

COMPUTER SOFTWARE



WHAT IS SOFTWARE?

- **SOFTWARE** is a program, or group of programs, that instructs (tells) the computer to perform a specific task
- Without software, a computer is like an airplane without a pilot
- Software is often divided into two classes:
 1. System software
 2. Application software



SYSTEM SOFTWARE

- **SYSTEM SOFTWARE** refers to the operating system that manages your computer's hardware (e.g. printers, disk drives, memory, etc.).
- All operating systems perform three (3) basic tasks:
 1. Allocate resources
 2. Monitor activities
 3. Manage disks and files



1. ALLOCATING RESOURCES

- The operating system directs the traffic inside the computer by:
 - Deciding what resources will be used and for how long
 - Managing memory resources
 - Managing all requests to read data from any input devices and outputting any data to output devices



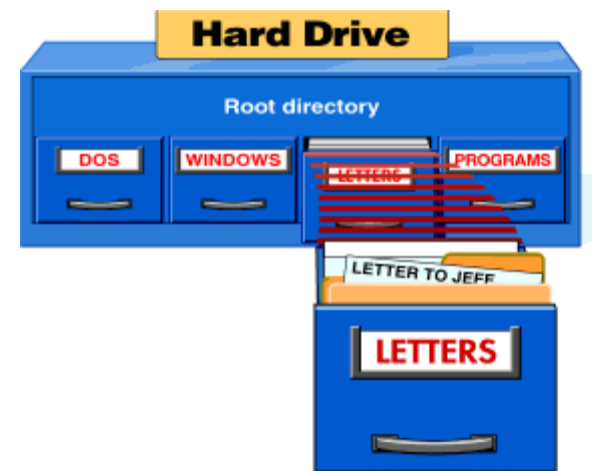
2. MONITORING SYSTEM ACTIVITIES

- The operating system allows users to monitor:
 - **SYSTEM PERFORMANCE:** How long it takes for the computer or the network to respond to certain tasks
 - **CPU UTILIZATION:** Compare the time the CPU is working to the time it is idle
 - **SYSTEM SECURITY:** Administrators can define who can have access to certain programs and data by setting up usernames and passwords



3. FILE AND DISK MANAGEMENT

- Operating systems come with basic file management commands that allows users to create directories for storing files in order to keep their files and data organized.
- Users are also able to use file management commands to copy, move, delete and rename files.



MICROSOFT WINDOWS

- Microsoft first introduced an operating system called Windows in 1985.
- Microsoft has since launched several versions of its operating system, the most current version being Windows Vista.
- Approximately 90% of computer users use Windows on as their operating system.



MAC OS

- Mac OS is the name for a series of operating systems developed by Mac Inc. for their Macintosh computers.
- The first version of the software was released in 1984.
- All new Mac computers use Mac OS X, which includes different subversions called Jaguar, Panther, Tiger, Leopard, Mavericks, Yosemite, etc.



UNIX OPERATING SYSTEM

- UNIX was developed in 1969 and is a powerful operating system used in high-end workstations and computer systems on the Internet.
- University networks and Internet Service Providers are likely to use the UNIX operating system.
- UNIX's ability to allow a single computer to operate multiple programs and be accessed by other computers all at the same time led to the development of the Internet and the reshaping of computing as centered in networks rather than in individual computers.



LINUX OPERATING SYSTEM

- LINUX is a generic term referring to UNIX-like computer operating systems
- It is an open-source program, meaning that the underlying source code is freely available to everyone.
- Programmers can work directly with the code and add features, and they can sell their customized version of Linux as long the source code is still open to others.
- This explains why there numerous Linux distributions (e.g. Debian, Fedora, Ubuntu, Red Hat, etc.)



APPLICATION SOFTWARE

- **APPLICATION SOFTWARE** is a program, or group of programs, that allows you to accomplish specific tasks (e.g. write letters, analyze numbers, sort files, manage finances, draw pictures, play games, etc.)



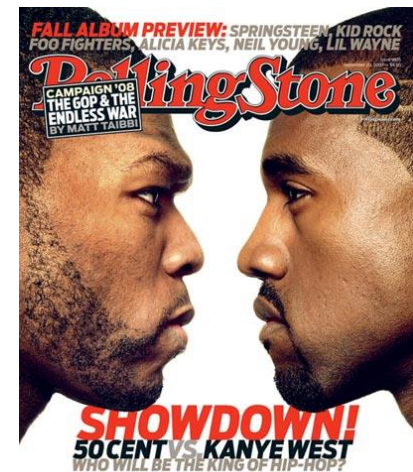
WORD PROCESSING

- **WORD PROCESSING** has replaced the typewriter as the main way words are put on paper.
- Documents can be revised and corrected before they are printed.
- An existing document can be used as a template, or pattern, for a new one so the user doesn't have to recreate standard documents from scratch each time.
- Examples of word processing programs: Microsoft Word, WordPerfect, Lotus WordPro, Open Office Writer, etc.



DESKTOP PUBLISHING

- **DESKTOP PUBLISHING** does on the computer what used to be done with scissors and glue to put together text and graphics for printing.
- A desktop publishing program gives precise control needed and also advanced capacities to create professional publications.
- Examples of desktop publishing programs: Microsoft Publisher, Corel Ventura, QuarkXpress, Adobe InDesign, etc.



SPREADSHEET SOFTWARE

- A **SPREADSHEET** is an application that allows users to create documents that organize numbers, like budgets, financial statements, grade sheets, and sales records.
- A spreadsheet can perform simple or complex calculations on the numbers you enter in rows and columns.
- Examples of spreadsheet programs: Microsoft Excel, Lotus 1-2-3, Quattro Pro, Open Office Calc, etc.



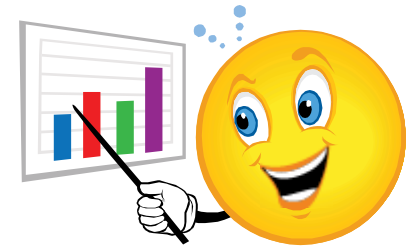
DATABASE SOFTWARE

- A **DATABASE** is a collection of data that you want to manage, rearrange, and add to later.
- It is a good program to use to manage lists that are not entirely numbers, such as addresses and phone numbers, inventories and membership rosters.
- With a database you can sort data, create forms to enter, update or display data, and create reports that output data.
- Examples of database programs: Microsoft Access, dBase, FoxPro, Oracle, Paradox, Open Office Calc, etc.



PRESENTATION SOFTWARE

- A **PRESENTATION** application links together a sequence of slides containing text and graphics
- A slide show might be used for a sales presentation, a training session, etc.
- A presentation application includes a number of useful tools, including adding sound and video clips to a slide show
- Examples of presentation software include: Microsoft PowerPoint, Corel Presentations, Lotus Freelance Graphics, Open Office Impress, etc.



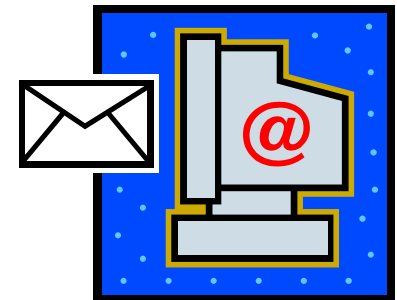
BROWSER SOFTWARE

- An **Internet browser** is a program that lets you navigate the World Wide Web or view HTML pages
- A browser displays web pages, keeps track of where you've been, and remembers the places you want to return to
- You can use a browser to buy books, check your bank account, buy and sell stocks, order pizza, etc.
- Examples of browser software include: Internet Explorer, Mozilla Firefox, Google Chrome, etc.



EMAIL SOFTWARE

- Email, or electronic mail, is a means by which people communicate
- An email client is a program that allows people to download and manage emails
- Examples of email clients include: Microsoft Outlook Express, Microsoft Outlook, Mozilla Thunderbird, Eudora, etc.
- Another way to handle email is with a web-based mail account whereby email is managed entirely through web pages
- Examples of web-based email sites include: Hotmail, Gmail, Yahoo, etc.



SUMMARY

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