Robert Judka CS550 Programming Assignment 1

Performance Results

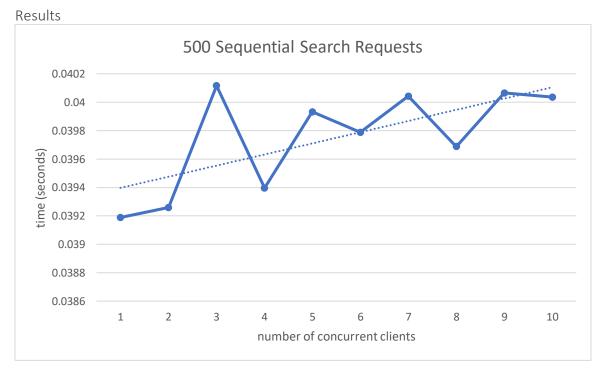
The Python scripts for running the evaluation and the data generated by running multiple simulations is found in the 'evaluation' directory.

Peer Simulation

The script 'peer_simulation.py' takes a single integer parameter for how many concurrent peers to run. To generate more peer directories for the evaluation, you can run 'make eval_env_dirs' and 'make eval_test_data' from the Makefile in 'src/'.

Evaluation

The script 'evaluation.py' takes all the log data generated by the simulation and calculates the average request time for a given number of peers. NOTE both these scripts may fail if the directories are not set up correctly.



From the chart, we can see a general upward trend as the number of concurrent clients increases. Since working with such a low number of concurrent clients does not give a large enough data set, it is difficult to tell whether the growth is linear or exponential. However, based on performance of similar systems, I would assume the growth to be exponential.