**Scott Hockaday**

**CS 4328**

**Project 2 Report**

* **Overview**

This program was compiled and ran using C++. In this program, there consists of three different types of algorithms with based scheduling. The three types of algorithms are the First-Come First-Served algorithm (non-preemptive), the Shortest Remaining Time First algorithm (preemptive), and the Round Robin algorithm (with a time quantum). The tests will consist of these 4 algorithms each ran with a different number of processes. Along with the number of processes, there will be an arrival time and burst time for each. After inputting the data into program/server, the program will then compute the average turnaround time, the throughput, and the cpu utilization, and the queue length.

* **Compile/Run instructions for CS Linux Servers**

Here are the instructions on how to compile/run project1 on CS Linux servers

How to run:

1. Open a Linux command line

2. ssh into Texas State CS Linux Server

-ssh TXST Net\_IDeros.cs.txstate.edu

OR

-ssh TXST Net\_IDzeus.cs.txstate.edu

3. Change to directory that contains the file “project2cpp.cpp”

4. While in that directory, access the different type of algorithms in the appropriate folder names with the following command:

cd FCFS

cd SRTF

cd RoundRobin

5. To Compile the program(s), simple type the following command:

- g++ -std=c+11 FCFS.cpp

- g++ -std=c+11 SRTF.cpp

- g++ -std=c+11 RoundRobin.cpp

-The program will compile and produce a new file in said directory.

-This file, after compiling, will be called “a.out” and will be in the same directory.

6. Since Round Robin is a special case, we have to run two tests for time quantum. The time quantum values are 0.01 and 0.2

7. Type: ./a.out #(s) on the following command line where # will represent the number of processes, followed by the arrival time(s) and burst time(s) of each process.

8. After inputting the amount of time for each type of scheduling process, the program will generate a table for the data collected.

**FCFS**

**Text

Description automatically generated with low confidence**

**SRTF**

**A picture containing text

Description automatically generated**

**RR 0.01**

**Calendar

Description automatically generated**

**A picture containing text, electronics

Description automatically generated**

**RR 0.2**

**Calendar

Description automatically generated**

**Calendar

Description automatically generated**