Design and Documentation:

The project given to the class was this: a client and server, written in C, was required to initiate in a socket connection. Within this socket connection, the client had to request from the server the location of a string within a file. The server should check the file for the string and return what that string was, how many times it was located, and where it was located. All these communications were to be encrypted in AES. Here is a high-level document of my client and server:

SERVER CLIENT

**TCP PORT 8888**

HEADERS HEADERS

QUERY SERVER FOR STRING

ENCRYPT ENCRYPT

PATTERN SEND

MATCH

ENCRYPTION/DECRYPTION

LOGIC/ LOGIC/

RETURN STRING AND LOCATION/AMOUNT

SOCKET SOCKET

My code was setup in this way: I implemented error handling firstly. After error handling, I implemented my encryption. After the encryption, the pattern matching/ sending of data occurred. After this, decryption occurred and then the socket connection was established.