Conceptual Model for Scheduling

Aim of the experiment

This experiment aims at creating an interactive and a student friendly simulation of the Scheduling mechanism.

Outcomes of the experiment

Understanding the mechanism of scheduling which includes

- Understanding the process states
- Understanding the transitions from one process state to another and how this impacts the scheduling mechanism.
- Understanding how scheduler decides which process to choose (Scheduling mechanisms).
- Understanding when a scheduler or the scheduling mechanism is triggered.

High level overview of the mechanism

What all do we have in this mechanism?

- Processes in different states (Ready, Running, Waiting for IO, Terminated, Completed)
- CPU to execute the processes.
- Scheduler to schedule the processes.

Flow of the mechanism
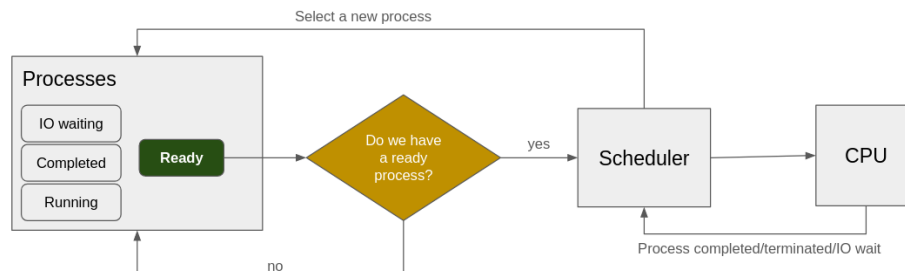
When is the scheduling mechanism triggered?

- When a process in the CPU completes it's execution. (Software interrupt)
- When an external entity terminates the process. (Hardware interrupt)