

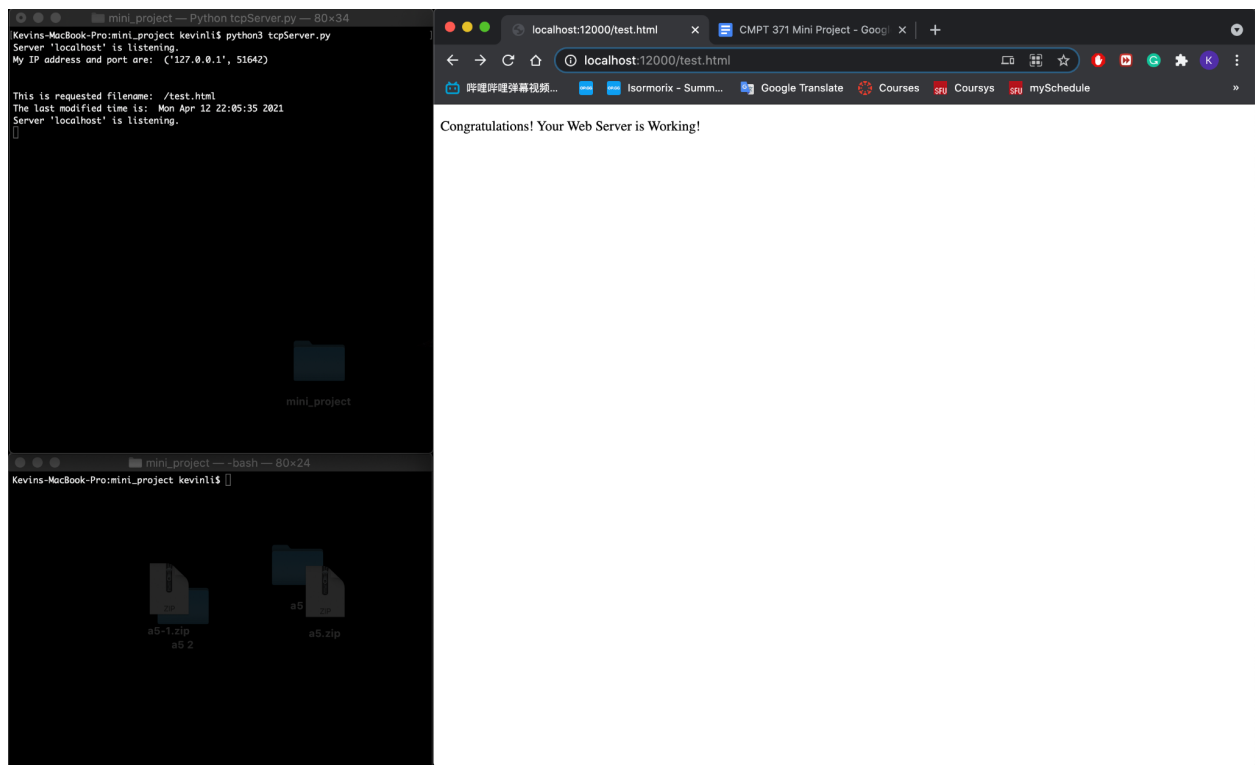
CMPT 371 Mini Project

In this project, we implemented two versions of web servers. For a single-thread web server, we use one terminal. **For Multi-threaded**, we open **Multiple terminals to send requests** to test it.

The first test we will be doing is about status code:

200 OK:

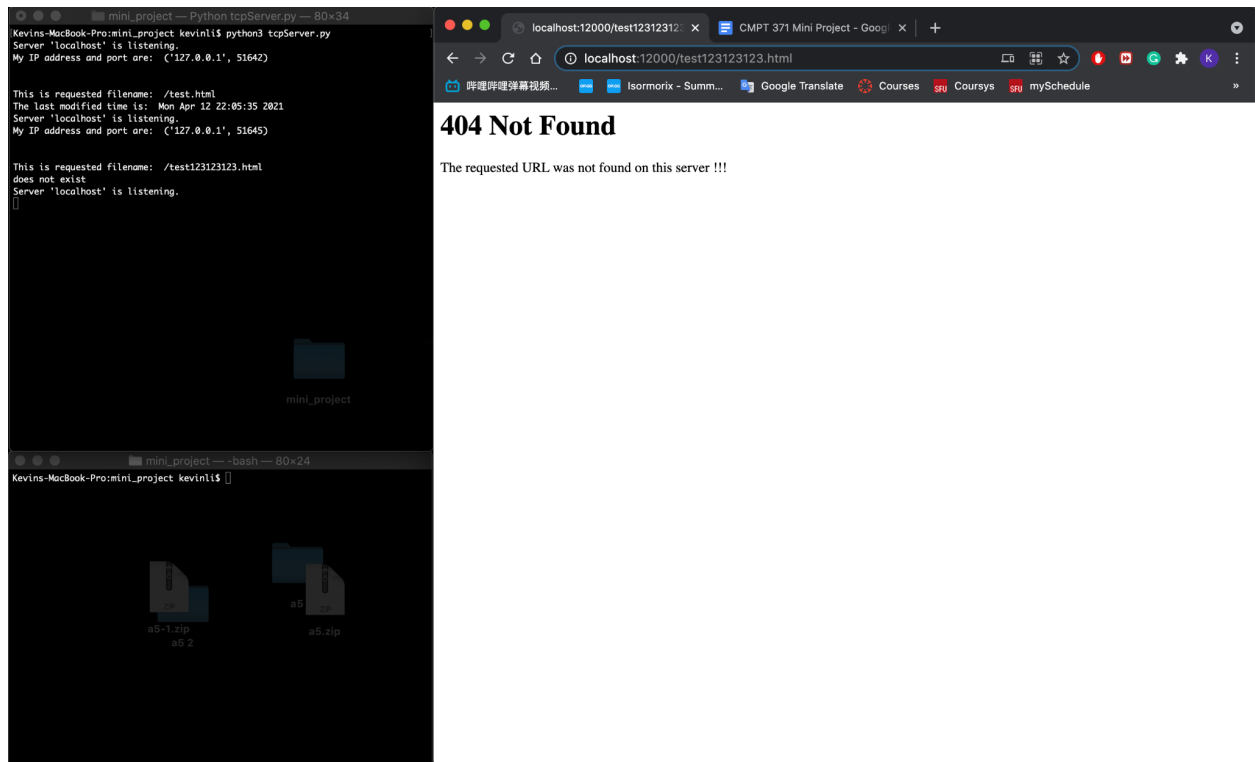
By entering `python3 tcpServer.py` to execute the program, it starts our web server with IP address = 127.0.0.1 which is the “localhost” on port 12000. To access the test.html, we can type in <http://localhost:12000/test.html> in the browser and it will successfully return the test.html.



404 Not Found:

In this case, we will access another file which does not exist in the same directory with `tcpServer.py`. Here, we change the url with <http://localhost:12000/test123123123.html>. Since `test123123123.html` does not exist, the web server cannot respond to the browser with its GET

request and therefore the server returns the error 404 Not Found (404.html) indicating the file does not exist on the server side.



304 Not Modified:

In this case, the requested file, test.html has not modified since last transmission. In this case, we first input the same url <http://localhost:12000/test.html> in the browser which gives us the status code: 200 OK. Then, we enter the same url again. This time, since we did not change the file “test.html”, it will give us the status code: 304 Not Modified.

However, if we use the hotkey Ctrl+F5 or Shift+F5, the page goes back to the “test.html”. The idea behind this is that the browser has the cached `If-Modified-Since` header and when we use Ctrl+F5 or Shift+F5, the header will be cleared.

400 Bad Request:

In this case, 400 Bad Request response status code indicates that the server cannot or will not process the request due to something that is perceived to be a client error (e.g., malformed request syntax, invalid request message framing, or deceptive request routing).

408 Request Timed Out:

In this case, we add a delay time before binding the server name and port number to the socket. After 10 second, without receiving any request, the TCP socket will be timed out and the server will return a status code of 408 Request Timed Out.