

COMPUTER SOFTWARE

SYSTEM SOFTWARE



We can compare, the computer system, hardware and software with human and human intelligence respectively. All the activities of human body like running eating, speaking are based on the thoughts and feeling raised by the brain. All these actions are initiated and controlled by our brain. If the brain doesn't raise such feeling and control, we will be idle and cannot do anything. Similarly, computer system (Hardware) is also initiated and controlled by the set of programs called software. Programs are the collections of data and instructions in a systematic order to perform some work.

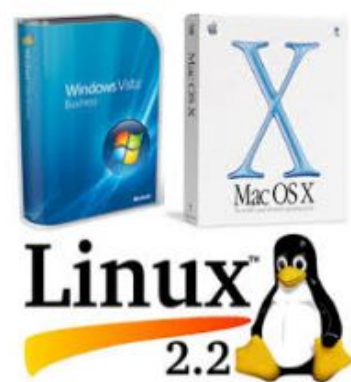
A set of the program, which are specially written to provide the user a precise functioning like solving a specific problems is termed as a software package. For example word, processor package helps to create the documents, save the document, modify and print the documents. "Software is the collection of program and other associated documents that help to control, manage and integrate the components of a computer system to accomplish a specific task."

Type of Software

In broad sense, we can classify the software into two types:

1. System software
2. Application software

System Software



The software that helps to activate the computer system and provide an operating environment for another application software is called system software. It's primary work is to control, integrate and manage the individual hardware components of a computer system. This software provides an operating and programming environment where programmer and user can create and the application software for their day to day application. It can be explained by three types:

1. Operating System (OS)

Software that helps to activate the computer system and provide a common platform to operate the computer system by the user is called OS. It is the first layer of software loaded into computer memory at the time of booting (Start Up). The main function of OS is to manage the disk access, files process etc. Another software is loaded in the environment of OS. Windows XP, Linux, MS-DOS etc are popular OS.

2. Device Drivers

As we discuss, system software helps to activate and recognize the computer hardware devices. To activate and recognize the hardware devices computer system requires special software called device drivers. To work with all devices, we need this software. For example to work with the modem, printers we have to install their driver software then only these devices will work. Until we install a device driver, OS will not recognize the device connected to the system.

3. Languages Processor

Translator program is a computer program that converts the programming instructions written in human convenient form into machine codes. The computer is digital devices. It can work only on the digits which are 0 to 1. All the commands, data, and instructions are required to be converted into machine code which is the combination of 0's and 1's. Different types of programming languages accept the data and instructions on natural language like English. But a computer can not process such data and instructions in natural language. So they should be translated into machine code. To convert such natural language. So they should be translated into machine code. According to the nature and application processing we have three types of language translators.

Compilers: Translator systems that compile the whole program and translate it into machine code at a time are compilers. This translator translates whole program at a time and creates object code then executive code. E.g. C Program, Pascal etc.

Interpreters: A translator that can convert the source code (Program code) in linear manner without looking at an entire program at a time. It translate each statement or lines at one time and translate another line only after completing previous line. E.g. Beginners All-Purpose Symbolic Instruction Code (BASIC).

Assemblers: It is a translator that can convert the assembly level language into machine code. It is also called source program.

4. Utility Software

Utility software helps a computer to work accurately and diligently. Any utility helps to restore backup on a computer, it also discard expired and unnecessary files in a computer. Some utility software recovers data, manage files, protect against computer virus and it also neutralizes virus from computer. Some utility software are attached with an operating system, such operating system is a text editor, backup utility, disk defragmentation and anti-virus.

APPLICATION SOFTWARE



Application Software is the software for the specific purpose, so we can say that software developed for user's purposes is called Application Software. This is developed by using High-level Language in the form of creative project work by the software industries.

There is much software available for user purposes:

Word Processing: MS-Word, Word Perfect, Word Star etc.

Spreadsheet: MS-Excel, Lotus-123, Quarto etc.

Database Management: MS-Access, dBase-IV, Clippers, Oracle, OMNIS, Ingress, Integra, FoxPro, SQL etc.

Graphics and Presentation: MS-Paint, MS Powerpoint, CorelDraw, Adobe PhotoShop, Adobe Illustrator etc.

Animation: Macromedia Director, Macromedia Flash, Adobe Image Ready, Adobe Premiere, Adobe after Effect etc.

Web Designing: Macromedia Dream weaver, Microsoft Frontpage Express etc.

1. Packaged Software



Packaged Software is ready made, error-free, advance and standard software for general works. All word processing, database management, graphics and representation, animation, web-designing software are packaged software. This software is equipped with essential tools and technology to enhance user productivity.

2. Tailored Software



Tailored software is a small software, developed by using high-level language for the specific small process. These types of soft wares are developed for the certain specific purpose. Example: Software for Payroll for Specific organization, Software for specific Bank, Software for Railway Reservation, Hotel Reservation etc. This software is developed for solving specific problems of specific users or organizations.

