Christopher Brant and Jennifer Starcher
Due March 9th, 2018
ECE 3220 – Carl Martin

ECE 3220 Intro to Operating Systems Project 2: Scheduler

Throughout the writing of this project there were a few difficulties that were encountered while working to create our scheduler. Overall, this project did not take an exceptional amount of time, as the pseudocode that was given to us was straightforward and the lectures about the project really elucidated any areas of confusion. However, we still faced a few issues. Those issues that arose were specific issues that had to do with new_process() and with ensuring that the amount of total processes left was being decremented correctly.

In this project, once we had finished writing all the code for this program, specifically once we had finished filling out all the functions that were our responsibility for writing, we ran our code and were getting a segmentation fault. After a few moments we came to find the infinite loop that we were getting into. The issue of the infinite loop came into play as we were searching for values that were loaded already as we were searching for processes such that their process_loaded value was a 1, which would be 0 processes so it would search forever. This issue was solved easily by just editing the parameter we were searching for to be a value of 0 instead of a value of 1. Other issues that were prevalent in this project were the problems associated with not finishing any more than 2 processes.

The issue of not completing processes arose as we were under the assumption that the number of processes left would need to be decremented in two different places, leading to an issue where only process 0 and process 1 would be completed, and the main loop of the program would end because the number of processes would decrement when it was not supposed to. The decrements in the wrong locations were removed, and that resolved that issue leading to a working program. Overall this was not an incredibly difficult issue to pinpoint and remove.

On the whole, this project was interesting and rather easy to understand, as stated before, the pseudocode and lectures were extremely helpful in understanding what was being asked and what was necessary of us on this project. The debugging process probably took about an hour on top of the hour to an hour and a half it took to write it. Which by our measure is a great length of a project. Hopefully the final project will also be about like this.