CS 452 Review 5

Scheduling Algorithms

First Come First Served	- Run each process to completion in FIFO order
Priority Scheduling	- Run the processes based on a given priority
Shortest Process Next	- Predict the process that will finish/block the soonest
Guaranteed Scheduling	- N Processes get 1/N CPU Time
Fair Share	- N users get 1/N CPU Time
Lottery Scheduling	- Just pick one

Implementations

Multilevel Feedback Queues (Windows/Mac)

There are multiple queues, each with their own priority. A process can move up or down in priority based on different criteria. Round-Robin on the base queue.

Completely Fair Scheduler (Linux)

Processes are stored in a Red-Black Tree based on how long each process has run. The left-most process is picked to run, removed from the tree, then reinserted with it’s new time.