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ECE 470

Server will decode messages sent in this manner. If not sent correctly it will return an error message saying where it went wrong.

First three characters: Opcode
Current valid opcodes: STR, RTV, DEL, INF
In order store, retrieve, delete, information

Depending on the opcode the rest of the message will need to be encoded in a certain manner.

To end the message it will be two /r/n and to distinguish between two strings one /r/n will be needed.

STR:
First string will be file name
Second string will be file path
Third string will be file size

Will take a file name, path and size and be ready to receive the exact file size and that's all.

RTV:
First string will be file name
Second string will be file path

Will retrieve the file from the database and transmit it after sending a message with the size.

Note: in regards to STR and RTV if at any time the server has waited to long to recv or the client took too long to start recv it will cancel the process and go back to listening.

DEL:
First string will be file name
Second string will be file path

Will delete the file if it is in the database.

INF:
Will return the entire database in a structured file

More will be added but as of now just these four.

File system setup:

The file system will be stored locally where the server is running. It will start off by saying the exact location of the file database which will be the current working directory joined with 'files'

The client will not be able to create files directly in the 'files' directory but will instead will have to give a path inside the files directory.

The server will have the capability of creating directories, as it does now, but in the future it should be able to delete directories also.

The max file size that the server can handle will be 100MB although this could go up if I feel the need.

A backup feature should be available to the server so that inside the files directory there will be a backup directory that of course the client doesn't have access to. But in case anything goes wrong it will be able to load from that.