COMP3100 Project stage2 Report- Job scheduling
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Introduction

In this assignment2, we are supposed to implement job scheduling method with new algorithm that helps
@minimization of total server rental cost
@minimization of average turnaround time
@maximization of average resource utilization.

This method is based on FF, WF, and BF which are some pros and cons on any methods.

My algorithm aims for reducing rental total cost

Problem definition

All three of WF, BF and FF are useful some situations but not all time. The scheduling effectiveness could be better.
Thus, this time I was trying to reducing total average cost but when I was trying to implement solution for this but my turnaround time was the way too big.

Algorithm description

Turnaround time = (end time of job – submission time) / the number of jobs

Wait time = In total of waiting time for all jobs

This algorithm starts with setting server and upload the time. Then this server completes the scheduled jobs.
This algorithm is finding a sever which reduce rental cost.
Then comparing the job starting time and running time.
And reducing the cost it is better to use one is already being used if there is enough space to have more jobs. This algorithm is similar to first fit algorithm.

Implementation details

For this assignment, I used same repository from project 1. For assignment 1 my group made different methods to better understanding. In job and server class have all information for implementing for this assignment. And in server class I added waitTime and runTime.
This class contains a list of all Server class servers, also methods that execute over all servers, reducing the number of iterators needed in the main code.

For getCapable function is for getting the list of capable server for assigning job.
Converting String to integer was for Server and Job.

Evaluation

Conclusion

In conclusion, I could reduce rental total cost.

Reference

[1]; https://github.com/Suguru1114/Comp3100-stage2