Computer Networks: Final Project

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Test Runs:

- Operations Input File

```
POST test2.txt 127.0.0.1 80
GET photo1.png 127.0.0.1
POST test2.txt 127.0.0.1
POST photo2.png 127.0.0.1 80
GET test1.html 127.0.0.1 80
GET nonExistent.png 127.0.0.1
GET photo1.png 127.0.0.1 80
POST nonExistent.html 127.0.0.1 80
```

- Client Terminal

```
OPERATION: POST test2.txt 127.0.0.1 80
Not found in cache. Connecting to server....
Connected to server.
Request is sent.
HTTP/1.1 200 OK




OPERATION: GET photo1.png 127.0.0.1
Not found in cache. Connecting to server....
Connected to server.
Request is sent.
HTTP/1.1 200 OK


PNG received. Displaying....




OPERATION: POST test2.txt 127.0.0.1
Found in Cache!
HTTP/1.1 200 OK




OPERATION: POST photo2.png 127.0.0.1 80
Not found in cache. Connecting to server....
Connected to server.
Request is sent.
HTTP/1.1 200 OK
```

```
OPERATION: GET test1.html 127.0.0.1 80
Not found in cache. Connecting to server....
Connected to server.
Request is sent.
HTTP/1.1 200 OK

Networks Project.
Testing HTML file.




OPERATION: GET nonExistent.png 127.0.0.1
Not found in cache. Connecting to server....
Connected to server.
Request is sent.
HTTP/1.1 404 Not Found




OPERATION: GET photo1.png 127.0.0.1 80
Found in Cache!
HTTP/1.1 200 OK




OPERATION: POST nonExistent.html 127.0.0.1 80
File you're trying to access does not exist!
Invalid Request....Will not be connected to server!

Process finished with exit code 0
```

- Server Terminal

```
Server is up. Waiting to connect...

Connected to ('127.0.0.1', 51737).
POST /test2.txt HTTP/1.1
Host:127.0.0.1:80

Networks Project.
Testing TXT file.

Response is sent.
Connection is closed due to inactivity.




Connected to ('127.0.0.1', 51738).
GET /photo1.png HTTP/1.1
Host:127.0.0.1:80
Response is sent.
Connection is closed due to inactivity.




Connected to ('127.0.0.1', 51739).
POST /photo2.png HTTP/1.1
Host:127.0.0.1:80


PNG received. Displaying....
Response is sent.
Connection is closed due to inactivity.


Connected to ('127.0.0.1', 51740).
GET /test1.html HTTP/1.1
Host:127.0.0.1:80
Response is sent.
Connection is closed due to inactivity.




Connected to ('127.0.0.1', 51741).
GET /nonExistent.png HTTP/1.1
Host:127.0.0.1:80
Response is sent.
Connection is closed due to inactivity.
```

- Project Directory After Running:

📁 .idea	5/15/2022 11:15 PM	File folder	
📁 venv	5/9/2022 11:52 PM	File folder	
client.py	5/15/2022 10:51 PM	JetBrains PyCharm	6 KB
server.py	5/15/2022 10:12 PM	JetBrains PyCharm	4 KB
clienttest1.html	5/15/2022 10:51 PM	Microsoft Edge HTM...	1 KB
test1.html	5/15/2022 10:29 PM	Microsoft Edge HTM...	1 KB
clientphoto1.png	5/15/2022 10:51 PM	PNG File	784 KB
photo1.png	3/14/2021 2:36 AM	PNG File	784 KB
photo2.png	7/23/2020 8:59 PM	PNG File	250 KB
serverphoto2.png	5/15/2022 10:51 PM	PNG File	250 KB
client-operations.txt	5/15/2022 10:49 PM	Text Document	1 KB
servertest2.txt	5/15/2022 10:51 PM	Text Document	1 KB
test2.txt	5/15/2022 10:29 PM	Text Document	1 KB