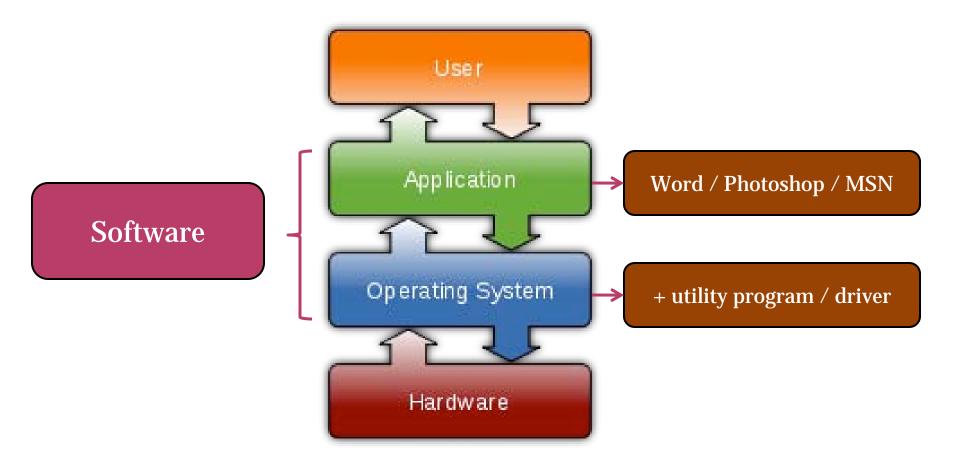
Chapter 14: System Software and Application Software

Curriculum

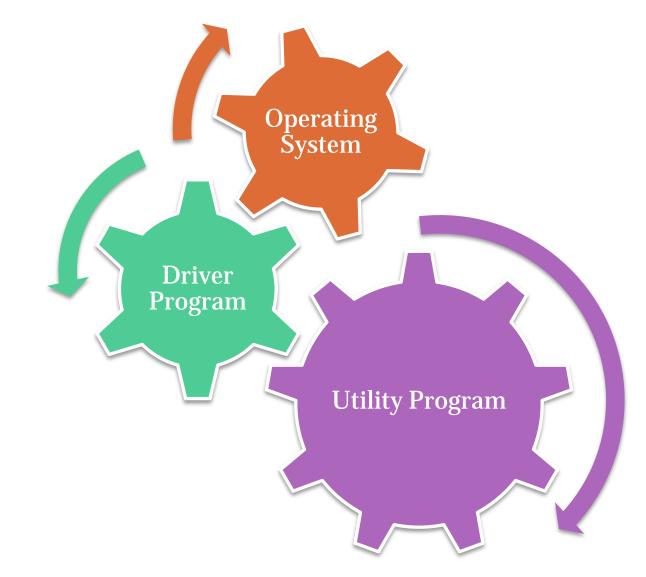
- Know the functions of system software and applications software, and the relationship between hardware, system software, applications software and users.
- Outline the basic functions of an operating system and describe some common operating systems, and their differences and applications.
- State the functions and needs of utility programs and driver programs.

Hardware <-> Software <-> Users



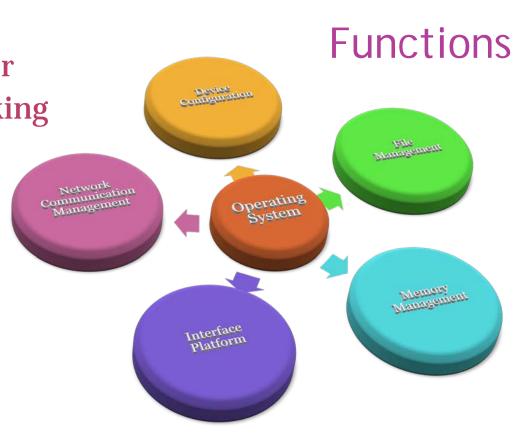
What is the role of software?

System Software



Operating System

- Types:
 - Features:
 Single / Multi-user
 Single/ Multi-tasking
 - Multi-processing
 - Devices:
 Network
 Desktop
 Mobile

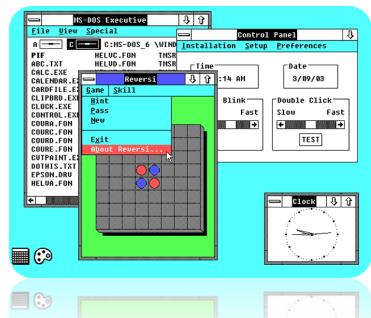


Disk Operating System (DOS)

- Single user
- Single tasking
- Command line interface

Microsoft Windows

• GUI



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Macintosh Operating System (Mac OS)

- For Macintosh Computer
- UNIX-based



UNIX

- Network Operating System exclusively for network servers
- Capable of handling a high volume of transaction
- Supports multiprocessors

Linux

- UNIX-like for PC
- Open source software



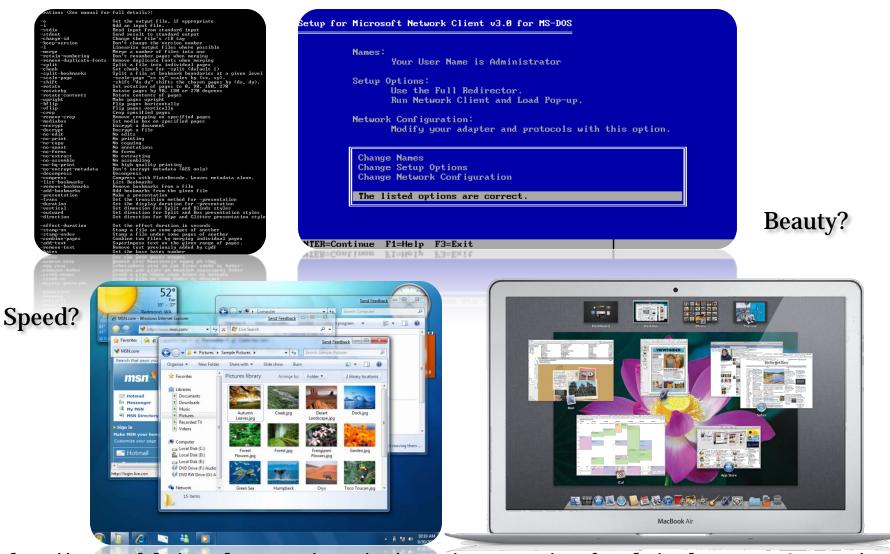
Mobile OS



User interface

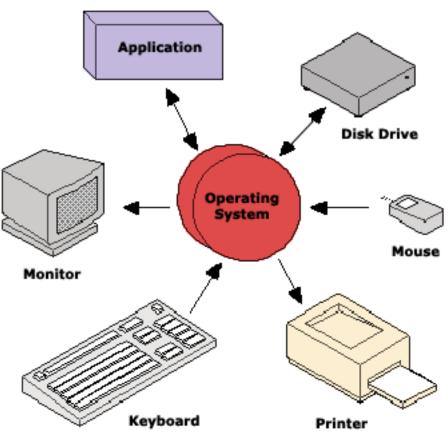
Efficiency?

User friendliness?



http://www.webdesignerdepot.com/2009/03/operating-system-interface-design-between-1981-2009/





System Software

Utility Program & Driver Program

Curriculum

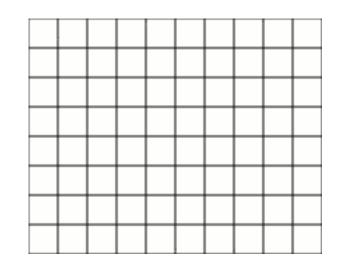
- State the functions and needs of utility programs and driver programs.
- Examples of the utilities are data compressors, virus checkers, file managers, defragmentation software and system monitoring software.
- Technical details of these programs are not required but demonstration or practice on their use should be given.

Utility Program

 Utility software is a kind of system software designed to help analyze, configure, optimize and maintain the computer. A single piece of utility software is usually called a utility or tool.

Disk Utilities

- Creation, conversion, compression and encryption of disk;
- Disk erasing, formatting, partitioning and cloning;
- Defragmentation tool;
- Backup, data recovery;
- File manager



http://en.wikipedia.org/wiki/Disk_defragme nter

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File Manager

Creation, conversion, compression and encryption of disk;

Disk erasing, formatting, partitioning and cloning;

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Anti-Virus / Firewall

- Anti-virus software: detects and removes viruses from computer system (AVG Anti-Virus / Norton 360)
- Firewall: a device or a software designed to permit or deny network transmissions based upon <u>a set of</u> <u>rules</u> and is frequently us from unauthorized acces
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Program Uninstaller

To remove an application and all entries of associated system files from a computer



System Monitor

Tools for tuning and monitoring the system performance and resources activities of CPU, disks

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Driver Program

- OR Device Driver
- A small program that allows a specific peripheral device to communicate with a computer system.
- Some driver programs come with an operating system or by the manufacturer of the device.
- OS (type, version), machine dependent

Application Software

Productivity Software



















MS PowerPoint

MS Access

MS Frontpage

Communication Software

MS Groove

MS InfoPath

MS OneNote

MS Outlook

Multimedia Software

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