Operating System

Day-1

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→ Let's suppose we have two application, which we using at a time, then we need to allocate resources effectively to both the application, ensuring each application receives the appropriate resources according to their requirment.

This is called "resource management".

Ex. App 1 → TikTok → cpu - 5%, memory → 10%, GPU → 10%.

App 2 → Pubg → cpu → 50%, memory → 40%, GPU → 60%.

Application Software :→ It is a computer program or software designed to perform specific task or functions for the user.

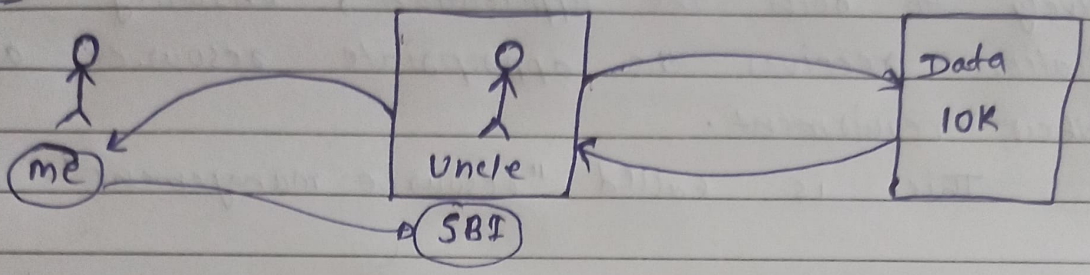
System Software :→ It operates and controls the computer the computers system and provides a plateform to run application software.

Operating System :→ It is a piece of software that manages all the resources of a computer system, both hardware and software, and provide an environment in which the user can execute their Programs in a convenient and efficient manner by hiding underlying complexity of the hardware and acting as a resource manager.

* The way the hardware is made, the software requirments are made accordingly.

→ Operating system is like an Interface.

Example :-



In the above example,

when I go to SBI bank, I told the uncle that uncle please check my bank balance and withdraw 10K amount and give it to me.

Let's relate this example to the operating system

me - user appn , Uncle → Interface , amount → Resources

Why operating system ?

What if there is no OS ?

→ All the appn have to do memory management by themselves due to which this application becomes bulky and complex.

→ Resource exploration by one application.

→ No memory protection.

What is an OS made up of ?

→ Collection of system software.