CIS 415 Operating Systems

Assignment 2 Report

Submitted to:

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**Report**

**Introduction**

*This program is a Master Control Program, which was been considered one of the predecessors of the modern operating system. In part 1, the program will take an input file with command lines and read the command and create child processes to execute those commands. Based on create and execute commands and programs, in part 2 the parent process will wait all child processes to finish executing. In part 3, we execute programs with round-robin that each process gets execute in a certain amount of time then go to the next process until all processes get done. In part 4, we read status of each processes from proc/PID/status and print out their information to simulate the usage of the top command.*

**Background**

In regards of finish this assignment, we need to know the usage of fork(), execvp(), wait()/waitpid(), sigwait(), kill(), and the usage of a signal set and signal handler function, etc.

**Implementation**

*Talk about your implementation of the project here. If there is anything nifty that you tried talk about it here too. If you had problems then talk about that here as well.*

*You can use Notepad++ to copy in code snippets into your document if you want. Just highlight some code, right click and select* ***Plugin Commands -> Copy text with Syntax Highlights.***

Figure 1: Some Algorithm implementation

int someFunction**(**int param**)**

**{**

/\*some comment \*/

int someVar **=** 5**;**

someVar **=** someVar**+**param**;**

**return** someVar**;**

**}**

**Performance Results and Discussion**

*Write about the performance of your project. Give any performance results using standard performance metrics here (i.e. if in the description we say the project needs to have certain output then measure the output of your code vs. that metric). Show output from the console or from your application here if necessary (as a picture or a table). If your code does not run to specification, then explain why here. We will be more understanding if your issues are well documented. If your code does not run, and there is no explanation in either your comments or report, then you’re not leaving us with much choice concerning your grades.*

**Conclusion**

*Give any concluding remarks here. If you learned anything talk about that here as well. If you discovered anything interesting, then talk about it here too.*