Software

Software -- General Information

Computer software provides instruction that tell the computer how to operate.

1. Software are also called programs.
2. Programs are usually created using other software called programming languages.

There are two (2) main types of software

1. System Software
   - Used by the computer to accomplish a task.
   - What system software does:
     - controls the internal function of the computer
     - controls other devices connected to the CPU

2. Application Software
   - Used by people to accomplish a specific task.
   - Some common kinds of application software
     - Word Processor software
     - Database software
     - Spreadsheet software
     - Games
     - Web Page Browsers

Kinds of Software

1. Public Domain Software
   - Has no copyright - no one owns the right to control who can make copies of the software.
   - Free to use or make copies of.
   - Can be copied, used in other programs, or changed by anyone.

2. Freeware
   - Has a copyright - someone owns the right to determine who can make copies of the software.
   - Free to use and make copies of.
   - Can only give away exact copies of the software.
   - Can not be changed or used in another program without the copyright holder's permission.

3. Shareware
   - Has a copyright.
   - Allowed to use the software before paying for it.
     - Can be a demo - which limits some major features like the Save command.
     - Can set an amount of time you can use the software.
     - Can trust that you will pay for it if you like the software.

- Can only give away exact copies of the software.
- Can not be changed or used in another program without the copyright holder's permission.

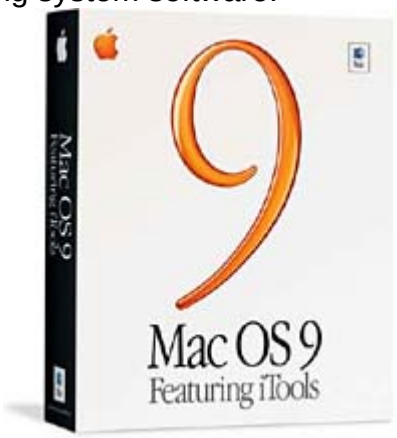
4. Commercial Software
    - Has the most resistive copyright.
    - Have to buy the software before you can use it.
    - Can usually make one copy of the software as a backup copy.
        - A backup copy is used in case something goes wrong with the original software.
        - Can not give away or sell the backup copy.
    - Can not copy, look at the program's code, change, or use the software in another program without the copyright holder's permission.
    - Commercial Software is the best software in the world.

How Software is Inputted Into Computer

1. Built into the computer's circuits, the ROM chips.
2. Loaded into the computer from a secondary storage device, like a floppy disk or hard disk drive.
3. Typed in from the keyboard.
    - Usually need to use a programming language to create the software.
    - Rarely done by most computer users today.

System Software

System software is a type of program that acts like a conductor in an orchestra. It directs all the activities and sets all the rules for how the hardware and software work together. MS DOS and Microsoft Windows are examples of system software or operating system software.



Some System Software is built into the computer.

1. ROM chips and BIOS.
2. Helps to setup the computer and start it.

Operating Systems

1. The operating system is usually located on a disk.

- Can be on either the hard disk drive, a floppy disk, or CD-ROM disk.
- Must be loaded into RAM before it can be used.

2. Used by the computer's hardware to work with its parts.
    - Tells the computer how to:
        - display information on the screen.
        - use a printer.
        - store information on a secondary storage device.
    - The system software that controls peripherals are called drivers.

3. An operating system works with application software.
    - Does basic tasks, like printing a document or saving a file
    - The operating system starts (launches) the application software so that it can be used.

User Interfaces

1. The user interface is how the computer's operating system presents information to the user and the user gives instructions (commands) to the computer.

2. There are two kinds of User Interfaces
    - Text Interface
        - Presents information to the user in the form of text.
        - Have to type in commands or select commands from a menu displayed as text on the screen.
        - Hard to use or learn, because the user must memorize and type in commands.
        - Examples:
            - MS-Dos (MicroSoft Disk Operating System)
            - ProDos (Professional Disk Operating System)
        - Many of the Text Interfaces had shells placed over them.
            - A shell was more of a Graphic User Interface.
            - Made using the Text Interface easier to use.
    - Graphic User Interface (GUI)
        - Presents information to the use in the form of pull-down menus and icons.
            - Pull-down menus the user clicks on to display the menu
            - Icons are small pictures that stand for something, like a file, volume, trash, or program

- The user gives commands to the computer by selecting items from a menu or by clicking on an icon when using a pointing device.
- GUIs are easy to learn and use
- Examples:
  - Windows 98
  - Windows 2000
  - MacOS

Application Software

Application software programs work with the operating system software to help you use your computer to do specific types of work such as word processing to type a letter.

1. Used by people to solve general problems
   - Can be used to do more than one thing - adapted to a wide variety of tasks
   - Some common tasks done by general purpose application software
     - Planning
     - Writing
     - Record keeping
     - Calculating
     - Communicating
     - Drawing
     - Painting
   - What can be done with general purpose application software is only limited by the imagination of the user.

2. Examples of general purpose application software
   - Word Processing Software

   - Database Software

- Spreadsheet Software

- Desktop Publishing Software

- Paint and Draw Software

Utilities

Utilities allow you to complete certain tasks on your computer. Examples of some of these tasks are file organizations.

- Specific purpose application software used to help a computer work better or to avoid problems.
- Some utility programs are built into the operating system
  - Scandisk in the Windows operating system
  - Disk formatting software
- Examples of utility programs
  - Anti-virus software
  - Disk maintenance software
- File management programs
- Security software