Julia Sales ID: jesales Asgn 2 CSE 130-02

Write up

Testing:

For testing my http server. I would test it on my local machine, on my school ssh account, and on Ubuntu. I would keep testing small portions of my code while updating the design document as well as writing the code. I had to constantly go back and forth between my design document and code because I could not get it right the first time. I tested in a similar way for linux and for Ubuntu. Nothing in my program is currently working correctly.

Problems:

There are problems in my code. Nothing is 100% working correctly. I struggled with multithreading as I have thought about the whole dispatcher wrong and misunderstood a lot of it and not realizing it sooner.

Q: Repeat the same experiment after you implement multi-threading. Is there any difference in performance?

A: I have not completed Asgn2, but based on what I learned in CSE130, implementing multithreading would increase throughput. Therefore, Asgn2 would be faster than Asgn1.

Q: What is likely to be the bottleneck in your system? How much concurrency is available in various parts, such as dispatch, worker, logging? Can you increase concurrency in any of these areas and, if so, how?

A: The dispatcher thread is our bottleneck in our system. A bottleneck is a shared resource. The dispatcher is a single thread that signals other threads of a connection to the socket. There is not a lot of concurrency in the dispatch because it is a single thread that listens to a socket and assigns that socket to a worker thread. But there is a lot of concurrency in worker and logging. Increasing the amount of dispatcher threads with worker threads would increase concurrency.