CSCI 460 Project Proposal: Deep Dive into Scheduler Algorithms (PoC Track)

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1 Proposed Work

We propose an analysis of common scheduling algorithms, from easy to implement and understand to high end schedulers. Performance of first come first server (FCFS), round robin, shortest remaining time, multilevel feedback queue, and highest response ratio next will be evaluated using common metrics throughput, waiting time, CPU utilization, turnaround time, and response time. We will code these algorithms in C and produce graphs comparing performance metrics, then outline our findings in a technical report and presentation.

GitHub Repository

2 Timeline

1. Code completion: Sunday, November 8th
2. Graphs & Report: Saturday, November 14th

3 Division of Labor

For how we will divide up the work for the project, we decided that each person would be responsible for one of the four algorithms. Each person will implement their algorithm in C code and perform analysis of said algorithm. Each analysis will include graphs and tables displaying the useful metrics mentioned above. This will ideally split up the workload evenly, but some algorithms might require slightly more infrastructure (coding time) than others.