What are some of the basic components of an operating system

Technology, Information Technology



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An operating system serves as the heart of the entire computer and it consists of a number of components within. These components enable the proper working of the entire operating system and computer as a whole.

Broadly the operating system consists of the following parts

Process management:

The process makes up for the program and the programs pile up to constitute the entire operating system. It is the operating system that enables the handling of the processes. Determining their timers, determining their commands and tasks are a few of the basic functions performed during the process management portion of the overall operating system activities handling. Deciding which particular process must be continued and choosing to delete a particular program against the other chosen ones also makes up for the tasks completed during the process management.

The kernel is another most important part of the operating system. This supported by the cache makes up for another integral part of the operating system.

I/O components:

These include the input and output enabling commands and components. The sole purpose of the I/Os is the enabling function of converting a machine interfaced language to the user understandable language. There are other important functions that are assigned to the I/O components. These include providing the computer programmers with the relevant information about the source code only and protecting any other information that may not support the programmer's purpose of tackling the operating system.

Main memory management:

Apart from the internal components, and the operating system consists of a set of components, which include the controlling unit, the service support programs unit and the utility programs support systems

What is the resource allocation process?

The resource allocation process consists of the function of allocating the workload and the program load according to the capacity of the operating system and the kernel. It is associated with the function of stacking up the information and ensuring that the operating system does not suffer from delay and wait. Allocating resources along with the cache and preventing any deadlocks in the operating system activities make up for the allocation process. The purpose is to get a smooth flow of the operating system and overall performance all together.

RAM is used for this purpose which ensures providing the secondary data and storage for processes execution. Allocating the memory to the right kind of registers and addresses is the function fulfilled in this part of the program. Ensuring that the data so used is in use by the authentic users is also the main memory management function. Memory spaces adjustment on the hard disk and the Ram is another function performed during the main memory management process.