Devon Rudd Muntuck Yap Operating Systems Writing Assignment

The Dispatcher

The dispatcher is the thing that gives control of the CPU to a process. A dispatcher runs on each core of the CPU. Functions that the dispatcher is responsible for are:

- 1. Context switches where dispatcher saves the state (context) of a process or thread that was running and then loads either the initial state or saved state of the next process.
- 2. Switching into user mode.
- 3. Selecting the proper location in the program that is shown by its state.

To make a computer more time efficient, the dispatcher should be as fast as possible because it called every time a process is switched. During context switches, the dispatcher is idle for a bit of time and therefore, unnecessary context switches should not be done. Dispatch latency is the time it takes the dispatcher to stop one process and start another.