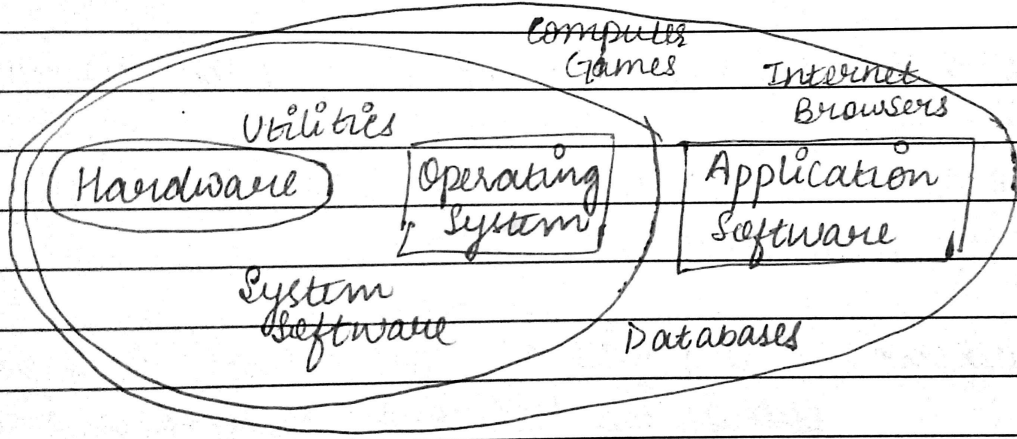


Operating System An operating sys. is the program that after being initially loaded into the computer by a boot program, manages all of the other applications programs in a computer.

The application programs make use of the operating system by making requests for services through a defined application program interface (API)

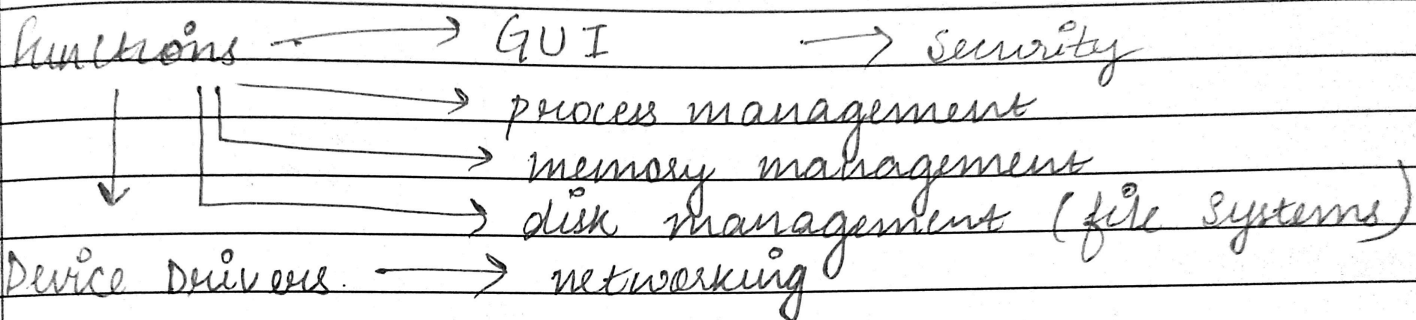


Types of OS For the most part, the IT industry largely focuses on the top 5 OSs,

- Apple mac OS
- Google's Android OS
- Apple IOS
- Microsoft windows
- linux operating system

- ① Mac OS : is a series of graphical user interface based operating systems developed by Apple Inc for their Macintosh.
- ② IOS (previously iPhone OS) : is a mobile operating system developed and distributed by Apple Inc. Originally unveiled in 2007 for the iPhone. It has been extended to support other Apple devices such as the iPod touch.
- ③ Linux : is a Unix like computer operating system assembled under the model of free and open source software development and distribution.
- ④ Android : is a linux based operating system designed primarily for touchscreen mobile devices such as smartphones and tablet computers. Initially developed by Android Inc.
- ⑤ Microsoft Windows : is a series of graphical interface operating systems developed, marketed, and sold by Microsoft.
- ⑥ BSD / OS : had a reputation for reliability in server roles; the renowned Unix programmer and author W. Richard Stevens used it for his own personal web server for this reason.

An Operating System's (OS) primary function is to manage files and folders. Operating systems are responsible for managing the files on a computer. This includes creating, opening, closing, and deleting files. The operating system is also responsible for organizing the files on the disk.



Features :

- protected and supervisor mode
- allows disk access and file systems Device Drivers

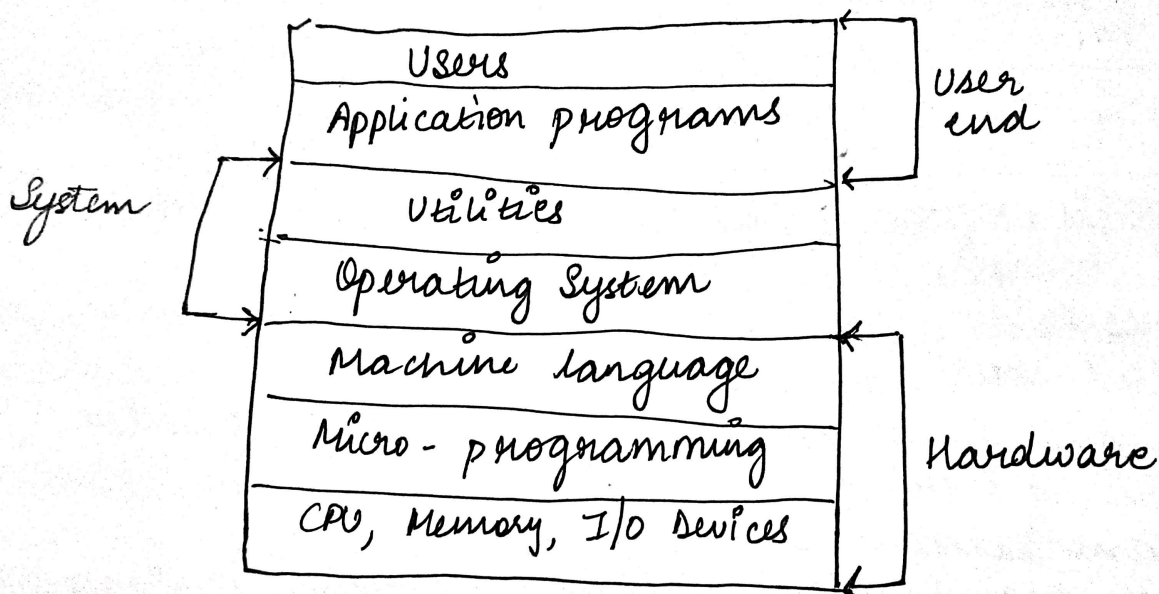
Networking Security:

- Program execution
- Memory management virtual memory multitasking
- Handling I/O operations
- Manipulation of the file systems
- Error detection and handling.
- Resource allocation.

Structure of a Comp syst.

A comp syst consists of:

- users (people who are using the comp)
- application programs (compilers, Databases, Games, Video player, Browsers, etc)
- System Programs (shells, editors, compilers etc)
- Operating System (A spec program which acts as an interface b/w user and hardware)
- Hardware (CPU, Disks, Memory etc)



What does an Operating system do?

1. Process Management
2. Process Synchronization
3. Memory Management
4. CPU Scheduling
5. File Management
6. Security

What does an Operating System do?

1. It checks all input devices: keyboard for key presses and mouse for movement and button presses
2. It manages the sending of data to output devices like the screen and the printer.
3. It controls where programs and data are placed in the main memory.
4. It manages the filing system
5. In some network systems it controls the system security of the system.
6. Provides a human computer interface (HCI) to the user.
7. Lets the user know if any mistakes have occurred