CSC 4730 Fall 2023 Project 3

User land scheduler simulations: Stride and MLFQ

Objectives

The educational purpose for this project master the scheduling algorithms called Stride and MLFQ (Multi Level Feedback Queue). You will accomplish this by reading the appropriate chapters in OSTEP and writing two programs.

One program will read formatted data, feeding it into a stride scheduler.

The other program will read formatted data, feeding it into an MLFQ scheduler.

The format of the data is almost the same for the two programs. Writing that portion in one program can be adapted for the other and both partners can finish the pair of programs in parallel.

Deadlines

You and your assigned partner have 7 days to complete this assignment plus one grace day. If you have not turned anything in by 11:59 PM on the eighth day, you will win a grade of zero. Therefore, to receive partial credit, hand in something before the project expires!

Overview

Each of these programs has its own specification:

- Stride
- MLFQ

The data each of these consume is very similar so the work you do on parsing the input can be shared across both programs.

What to Hand In

Zip your source code files together and submit that.

Partners

- You must use only the partner I assign you.
- Only 1 person should hand in code. The code should clearly state who the partners are in a new text file `partner.txt` in the main directory.
- The non-code-submitting partner must submit a text file "partner.txt" that states who the partners are.

- Failure to list partners correctly as described above removes 5 points from your grade.

Software Kills

You goofed when you tweaked the scheduler of the system running a nuclear power plant. It starves a crucial monitoring task. The reactor melts down. Millions die.

Grading

The class will receive a rubric when grading is complete that describes errors and penalties.

Both partners get the same grade without exception.