Design Document for P2 HTTP Proxy

Partner A: NAME

Partner B: NAME

1. Socket Management

Describe 1) how many socket objects are used, 2) the variable name for each socket, and 3) the purpose of each socket object.

2. Multi-threading

Overall Design

Describe how multithreading is used in your program. You must include 1) the number of threads you use including the main thread, 2) what each thread is for and doing, 3) any loops you have for each thread.

Justification

Justify why your design is efficient and show evidence it can handle multiple client requests efficiently. Specify your testing scenario (how many requests were made, which websites were being used, etc

3. Streaming

Describe how streaming is implemented in your Proxy and the parameter (i.e. num of bytes) used for streaming. Justify the choice of your parameter.

4. Data structures

In the cell below, list any notable data structures you used and justify the use of the data structure. Also specify how you handle synchronization for the data structure if there were any need for synchronization. If none, you can say "None".

5. How shutdown is handled

Describe how you handled the shutdown gracefully.

6. Error handling

Describe how you handle unexpected errors by specifying 1) what kind of errors you may encounter 2) what you do for each error.

7. Any libraries used

List any libraries that you used for the implementation and justify the usage.

8. Reflection

What was the most challenging part working on this project? Most fun part?

If you are to do this all over again, how would you do it differently?

Reflection on pair programming

Log of the amount of time spent driving and the amount of time spent working individually for each part (e.g., X drives 1 hour; Y drives 45 minutes; X works alone for 1 hour, etc.)

- For Check point:
- For Final submission:

What went well/or not-so-well doing pair programming? What was your take away in this process?

Submission Instruction

Remember to export to pdf and include the pdf under the project root. Make sure to push the pdf and all of your latest code to the team repository.