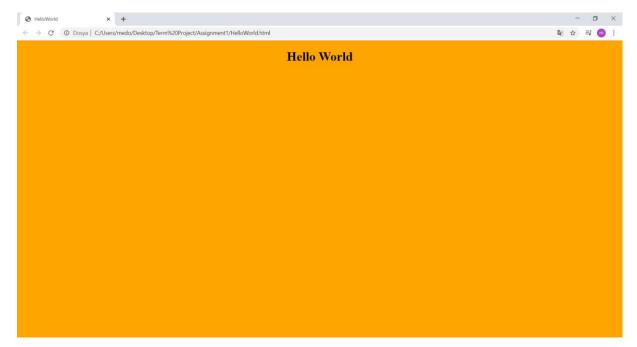
CSE-476 Mobile Communications Networks TERM PROJECT FINAL REPORT Medine ASLAN 161044015

Assignment1: Web Server

For Assignment1, I fully understood what was required,I did some researches about this assignment and I started completing the skeleton code into the WebServer.py file and I create a HelloWorld.html file. While completing skeleton code I send a http header line into socket. Then I send the content of the requested file to the client. For the files which is not present my server I returned a 404 Not Found error message. I kept WebServer.py and HelloWorld.html file into the same directory. After run the server program I got some results. I will show these results as a screenshot below. I used python version 2.7.18 while running the code. I got a warning message because no action was taken after the code was run, and I added an if condition in the try block to eliminate it. That's how I handled this warning message.

Results

This is my HelloWorld.html file



• Run WebServer.py

```
Administrator. C:\WINDOWS\system32\CMD.exe - py -2 WebServer.py

Microsoft Windows [Version 10.0.19041.685]
(c) 2020 Microsoft Corporation. Tüm hakları saklıdır.

C:\Users\medo>cd Desktop

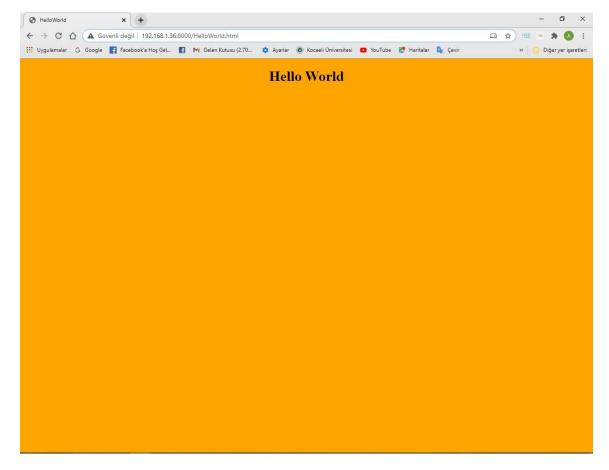
C:\Users\medo\Desktop>cd "Term Project"

C:\Users\medo\Desktop\Term Project>cd Assignment1

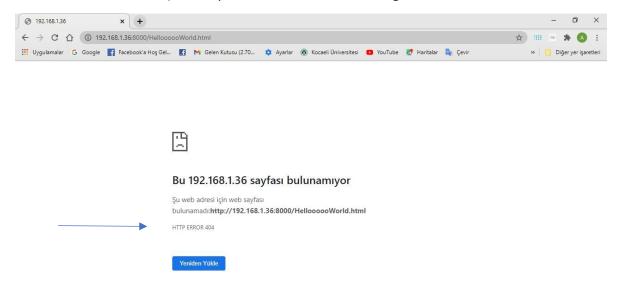
C:\Users\medo\Desktop\Term Project\Assignment1>py -2 WebServer.py
Ready to serve...
```

• Results with another host

I get these results with my IPv4 adress and by the another host I open a browser and run with corresponding URL. (HelloWorld is my html file's name.) And port number is 8000. I get these results.



After these, I run the server with with a file which is not into the same directory. (I try with HelloooooWorld.html file). And it prints '404 Not Found' message



Assignment2: UDP Pinger

For Assignment2, I fully understood what was required,I did some researches about this assignment and I copy the UDPPingerServer.py skeleton code. Then I started implementing UDPPingerClient.py code. This client code sends ping messages using UDP. It prints the response message if there is a response from the server. And it calculates and prints the round trip time. Otherwise it prints request timed out message.

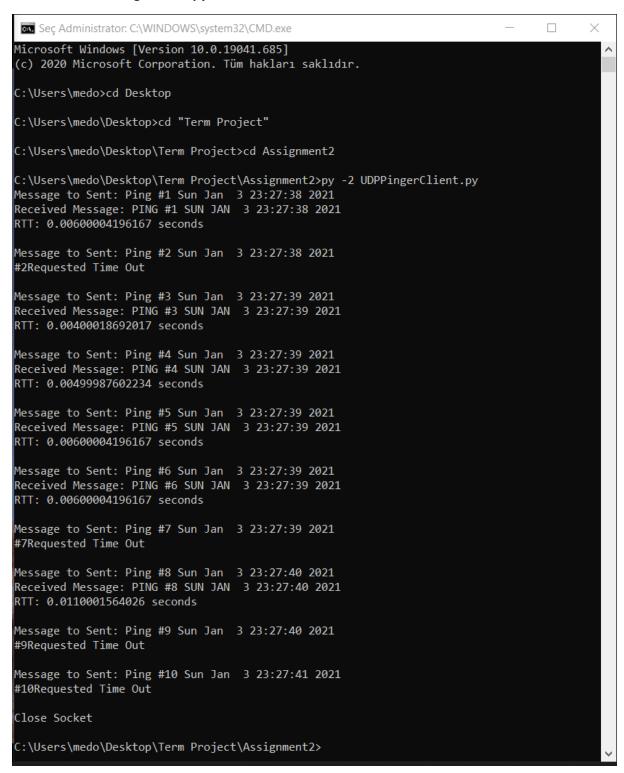
For the seeing results firstly I run the server program after that I run the client program and I got some results. I will show these results as a screenshot below. I used python version 2.7.18 while running these codes.

Results

Run UDPPingerServer.py



• Run UDPPingerClient.py



Assignment3: Mail Client

For Assignment3, I fully understood what was required,I did some researches about this assignment and I copy the skeleton code. Then I started completing this. While completing this code I create I socket which is client socket. Then I send these commands this order: HELO command, STARTTLS command, MAIL FROM command, RCPT TO command, DATA command. After that I wanted a message from the terminal. Then I send QUIT command.

I used my gmail and gtu mail account. I deleted these from my source codes. For run this program you should enter your mail adresses and necessary informations(such as your mail accounts and password).

Then I run program. After run the program I received mail from my gmail account to my gtu mail account. Mail content is given message into the beginning of skeleton code(I love computer networks!). I will show these results as a screenshot below. I used python version 2.7.18 while running these codes.

Results

Run MailClient.py

```
П
Administrator: C:\WINDOWS\system32\CMD.exe
                                                                                                                       X
Microsoft Windows [Version 10.0.19041.685]
(c) 2020 Microsoft Corporation. Tüm hakları saklıdır.
C:\Users\medo>cd Desktop
C:\Users\medo\Desktop>cd "Term Project"
C:\Users\medo\Desktop\Term Project>cd Assignment3
 :\Users\medo\Desktop\Term Project\Assignment3>py -2 MailClient.py
220 smtp.gmail.com ESMTP u26sm42546238edo.37 - gsmtp
250 smtp.gmail.com at your service
220 2.0.0 Ready to start TLS
235 2.7.0 Accepted
250 2.1.0 OK u26sm42546238edo.37 - gsmtp
250 2.1.5 OK u26sm42546238edo.37 - gsmtp
354 Go ahead u26sm42546238edo.37 - gsmtp
The message is: I love computer networks!
250 2.0.0 OK 1609715364 u26sm42546238edo.37 - gsmtp
221 2.0.0 closing connection u26sm42546238edo.37 - gsmtp
C:\Users\medo\Desktop\Term Project\Assignment3>
```

