

PABLO

Computer

software

Computer Software

What is **software**?

- Consists of a series of instructions that tells the computer what to do, when to do and how to do it.
- Instructions and associated data, stored in electronic format, that direct the computer to accomplish a task.
- Also called a program.
- Computer programmers write the codes/instructions that make-up software applications/programs.

Types of Software

1. System Software
2. Application Software

System Software

- Software that can control or maintain the operations of the computer and its devices.
- System software can be categorized as:
 - Operating system
 - Utilities and drivers
 - Programming language

Operating System Software

- An **Operating System** (OS) is the master controller within a computer.
- Coordinates all activities among computer hardware devices.
- An operating system interacts with:
 - All hardware installed in or connected to a computer system.
 - All software installed or running from a storage device on a computer system.

Operating System Software...

- Directs all the activities and sets all the rules for how the hardware and software will work together.
- Common operating system software:
 - Microsoft Windows
 - Mac OS
 - Network operating system (NOS)

Operating System Software...

○Microsoft Windows:

- Most popular operating system.
- Supports a vast array of application software and peripheral devices.

○Examples:

DOS, Windows 95, 98, ME, NT, XP, 7, 8, 10

○Mac OS:

- For Apple computers.
 - Does not have same functionality and support for software and peripheral devices.
- ## ○Examples:

MAC system OS 6,7,8,9,10

Operating System Software...

○ Network operating system (NOS):

- Manages network resources.
- Maintains security.
- Tracks user accounts.
- Handles communication between workstations and servers.

○ Popular network operating systems:

Windows NT /server, Novell Netware, UNIX

Utilities and Drivers

- **Utility Programs** allow the user to perform maintenance-type tasks usually related to managing a computer, its devices or its programs.
- Utilities provide file management capabilities such as copying, moving or renaming a file.
- Drivers are usually used to allow some devices to communicate with the operating system.

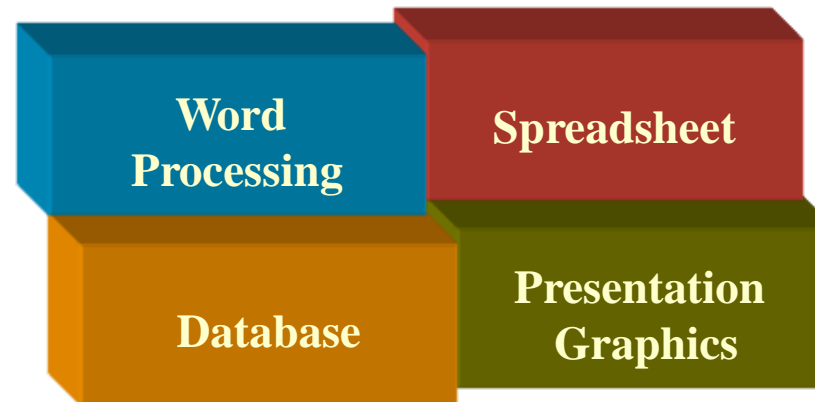
Programming Languages

- Basic building blocks of any software.

- Programming languages allow a programmer to write instructions that a computer can understand.
- Programming languages have some resemblance to the English language.
 - Visual basic
 - Pascal
 - Fortran
 - C++
 - Java

Application Software

- Programs designed for user oriented tasks or for specific tasks.
- Programs that work with operating system software to help the computer to do specific types of work.



Application Software...

1. **Business software:** word processors, spreadsheets, and database programs.
2. **Communication software:** allows computers to communicate with other computers
 - E.g fax software, Novell NetWare, AOL, Modem Software.
3. **Graphics software:** software that allows users to create and manipulate graphics.
 - E.g Photoshop, Print Shop, etc.

Application Software...

- 4. **Education and Reference software:** Programs that help teach new material and ideas, and programs that can be used to find information
 - E.g: Encarta, Worldbook Encyclopedia, Jumpstart Kindergarten
- 5. **Entertainment and Leisure software:**
 - E.g: Warcraft, Age of Empires, Barbie Design Center, Pacman, Solitaire
- 6. **Integrated software:** Combines several types of software into one program or package, Quicken

(Spreadsheet /data base /communications /reference)
or Print Shop (Graphics /Word processor).

Application Software...

○ Productivity Software:

- Spreadsheets
- Databases

○ Presentation Software

- Presentation software

○ Document Preparation

- Word Processing

- Desktop Publishing

○Project Management Software

Application Software...

○Graphics Creation and Manipulation

○Video Editing

○Internet Connectivity ○Website
Creation and Management

○Financial Management

○Educational Games and Tutorials

Examples of software Usage

- What software is available for a **home user**?
 - Personal finance management
 - Web access
 - Communications
 - Entertainment
- What software is available for a **small office/home office (SOHO)** user?
 - Productivity software
 - Web usage
 - E-mail

Examples of software Usage...

What are the needs of the large business user?

- Payroll
- Inventory
- E-commerce
- Desktop publishing

Computer Applications in Society

○ What are some examples of computer applications in society?

Education

Finance

Government

Healthcare

Science

Publishing

Travel

Manufacturing