Date: 04/13/20 ReadMe Notes – Assignment3 Sai haswanth Gude(Z1862847)
Sai Vinay Sayyapureddi(Z1861884)

Readme Notes

Objective:

We are supposed to implement “Thread Pooling” and "Scheduling" Tactic. The implementation is minimum prototyping of the tactic than full implementation of a system. A thread pool is a managed collection of threads that are available to perform tasks. Thread pools usually provide improved performance when executing large numbers of tasks due to reduce per-task invocation overhead.

Working:

Developed a performance critical task that requires concurrency to be finished in a reasonable time and Created a pool of threads to accomplish that performance critical task. The Pool size is of 10 threads and a scheduling paradigm is prioritized for the execution of concurrent threads. All the tasks are time consuming and it will take more than 10 threads to accomplish it, so after a thread performs it tasks, it is reused for the next piece of work. All 3 tasks include a total of 17 works which will be using 10 threads.

Frameworks used:

Almost all of the source code is implemented from the scratch except a few lines. LinkedBlocking Queue and Blocking Queue interface methods are implemented from the Concurrent framework to hoard the Threads in it where it could be easily manipulated.

Steps to run the code and Output of it:

Each and every class including tasks are extended from the main class, so just running the main class would be sufficed. The output of the program results in displaying ‘Start and End of the Threads’, and the tasks assigned to this particular thread. An ongoing task along with its assigned thread will also be displayed for easy understanding. At last, the program would be shutting down terminating all the threads once the tasks are done executing.