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CIS 457

GV-NAP Project Report

Completion percentage:

For the percentage completion I would say my project meets 80 – 90 percent of the guidelines. The entire system works linearly, the users must enter commands in a certain order to flow through the program. That is about the only difference, mainly because it is a terminal command interface instead of a gui. The central server keeps track of users and files in the working directory, also deleting the user and their specific keyword when they quit. There also isn't a quit button but if the user enters quit in any command they will be kicked out and their credentials will clear on the central server.

Basic Logic/ Implementation:

This is a multithreaded server that guides the user through the program and gets their signing credentials and file keyword. They can then get a list of files matching the keyword they enter and download a file from that list. This is a linearly moving program which was a problem and helped at the same time. If the user doesn't quit, they will be in a loop of looking for a list based on a keyword and downloading a file then the program asking if they want to quit. The central server will stay open for other users and will accept any number of users.

Problems:

Having the program be linear helped and hurt. It was nice that everything moved together and had a certain path while running, but when something went wrong it took a minute to fix it. I had to find where it went wrong in both programs and fix and restructure them, so they work together. Other than that, it wasn't too difficult of a project, just a lot of testing and making sure everything is working. Having to do a gui would have been horrible.

```
Command Prompt - python Central_Server.py
Microsoft Windows [Version 10.0.19043.1645]
(c) Microsoft Corporation. All rights reserved.

C:\Users\aaacke>cd Desktop\Homework\CIS457\GV-NAP

C:\Users\aaacke\Desktop\Homework\CIS457\GV-NAP>python Central_Server.py
[['Username', 'Hostname', 'Speed'], ['prof', '216.171.56.60', 'fast']]
[['Filename', 'File description'], ['test2.html', 'cats']]
['test2.html']
RETR test2.html
test2.html
pass1
<html>
  <h1>
    Me Mow
  </h1>
  <h2>
    mmmmmmmmmmm
  </h2>
</html>
[['Username', 'Hostname', 'Speed']]
[['Filename', 'File description']]
```

```
Command Prompt

C:\Users\aaacke\Desktop\Homework\CIS457\New folder> python User_Host.py
Enter CONNECT <Hostname> <Port>: connect <216.171.56.60> <7857>
Connected...
Enter SIGNIN <username> <hostname> <speed>(slow, medium, or fast): SIGNIN <prof> <216.171.56.60> <fast>
Current Files:
Central_Server.py
test1.html
test2.html
Enter FILE <filename> <file description>: FILE <test2.html> <cats>
Enter KEYWORD <file description>: KEYWORD <cats>
test2.html
Enter RETR <filename>: RETR <test2.html>
File transfered
Would you like to quit? (YES/NO): YES

C:\Users\aaacke\Desktop\Homework\CIS457\New folder>
```