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COEN 317 Programming Assignment 1

High-level description:

My program is a multithreaded web server that will show files stored in the local file system when a client requests for them. The file types supported are: TXT, HTML, JPG, PNG, GIF. Some files are not permitted to read for everyone. My program is able to show the front page of www.scu.edu if you request for `/` in your browser.

How to run the code:

1. Go in to this folder in command line prompt
2. In command line, do `javac Server.java`
3. In command line, do `java Server -document_root "/Users/you/fileLocation" -port 8999` or any 8000 <= portNo <= 9999
4. If the code is up running correctly, it will print "Server is up and running, listening to port 8999"
5. Now go to Chrome and type in `127.0.0.1:8999/` to see the front page of `www.scu.edu`
6. For any other files such as `elden_ring.jpg` or `GIF.gif`, etc., please refer to my screenshots

List of submitted files:

Code: `src/Server.java` `src/ClientHandler.java`
Resources: `dontRead.txt`, `elden_ring.jpg`, `GIF.gif`, `index.html`, `README.pdf`, the entire `Home%2520-%2520Santa%2520Clara%2520University_files` folder, and the `screenshots` folder.

How client makes requests to the web server:

Please check out the `screenshots` folder.

More information:

For `403 Permission Denied`, My approach was to check `if(file.canRead())` and if not, I will respond `403 Permission Denied`. `chmod 000` wouldn't disable my permission to read the file, so I tried making the owner of `dontRead.txt` not myself, and therefore I could disable my permission to view the file. I'm not sure if it will work on your computer. I'm just trying to say that I understand the idea behind it.