OPERATION SYSTEM

An operating system (sometimes abbreviated as "OS") is the program that, after being initially loaded into the computer by a boot program, manages all the other programs in a computer. The other programs are called applications or application programs. The application programs make use of the operating system by making requests for services through a defined application program interface (API). In addition, users can interact directly with the operating system through a user interface such as a command language or a graphical user interface (GUI).

Operating system controls the basic input and output, allocates system resources, manage storage space, maintain security and delete equipment failure. The operating system controls the flow of data.

Examples of popular modern operating systems include Android, BlackBerry 10, BSD, Chrome OS, iOS, Linux, OS X, QNX, Microsoft Windows,Windows Phone, and z/OS

An operating system performs these services for applications:

1. In a multitasking operating system where multiple programs can be running at the same time, the operating system determines which applications should run in what order and how much time should be allowed for each application before giving another application a turn.
2. It manages the sharing of internal memory among multiple applications.
3. It handles input and output to and from attached hardware devices, such as hard disks, printers, and dial-up ports.
4. It sends messages to each application or interactive user (or to a system operator) about the status of operation and any errors that may have occurred.
5. It can offload the management of what are called batch jobs (for example, printing) so that the initiating application is freed from this work.
6. On computers that can provide parallel processing, an operating system can manage how to divide the program so that it runs on more than one processor at a time.

FUNCTIONS OF AN OPERATING SYSTEM

The Operating System has three main functions

1. Manage the computer's resources, such as the central processing unit, memory, disk drives, and printers
2. Establish a user interface
3. Execute and provide services for applications software

Other functions are:

- Boot process: When the computer is switched on the boot program that is resided in Rom initialize the setup of the computer, the then load the rest of the operating system from the banking storage (hard ware) in the RAM.
- Operating system does the work of sharing and accounting of the computer resources
- Operating system handles the input and output of data and information.
- Operating system handles the management of memory.
- Operating system handles the management of the hardware.
- Operating system handles multitasking and multi programming.
- Operating system handles protection and error trending.
- Operating system acts as an interface between the user and the computer
- Operating system controls interaction and program control