

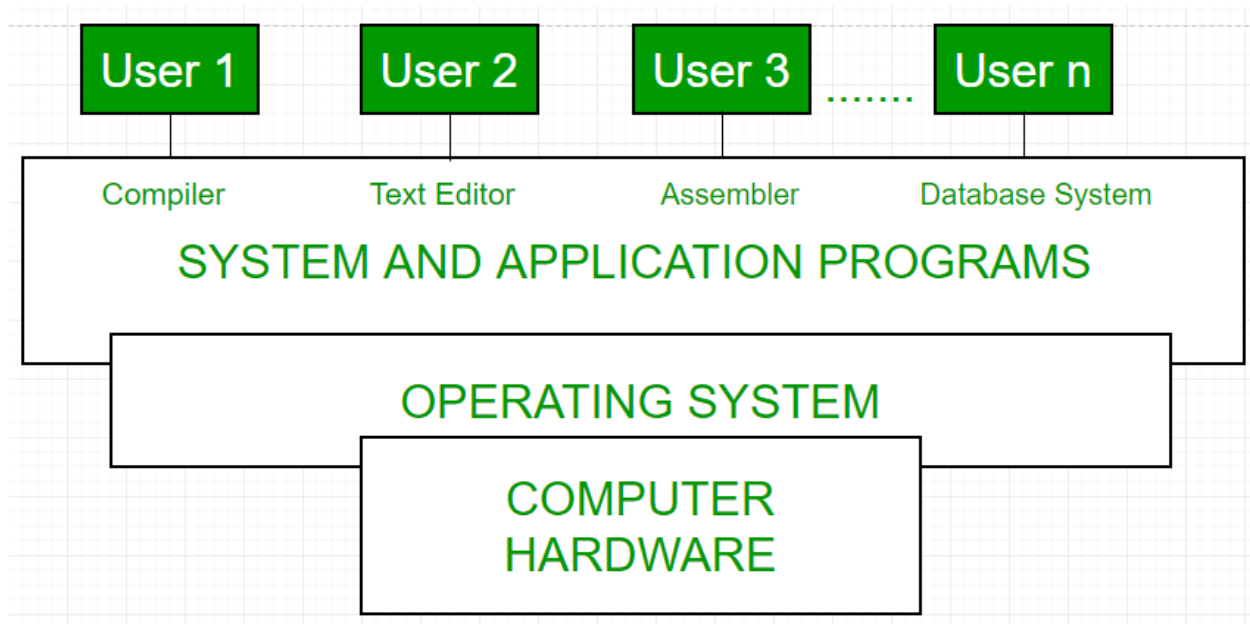
Operating System & Types Of Operating System

Operating System- Operating System is a System software that acts as a interface between User and Hardware.

Examples Of Operating Systems are- Windows,Unix,Linux etc.

Functions Of Operating System-

- 1) _An Operating System makes computer convenient to use.
- 2) Operating system makes our task easier and it also saves our time



Functionalities Of Operating System

- 1) **Memory Management-** Operating Systems keeps track of memory whenever process needs memory then Operating System allocates the memory to the process.
- 2) **Device Management-** An Operating System keeps track of all devices that are connected to the hardware. Program responsible for this task is known as **I/O Controller**.
- 3) **File Management-** Operating System keeps track of all file handling operations. It keeps track of all the file related information like directory, modified time etc.

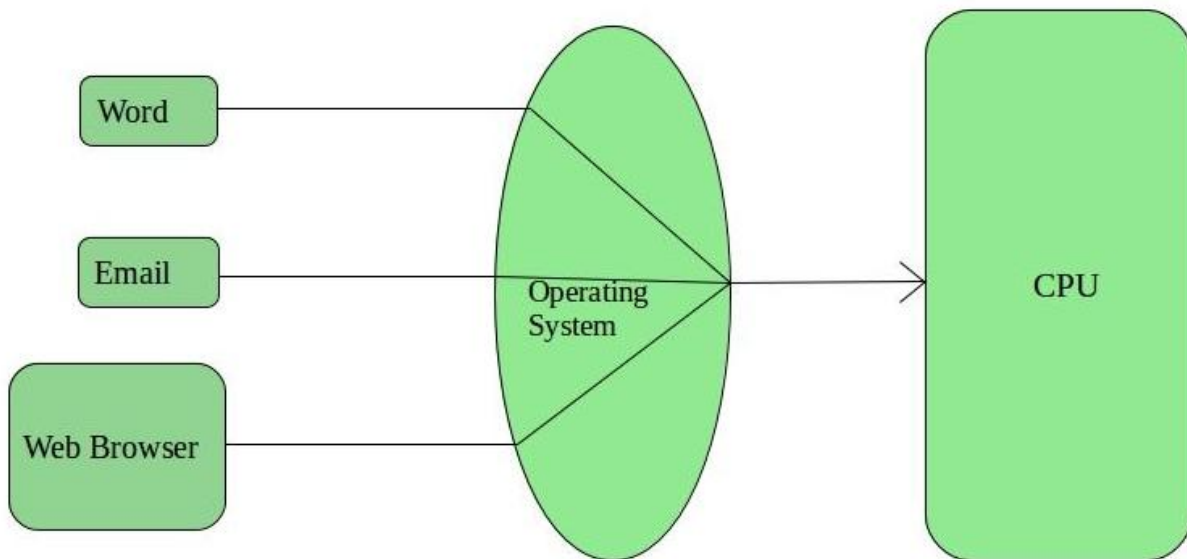
Types Of Operating System

1)Batch Operating System- In Batch Operating System there is an operator which takes similar job having the same requirement and group them into batches. It's responsibility to sort the jobs with the similar needs. The user of Batch Operating System does not directly interact with computer.

Advantages Of Batch Operating System-

- Multiple users can share batch systems
- Idle time for the Batch Operating System is very less.

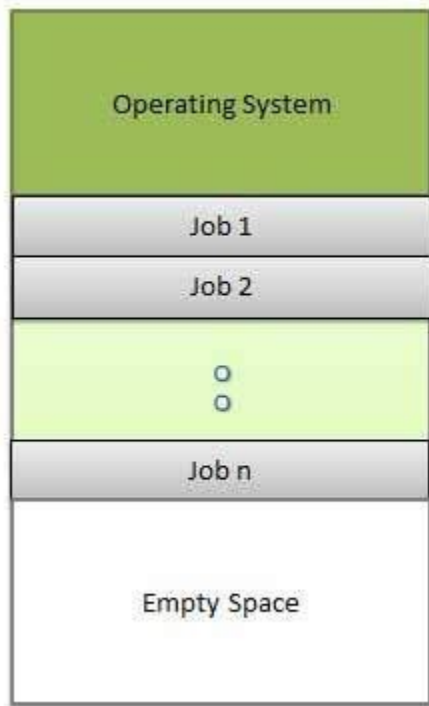
2)Multitasking/Time Sharing Operating System- Each task is given some time to execute the task to work accordingly. Each user gets the time of CPU as they use single system. This System is also known as Multitasking. The Processor timing is shared between multiple users are called as **Time Sharing**.



Advantages Of MultiTasking-

- Each task gets an equal amount of time
- Avoids duplication of software.

Multiprogramming Operating System- Sharing the processor, when two or more processor reside in the memory at the same time. Multiprogramming increases CPU Utilization by organizing jobs so that CPU has to execute one by one.



Advantages Of MultiProgramming-

- The Operating System keeps several jobs in memory at a time.
- The Operating system picks and begin to execute the job in the memory.

MultiProcessing Operating System- A multiprocessing operating system is one in which two or more central processing units control the functions of the computer. Each CPU contains a copy of the OS, and these copies communicate with one another to coordinate

Other Operating Systems:

- Real Time Operating System
- Network Operating System
- Distributed Operating System