

CME 334  
Lab 2  
Thursday February 3, 2022

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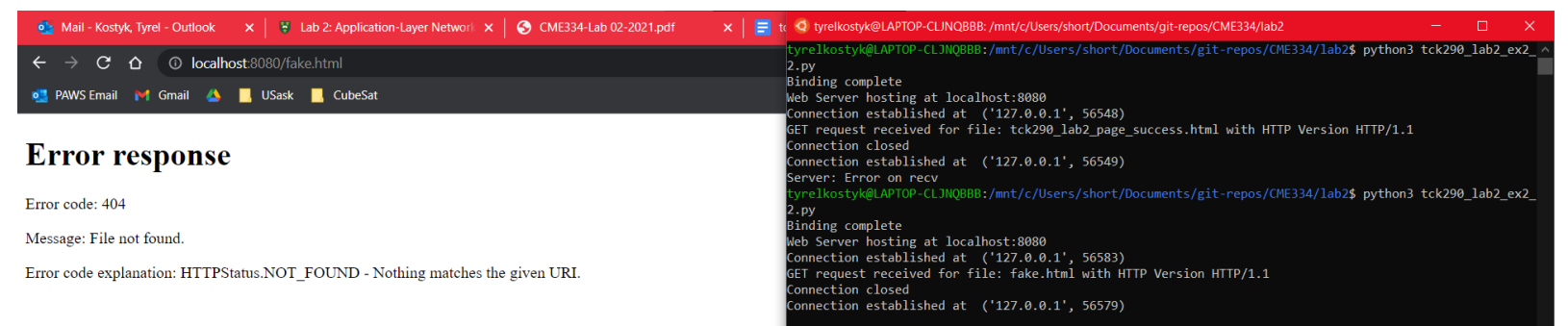
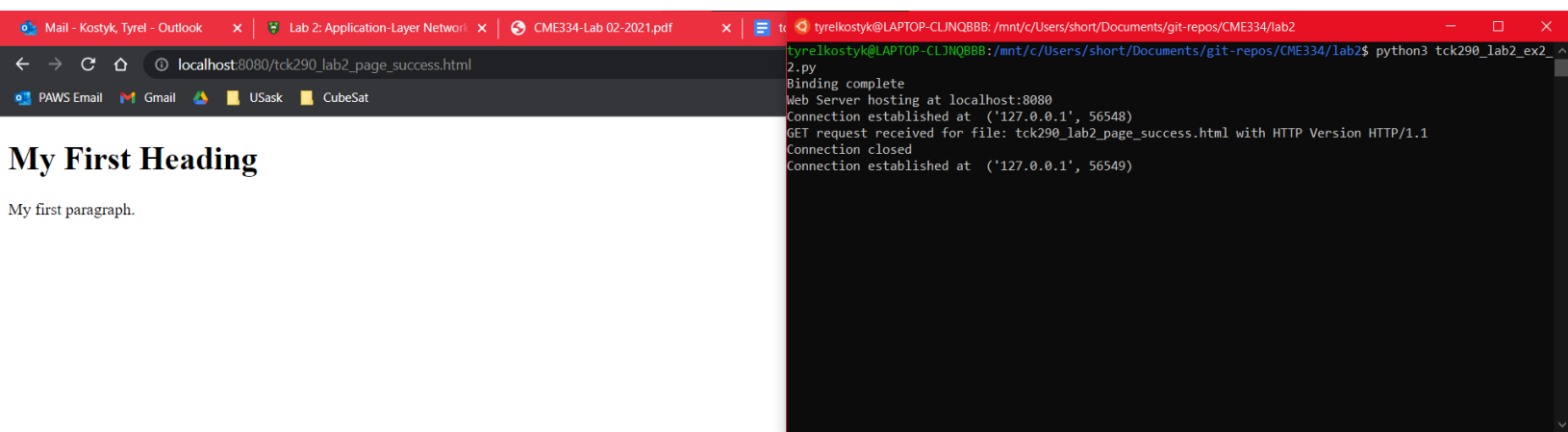
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## Exercise 2.2

To test exercise 2.2 (TCP web server) with a web browser:

1. Run `python3 tck290_lab2_ex2_2.py`
2. Navigate to `localhost:8080/tck290_lab2_page_success.html`
  - a. You should see a very simple HTML web page rendered in the browser
  - b. You should see some simple output in the terminal running the server
3. Navigate to any other web page; e.g. `localhost:8080/fake.html`
  - a. You should see a simple 404 Error web page rendered in the browser
  - b. You should see some simple output in the terminal running the server

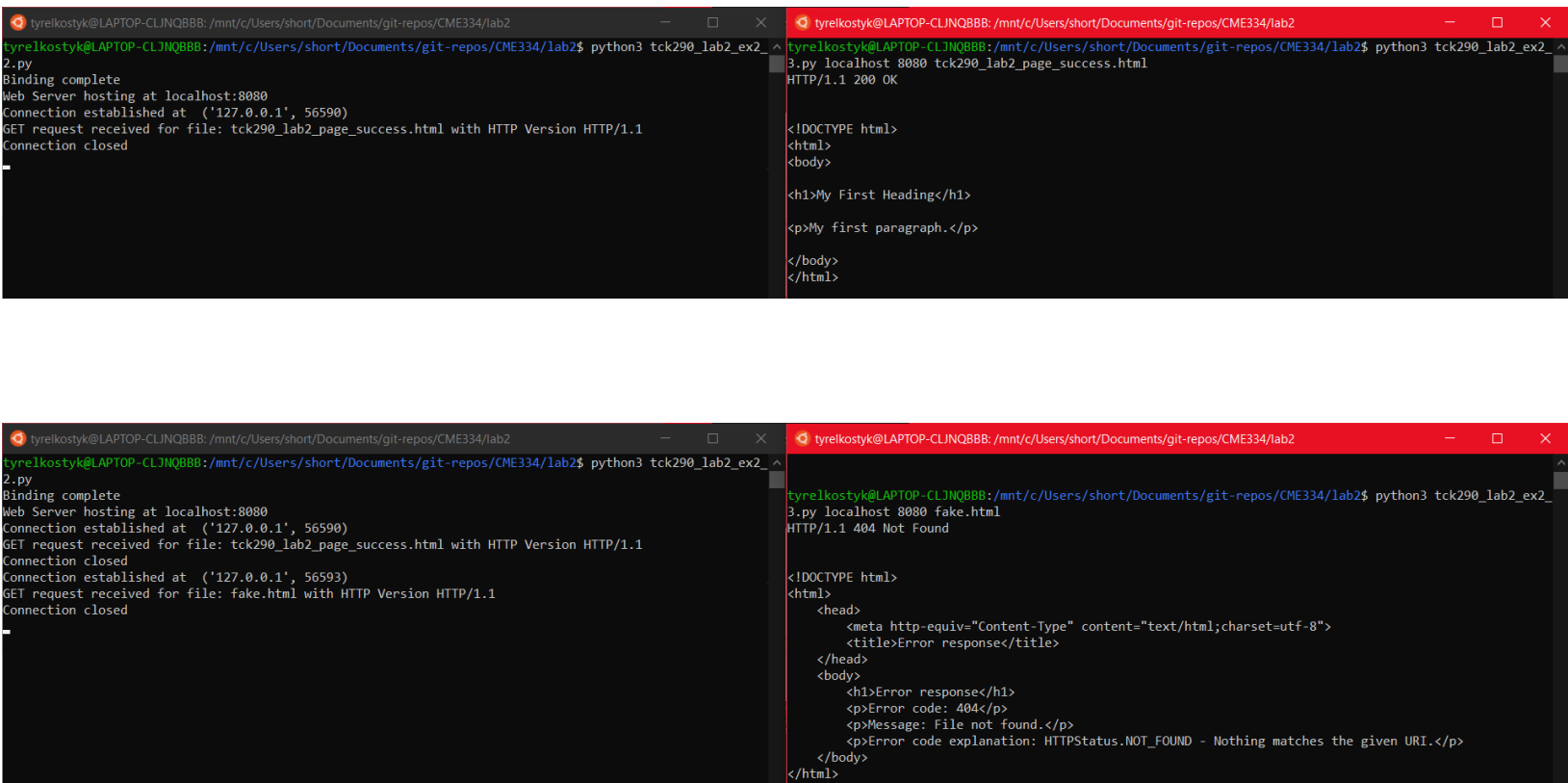
To test exercise 2.2 with a terminal-based client, refer to exercise 2.3 below.



## Exercise 2.3

To test exercise 2.3 (TCP web client):

1. Run `python3 tck290_lab2_ex2_2.py`
2. (in another terminal) Run `python3 tck290_lab2_ex2_3.py localhost 8080 tck290_lab2_page_success.html`
  - a. You should see a very simple HTML web page output as text in the client's terminal window, including the 200 OK status code
    - i. The program will exit after receiving the full web page (this is intended)
  - b. You should see some simple output in the terminal running the server
3. (in the client terminal) Run `python3 tck290_lab2_ex2_3.py localhost 8080 fake.html`
  - a. Any non-existent web page will do
  - b. You should see a very simple HTML web page output as text in the client's terminal window, including the 404 Not Found status code
    - i. The program will exit after receiving the full web page (this is intended)
  - c. You should once again see some simple output in the terminal running the server



```
tyrelkostyk@LAPTOP-CLJNQBBB: /mnt/c/Users/short/Documents/git-repos/CME334/lab2$ python3 tck290_lab2_ex2_2.py
tyrelkostyk@LAPTOP-CLJNQBBB: /mnt/c/Users/short/Documents/git-repos/CME334/lab2$ python3 tck290_lab2_ex2_3.py localhost 8080 tck290_lab2_page_success.html
tyrelkostyk@LAPTOP-CLJNQBBB: /mnt/c/Users/short/Documents/git-repos/CME334/lab2$ python3 tck290_lab2_ex2_3.py localhost 8080 fake.html
```

```
tyrelkostyk@LAPTOP-CLJNQBBB: /mnt/c/Users/short/Documents/git-repos/CME334/lab2$ python3 tck290_lab2_ex2_2.py
2.py
Binding complete
Web Server hosting at localhost:8080
Connection established at ('127.0.0.1', 56590)
GET request received for file: tck290_lab2_page_success.html with HTTP Version HTTP/1.1
Connection closed

tyrelkostyk@LAPTOP-CLJNQBBB: /mnt/c/Users/short/Documents/git-repos/CME334/lab2$ python3 tck290_lab2_ex2_3.py localhost 8080 tck290_lab2_page_success.html
HTTP/1.1 200 OK

<!DOCTYPE html>
<html>
<body>

<h1>My First Heading</h1>

<p>My first paragraph.</p>

</body>
</html>

tyrelkostyk@LAPTOP-CLJNQBBB: /mnt/c/Users/short/Documents/git-repos/CME334/lab2$ python3 tck290_lab2_ex2_2.py
2.py
Binding complete
Web Server hosting at localhost:8080
Connection established at ('127.0.0.1', 56590)
GET request received for file: tck290_lab2_page_success.html with HTTP Version HTTP/1.1
Connection closed
Connection established at ('127.0.0.1', 56593)
GET request received for file: fake.html with HTTP Version HTTP/1.1
Connection closed

tyrelkostyk@LAPTOP-CLJNQBBB: /mnt/c/Users/short/Documents/git-repos/CME334/lab2$ python3 tck290_lab2_ex2_3.py localhost 8080 fake.html
HTTP/1.1 404 Not Found

<!DOCTYPE html>
<html>
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
    <title>Error response</title>
  </head>
  <body>
    <h1>Error response</h1>
    <p>Error code: 404</p>
    <p>Message: File not found.</p>
    <p>Error code explanation: HTTPStatus.NOT_FOUND - Nothing matches the given URI.</p>
  </body>
</html>
```