

Hoat Vu
Socket 2
CSC 138

Screen shot of source code:

```
#import socket module
from socket import *

#provide server port number
serverPort = 8100
serverSocket = socket(AF_INET, SOCK_STREAM)

#prepare a server socket
serverSocket.bind('', serverPort)

#listen for the connection
serverSocket.listen(1)

while True:
    #establish the connection
    print("Ready to serve...")

    #create a connection socket for accepted client
    connectionSocket, addr = serverSocket.accept()

    try:
        #receive the message
        message = connectionSocket.recv(1024)

        #print the message
        print(message)

        #determine the file name
        filename = message.split()[1]

        #open the file
        f = open(filename[1:])

        #read the file
        outputdata = f.read()

        #send http header to the socket
        connectionSocket.send("HTTP/1.1 200 OK".encode())

        #provide the requested file that the client try to GET to the socket
        connectionSocket.send('HelloWorld.html'.encode())

        #send the content of the requested file to the client
        for i in range(0, len(outputdata)):
            connectionSocket.send(outputdata[i].encode())

        connectionSocket.close()

    except IOError:
        #Send response message for file not found
        connectionSocket.send("\n404 Not Found\n".encode())

        #close the client socket
        connectionSocket.close()

#close the server socket
serverSocket.close()
```

HTML source code:

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <title>SUCCESS</title>
5 </head>
6 <body>
7   HELLO WORLD! MY NAME IS HOAT VU.
8 </body>
9 </html>
```

Screen shot of execution inside the terminal window:

```
Command Prompt - python wb.py
Microsoft Windows [Version 10.0.17763.805]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Users\Project--Account>cd Desktop/Socket-2

C:\Users\Project--Account\Desktop\Socket-2>python wb.py
Ready to serve...
b'GET /HelloWorld.html HTTP/1.1\r\nHost: 127.0.0.1:8100\r\nUser-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:70.0) Gecko/20100101 Firefox/70.0\r\nAccept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8\r\nAccept-Language: en-US,en;q=0.5\r\nAccept-Encoding: gzip, deflate\r\nConnection: keep-alive\r\nUpgrade-Insecure-Requests: 1\r\n\r\n'
Ready to serve...
b'GET /favicon.ico HTTP/1.1\r\nHost: 127.0.0.1:8100\r\nUser-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:70.0) Gecko/20100101 Firefox/70.0\r\nAccept: image/webp,*/*\r\nAccept-Language: en-US,en;q=0.5\r\nAccept-Encoding: gzip, deflate\r\nConnection: keep-alive\r\n\r\n'
Ready to serve...
b'GET /HelloWrld.html HTTP/1.1\r\nHost: 127.0.0.1:8100\r\nUser-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:70.0) Gecko/20100101 Firefox/70.0\r\nAccept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8\r\nAccept-Language: en-US,en;q=0.5\r\nAccept-Encoding: gzip, deflate\r\nConnection: keep-alive\r\nUpgrade-Insecure-Requests: 1\r\n\r\n'
Ready to serve...
b'GET /favicon.ico HTTP/1.1\r\nHost: 127.0.0.1:8100\r\nUser-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:70.0) Gecko/20100101 Firefox/70.0\r\nAccept: image/webp,*/*\r\nAccept-Language: en-US,en;q=0.5\r\nAccept-Encoding: gzip, deflate\r\nConnection: keep-alive\r\n\r\n'
Ready to serve...
```

Screen shot of result in the browser:

