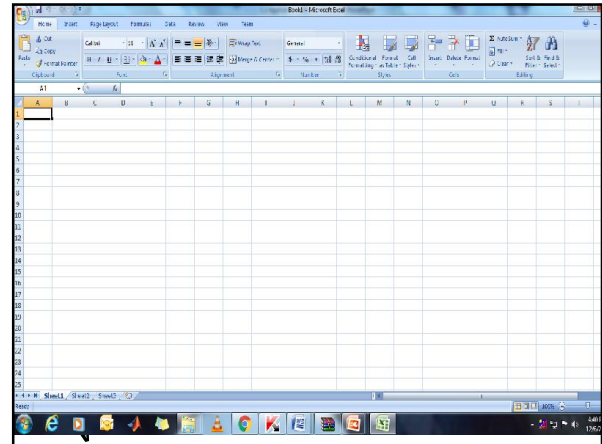
Features Cont'

- **Grammar/Style Checker:** These programs can be used to identify and correct grammar and punctuation errors.
- **Importing:** Files may be retrieved from nontext programs such as spreadsheets and graphics and added to the word processing program.

Spreadsheets

- Spreadsheets are used to
  - organize,
  - analyze, and
  - graph numeric data
- Common uses for spreadsheets include planning and tracking budgets, consolidating financial reports, recording marks & calculating grades, analyzing sales trends, etc
- Common spreadsheet programs include Microsoft Excel, Corel Quattro Pro, and Lotus 1-2-3

Features

- Some common features of spreadsheet programs are as follows:
- **Formulas:** The major benefit of spreadsheets is that users can manipulate data by using formulas.
- They make connections between numbers in particular cells.

Features Cont'

- **Recalculation**: If users change one or more numbers in the spreadsheet,
- all related formulas will recalculate automatically.
- **Graphic Data Display: S**preadsheets, allow users to display numerical information as pie charts or bar charts

Features Cont'

- **Consolidation Feature:** Data may be consolidated from several small worksheets into one large worksheet.
- Thus, users can work with small worksheets, which are more manageable, and summarize the data on a large worksheet.

Features Cont'

- **Dynamic File Links:** Some software offers dynamic file links,
- which allow users to link cells in one worksheet file to cells in other worksheet files.
- Whenever a change occurs in one file, the linked cells in the other files are automatically updated.

Database Management Packages

- A *database* is a large collection of data entered a computer system and stored for future use.
- The computerized information in the database is organized so that the parts that have something in common can be retrieved easily.
- Most DBMS packages can perform four primary tasks:

Database Management Packages

- **Database Development:** Define and organize the content, relationships, and structure of the data needed to build a database.
- **Database Interrogation:** Access the data in a database for information retrieval and report generation.

Database Management Packages

- **Database Maintenance:** Add, delete, update, correct, and protect the data in a database.
- **Application Development:** Develop prototypes of data entry screens, queries, forms, reports, and labels for a proposed application.

Database Management Packages

- Popular database management programs include dBASE, Paradox, and FoxPro access, Oracle.
- Database management packages have different features, depending on their sophistication.
- A principal feature of database management software are as follows:

Features

- **Retrieve/Display:** The program can search each record for a match in a particular field to whatever data users specify.
- The records can then be displayed on the screen for viewing, updating, or editing.

Features Cont'

- **Sort:** Normally, records are entered the database in the order they occur.
- There are many ways users can quickly rearrange the records in the file.
- **Calculate/Format:** Many database programs contain built-in math formulas.
- for example, you can find the highest or lowest commissions earned and calculate the average of the commissions earned.

Features Cont'

- **Program Control Languages:** Many database management programs include a programming control language so that advanced users can create sophisticated applications.

Presentation tools

- The presentation programs can make giving presentations and using overheads easier.
- Other uses include:
- Slide Shows
- Repeating Computer Presentations on a computer monitor

Presentation tools

- The most recognized graphic presentation programs are
- Microsoft PowerPoint and Harvard Graphics.
- Others are:
- AppleWorks (slideshows), HyperStudio, Flash, Director, HyperCard, Digital Chisel, SuperCard, Corel Envoy

Microsoft PowerPoint

- PowerPoint presentations consist of a number of individual pages or "slides".
- The "slide" analogy is a reference to the slide projector.
- A better analogy would be the "foils" (or transparencies/plastic sheets) that are shown with an overhead projector.

Microsoft PowerPoint

- Slides may contain text, graphics, sound, movies, and other objects, which may be arranged freely.
- The presentation can be printed, displayed live on a computer, or
- navigated through at the command of the presenter.

Microsoft PowerPoint

- For larger audiences the computer display is often projected using a video projector.
- Slides can also form the basis of webcasts.

Microsoft PowerPoint

- PowerPoint provides the ability to create a presentation that includes music which plays throughout the entire presentation or
- sound effects for particular slides.
- In addition to the ability to add sound files, the presentation can be designed to run, like a movie, on its own.

Microsoft PowerPoint

- PowerPoint allows the user to record the slide show with narration and a laser pointer.
- Microsoft also offers the ability to broadcast the presentation to specific users via a link and Windows Live.

Integrated packages

- An Integrated package is a single program that provides the functionality of a
  - word processor,
  - spreadsheet,
  - database management and more.

Integrated packages

- The main disadvantage of an integrated package is the capabilities of each function is not as extensive as stand alone packages.
- However, the main advantage is they are cheaper and easier to use.
- They are typically found on low end PCs, popular with home users.
- Common programs include Microsoft Works, AppleWorks, etc.

Software suites

- Software suites are collections of separate applications sold as a group
- The main advantage is they are less expensive than buying each individually

Types of suites include:

- Productivity Suite (aka Business Suite): popular examples include Microsoft Office, WordPerfect, Lotus SmartSuite
- Personal Suite (aka Home Suite): popular examples include Microsoft Works Suite, Works plus Calendar.
- Specialized Suite: examples include graphics suites, financial planning suites.
- Utility Suite: examples include Norton System Works and Norton Internet Security Suite

Questions