Application Software Packages

Common Packages

- Introduction
- Word processors
- Spreadsheets
- Presentations
- Accounts
- Database Management Systems

Introduction

- **Application software** consists of programs designed to perform specific tasks for end users.
- Application software can be used as a productivity/business tool;
- to assist with projects; to support home, personal, and educational activities; and to facilitate communications.
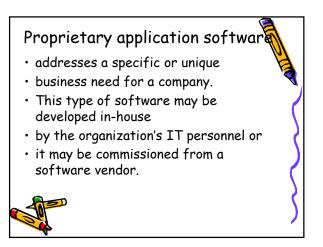
Application software

- Specific application software products, called **software packages**,
- Thousands of application packages are available from software vendors.
- because there are thousands of different jobs end users want computers to do.

Types of Application Software

- Application software includes
- proprietary application software also known as inbuilt software and
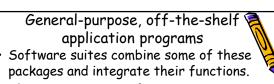- off-the-shelf application software.

Proprietary application software

- addresses a specific or unique
- business need for a company.
- This type of software may be developed in-house
- by the organization's IT personnel or
- it may be commissioned from a software vendor.

Proprietary application software

- Such specific software programs developed for a particular company by a vendor are called **contract software**

General-purpose, off-the-shelf application programs

- they support general types of processing
- rather than being linked to any specific business function.
- This type of software consists of nine widely used packages:
- spreadsheet, data management, word processing, desktop publishing, graphics, multimedia, communications, speech-recognition software, and groupware.

General-purpose, off-the-shelf application programs

- Software suites combine some of these packages and integrate their functions.
- The most common software suite is Microsoft office.
- Off-the-shelf may be customizable.
- Special purpose programs or "packages" can be tailored for a specific purpose,
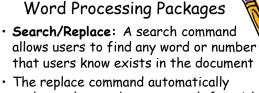- such as inventory control or payroll.

Word Processing Packages

- Word processing software is used to create, manipulate, and print documents.
- Documents can be any kind of text material.
- Some examples of documents are letters, memos, term papers, reports, and contracts.

Word Processing Packages

- Popular word processing packages include WordPerfect, MS-Word, and MacWrite.
- These word processing packages allow users to do the following interesting features:

Word Processing Packages

- **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.

Word Processing Packages

- **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.
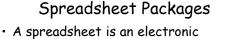
Word Processing Packages

- **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

Word Processing Packages

- **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.

Spreadsheet Packages

- A spreadsheet is an electronic worksheet used to organize and manipulate numbers and display options for what-if analysis.
- The electronic spreadsheet has rows and columns.

Spreadsheet Packages

- Users can manipulate numbers by using stored formulas and calculate different outcomes.
- A spreadsheet has several parts.
- The *worksheet area* of the spreadsheet has *column headings* across the top and *row headings* down the left-hand side.
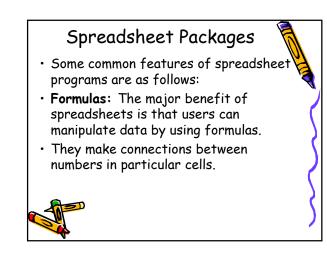
Spreadsheet Packages

- The intersection of a column and row is called a *cell*.
- The cell holds a unit of information.
- The position of a cell is called the *cell address*.
- Popular electronic spreadsheet packages include Lotus 1-2-3, Quattro Pro, and Excel.
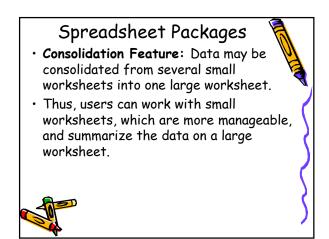
Spreadsheet Packages

- 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.
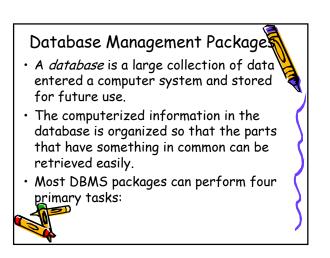
Spreadsheet Packages

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

Spreadsheet Packages

- **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.

Spreadsheet Packages

- **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.
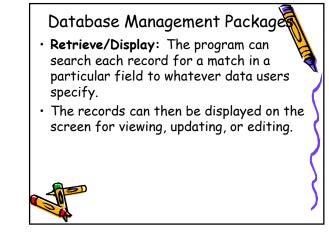
Database Management Packages

- **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.
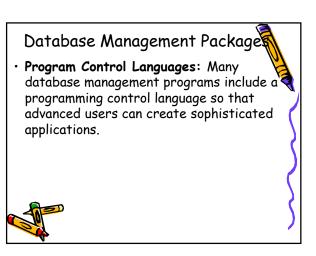
Database Management Packages

- 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:

Database Management Packages

- **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.

Database Management Packages

- **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.

Database Management Packages

- **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:
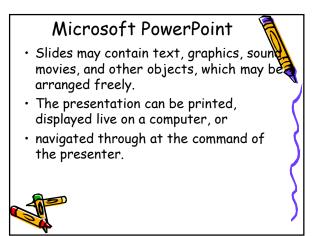- Slide Shows
- Repeating Computer Presentations on a computer monitor

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
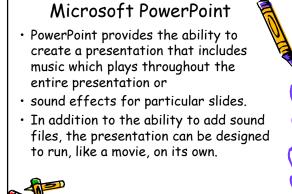
Microsoft PowerPoint

- 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.

Accounting software

- records & processes accounting transactions within functional modules
- such as accounts payable, accounts receivable, payroll, and trial balance.
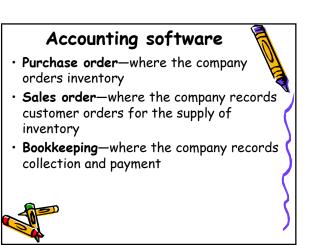- It functions as an accounting information system.

Accounting software

- It may be developed in-house by the company or organization using it,
- may be purchased from a third party, or
- may be a combination of a third-party application software package with local modifications.
- It varies greatly in its complexity and cost

Accounting software

- Accounting software is typically composed of various modules,
- different sections dealing with particular areas of accounting.
- Among the most common are:

Accounting software

- **Accounts receivable**—where the company enters money received
- **Accounts payable**—where the company enters its bills and pays money it owes
- **General ledger**—the company's "books"
- **Billing**—where the company produces invoices to clients/customers
- **Stock/inventory**—where the company keeps control of its inventory

Accounting software

- **Purchase order**—where the company orders inventory
- **Sales order**—where the company records customer orders for the supply of inventory
- **Bookkeeping**—where the company records collection and payment

Accounting software

- Non-core modules
- **Debt collection**—where the company tracks attempts to collect overdue bills (sometimes part of accounts receivable)
- Electronic payment processing
- Inquiries—where the company looks up information on screen without any edits or additions

Accounting software

- **Payroll**—where the company tracks salary, wages, and related taxes
- **Purchase requisition**—where requests for purchase orders are made, approved and tracked
- **Reconciliation**—compares records from parties at both sides of transactions for consistency
- etc

Web Browsers

- Web Browsers provide an easy to surf the Internet.
- Use search engines to find people, places, and things world-wide.
- Create your own web page to tell the world about you and your job.

Web Browsers

- Advertise your company and special activities.
- The two most popular web browsers are Netscape and Microsoft Internet Explorer.

Questions