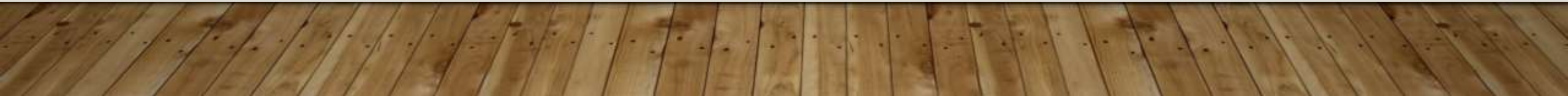


TYPES OF OPERATING SYSTEM



SINGLE USER SINGLE TASKING OS

- One user can work in the system. One task can be executed at once. For example DOS (Disk Operating System).

BATCH PROCESSING OS

- A set of programs are collected to form a batch and executed all together.
- It allows very limited or no interaction between user and processor during execution.

SINGLE USER MULTI TASKING OS

- This OS allows a single user to perform several tasks simultaneously.
- For example MS Windows, Apple MAC OS

MULTI USER MULTI TASKING OS

- A multi user OS enables multiple users on different computers to access a single system.
- Users will typically be at terminals or computers that access the main system through a network.
- For example UNIX, LINUX

MULTI PROCESSING OS

- There are two or more processors in a single computer system.
- In this case a complex program can be divided into smaller parts and then executed concurrently by multiple processors in parallel

REAL TIME OS

- It is basically used to control machinery, scientific instruments and industrial systems.
- It has very little user interface capability. It is designed to run applications with very precise timing and high degree of reliability.
- In this case down time is costly or program delay could cause huge loss.

MULTIPROGRAMMING OS

- It can execute more than one program at one time.
- More than one program is kept in memory.
- One of the programs is selected for execution.
- When this program need to perform I/O operation CPU is switched to next program.

MULTIPROGRAMMING OS

- So when one program is doing computations by holding cpu, other programs may be doing their input/output operation.
- In this way more than one programs are executed in the system even if there is one processor

TIME SHARING OS

- Each user's job is allotted with a small amount of CPU time for example 20ms.
- At first one of the job is selected and executed for 20ms, when the time slice is over the CPU is assigned to next job.

TIME SHARING OS

- If there are 10 users in this system, then each user will get cpu 5 times in each one second.
- That means CPU is switched between user jobs such a speed that each user thinks his program is executing in the system.