

Programming Assignment – PA1

COEN 317 – Distributed Systems

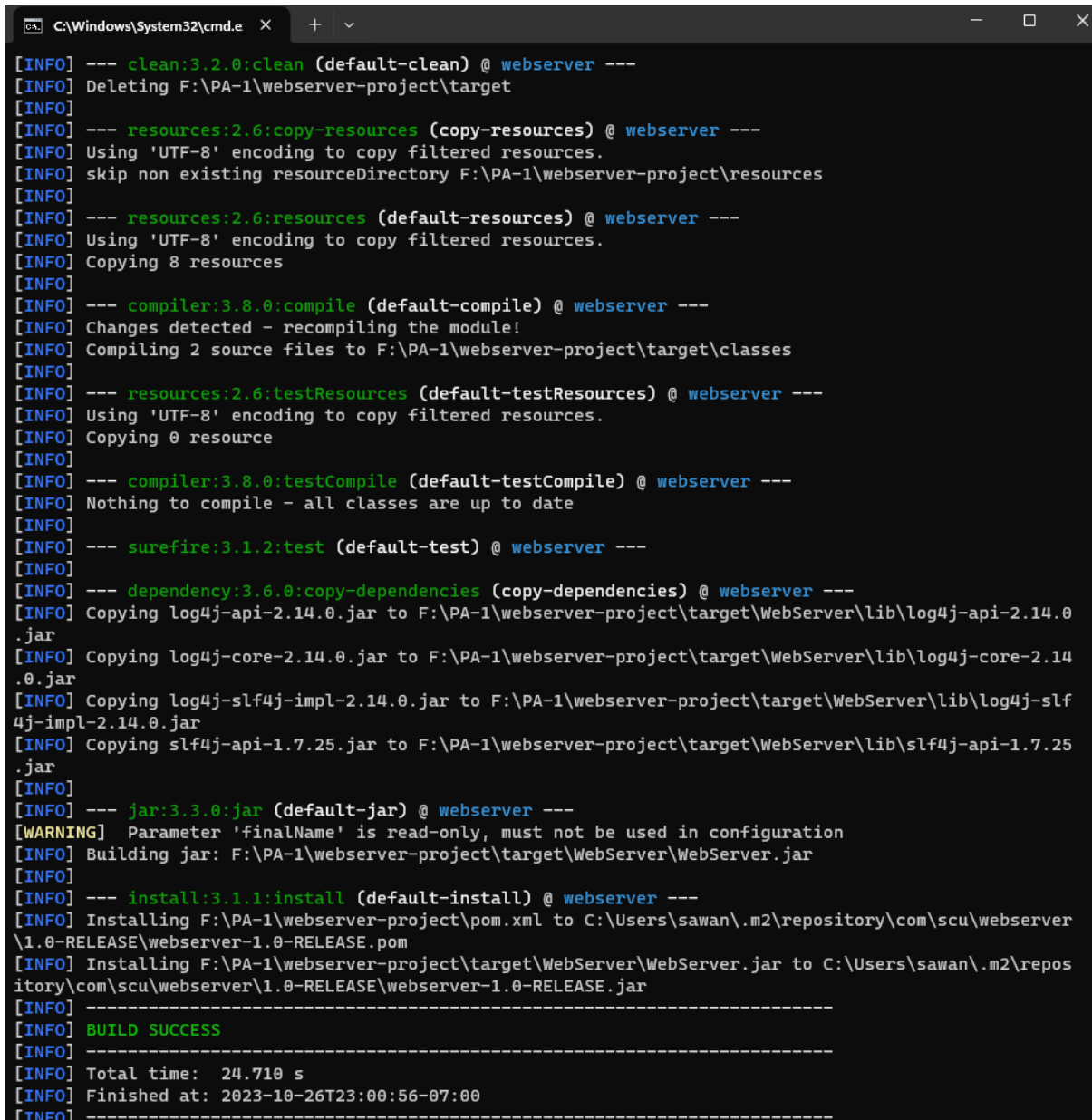
Sawan Chakraborty

SCU ID -W1653472

Screenshots:

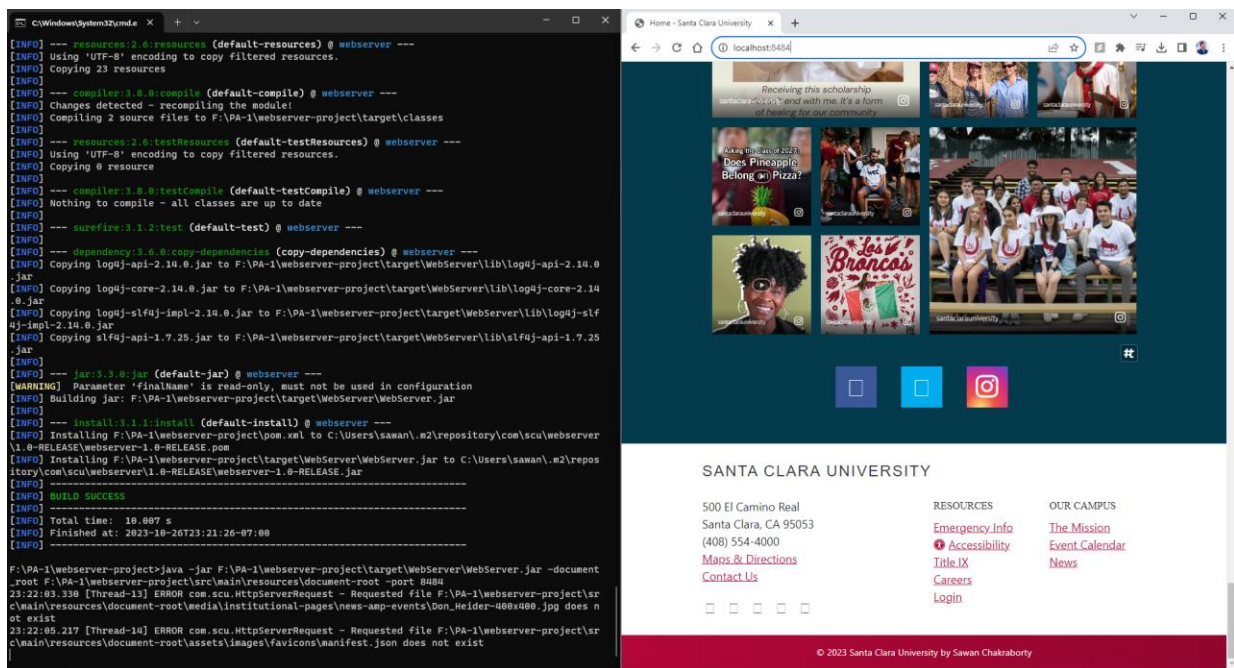
- We are using port number : 8484

1. mvn clean install

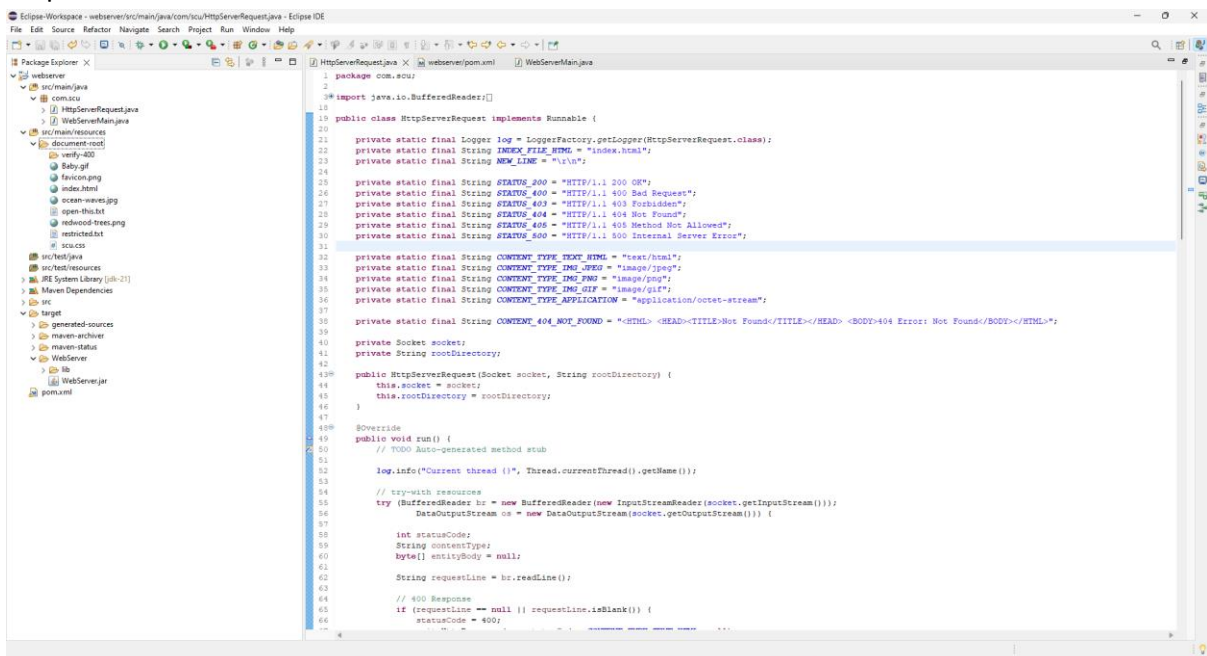


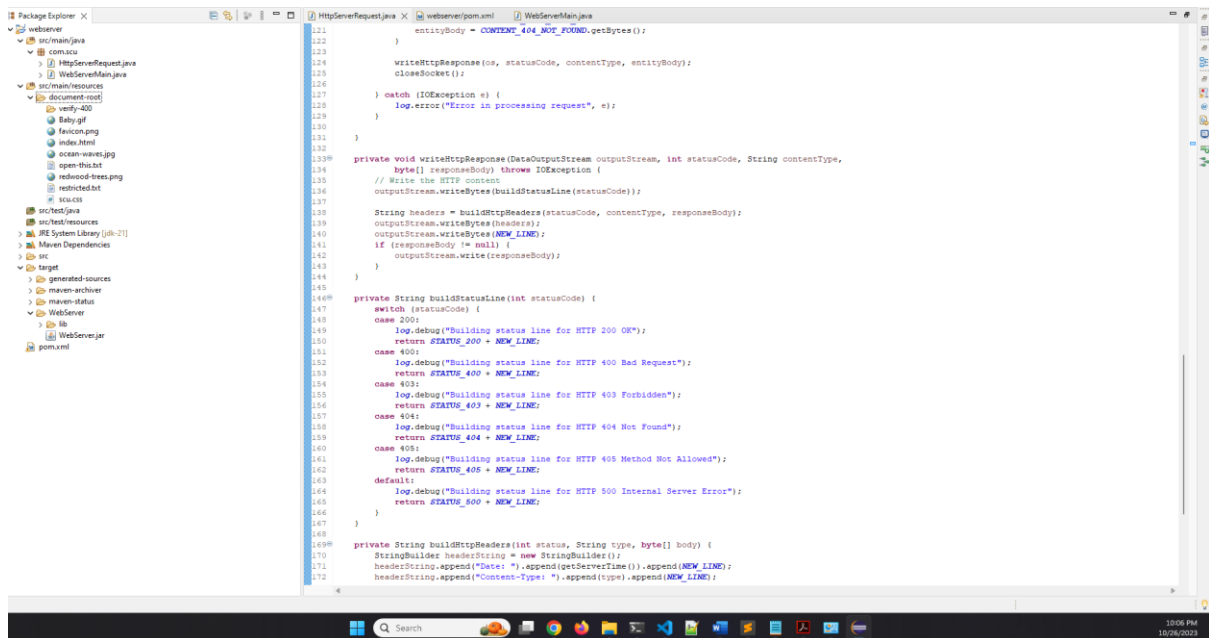
```
C:\Windows\System32\cmd.e X + v
[INFO] --- clean:3.2.0:clean (default-clean) @ webserver ---
[INFO] Deleting F:\PA-1\webserver-project\target
[INFO]
[INFO] --- resources:2.6:copy-resources (copy-resources) @ webserver ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] skip non existing resourceDirectory F:\PA-1\webserver-project\resources
[INFO]
[INFO] --- resources:2.6:resources (default-resources) @ webserver ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] Copying 8 resources
[INFO]
[INFO] --- compiler:3.8.0:compile (default-compile) @ webserver ---
[INFO] Changes detected - recompiling the module!
[INFO] Compiling 2 source files to F:\PA-1\webserver-project\target\classes
[INFO]
[INFO] --- resources:2.6:testResources (default-testResources) @ webserver ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] Copying 0 resource
[INFO]
[INFO] --- compiler:3.8.0:testCompile (default-testCompile) @ webserver ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
[INFO] --- surefire:3.1.2:test (default-test) @ webserver ---
[INFO]
[INFO] --- dependency:3.6.0:copy-dependencies (copy-dependencies) @ webserver ---
[INFO] Copying log4j-api-2.14.0.jar to F:\PA-1\webserver-project\target\WebServer\lib\log4j-api-2.14.0.jar
[INFO] Copying log4j-core-2.14.0.jar to F:\PA-1\webserver-project\target\WebServer\lib\log4j-core-2.14.0.jar
[INFO] Copying log4j-slf4j-impl-2.14.0.jar to F:\PA-1\webserver-project\target\WebServer\lib\log4j-slf4j-impl-2.14.0.jar
[INFO] Copying slf4j-api-1.7.25.jar to F:\PA-1\webserver-project\target\WebServer\lib\slf4j-api-1.7.25.jar
[INFO]
[INFO] --- jar:3.3.0:jar (default-jar) @ webserver ---
[WARNING] Parameter 'finalName' is read-only, must not be used in configuration
[INFO] Building jar: F:\PA-1\webserver-project\target\WebServer\WebServer.jar
[INFO]
[INFO] --- install:3.1.1:install (default-install) @ webserver ---
[INFO] Installing F:\PA-1\webserver-project\pom.xml to C:\Users\sawan\.m2\repository\com\scu\webserver\1.0-RELEASE\webserver-1.0-RELEASE.pom
[INFO] Installing F:\PA-1\webserver-project\target\WebServer\WebServer.jar to C:\Users\sawan\.m2\repository\com\scu\webserver\1.0-RELEASE\webserver-1.0-RELEASE.jar
[INFO]
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 24.710 s
[INFO] Finished at: 2023-10-26T23:00:56-07:00
[INFO]
```

2. Running the java -jar



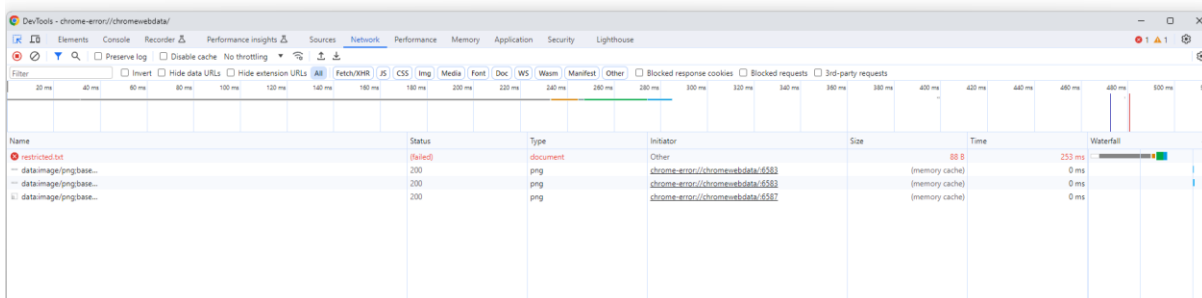
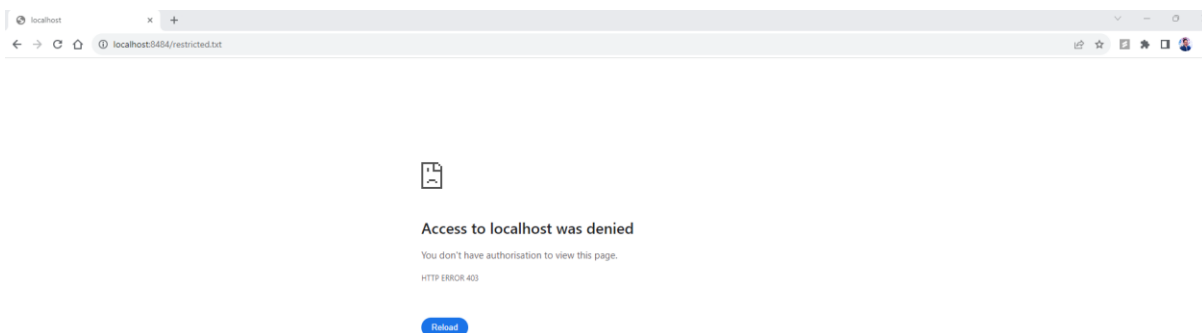
3. Http version used v1.1





4. Handling Request Codes

- 403 - Forbidden. URL: localhost:8484/restricted.txt



- 404 – File Not Found

URL: localhost:8484/filenotfound.txt

Not Found

localhost:8484/filenotfound.txt

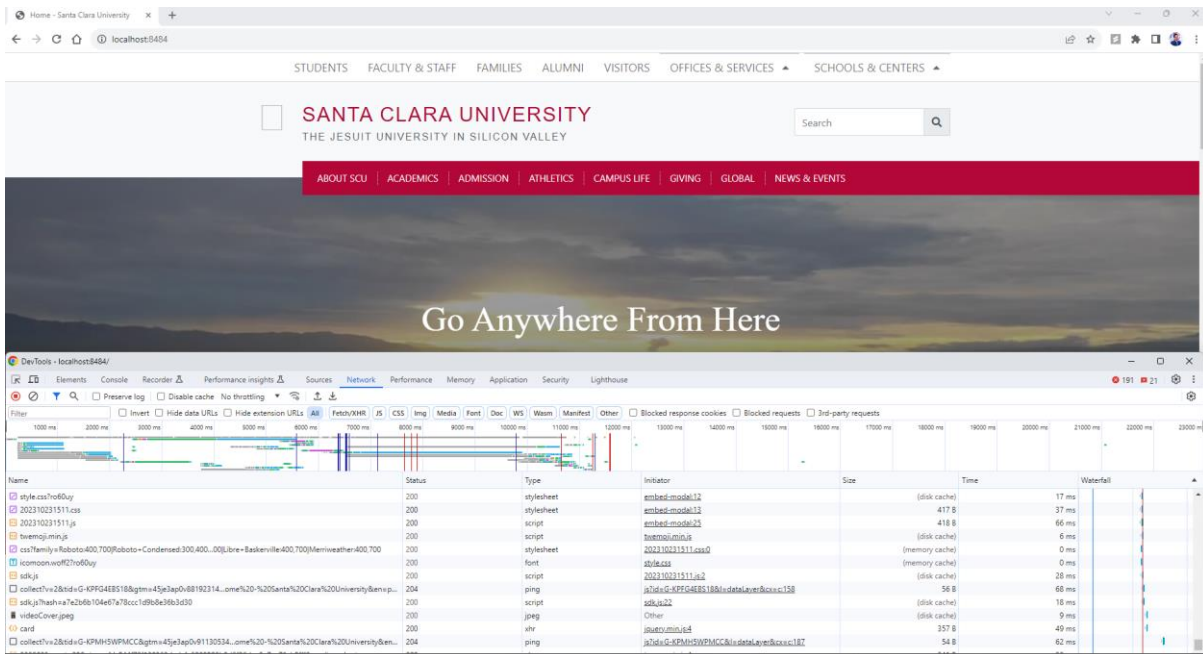
404 Error: Not Found

The screenshot shows a web browser with a single tab titled "Not Found". The address bar displays "localhost:8484/filenotfound.txt". The main content area of the browser shows the text "404 Error: Not Found". Below the browser window, the Chrome DevTools Network tab is open, showing a single request to "filenotfound.txt". The request details are as follows:

Name	Headers	Preview	Response	Initiator	Timing	Cookies
filenotfound.txt	<p>General</p> <p>Request URL: http://localhost:8484/filenotfound.txt</p> <p>Request Method: GET</p> <p>Status Code: 404 Not Found</p> <p>Remote Address: [::1]:8484</p> <p>Referrer Policy: strict-origin-when-cross-origin</p> <p>Response Headers</p> <p>Content-Length: 134</p> <p>Content-Type: text/html</p> <p>Date: Thu, 26 Oct 2023 23:26:08 GMT</p> <p>Request Headers</p> <p>Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.7</p>					

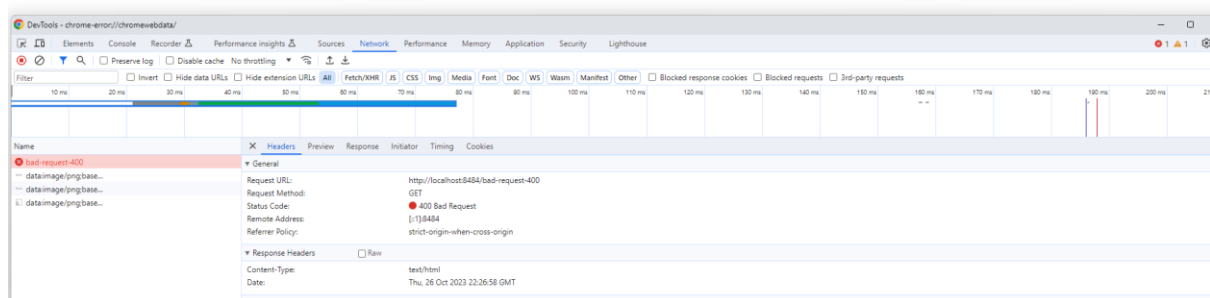
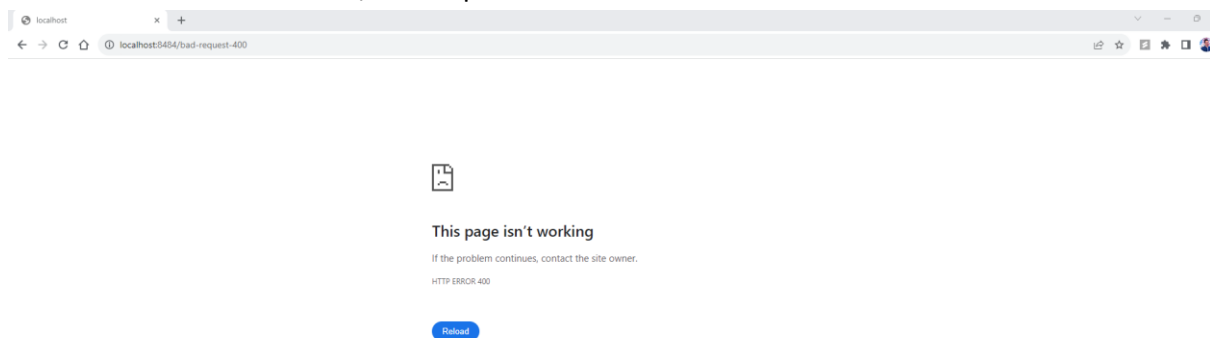
1 requests | 243 B transferred | 134 B resources | Finish: 50 m

- c. 200 – ok
URL: localhost:8484

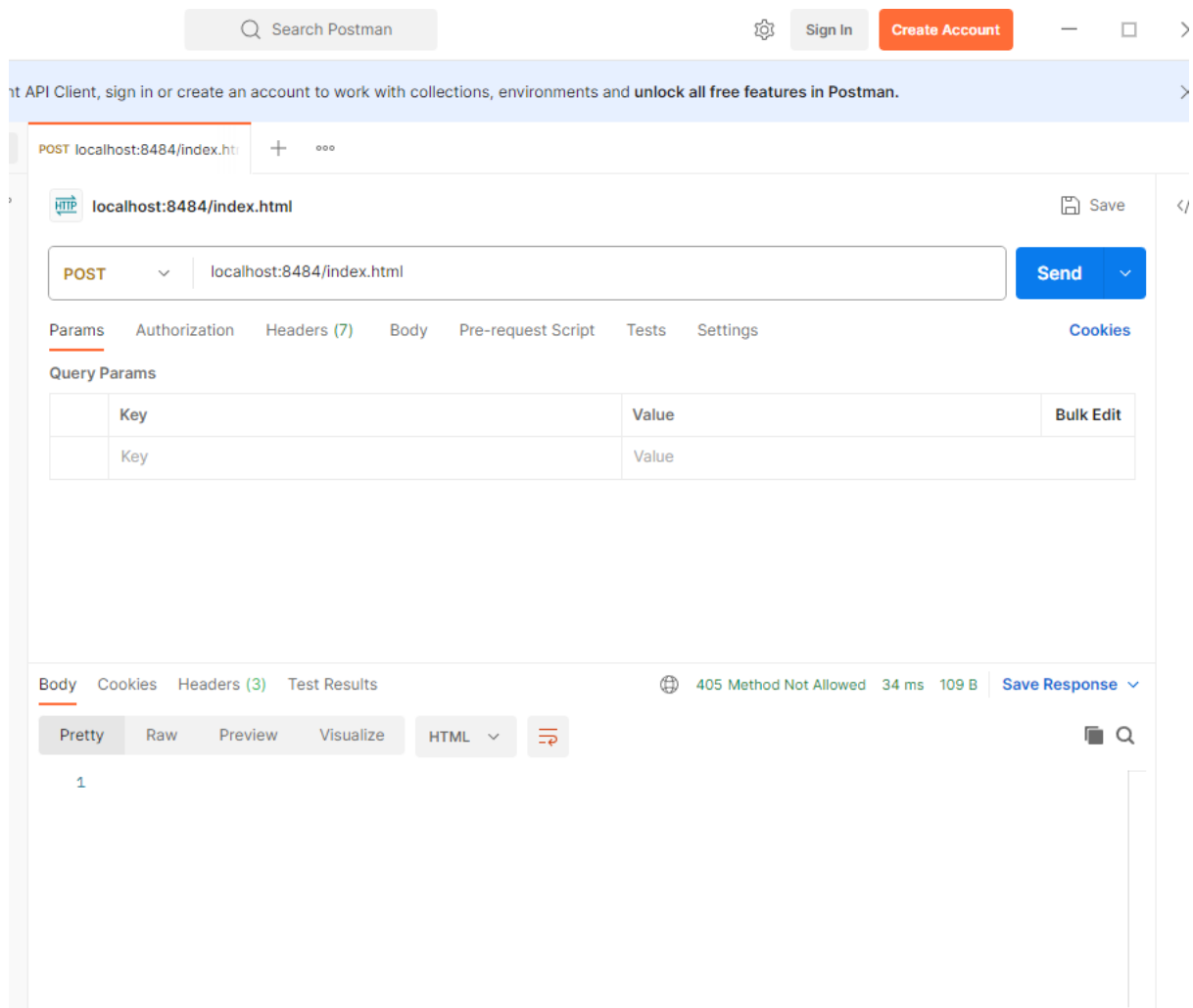


d. 400 – Bad Request

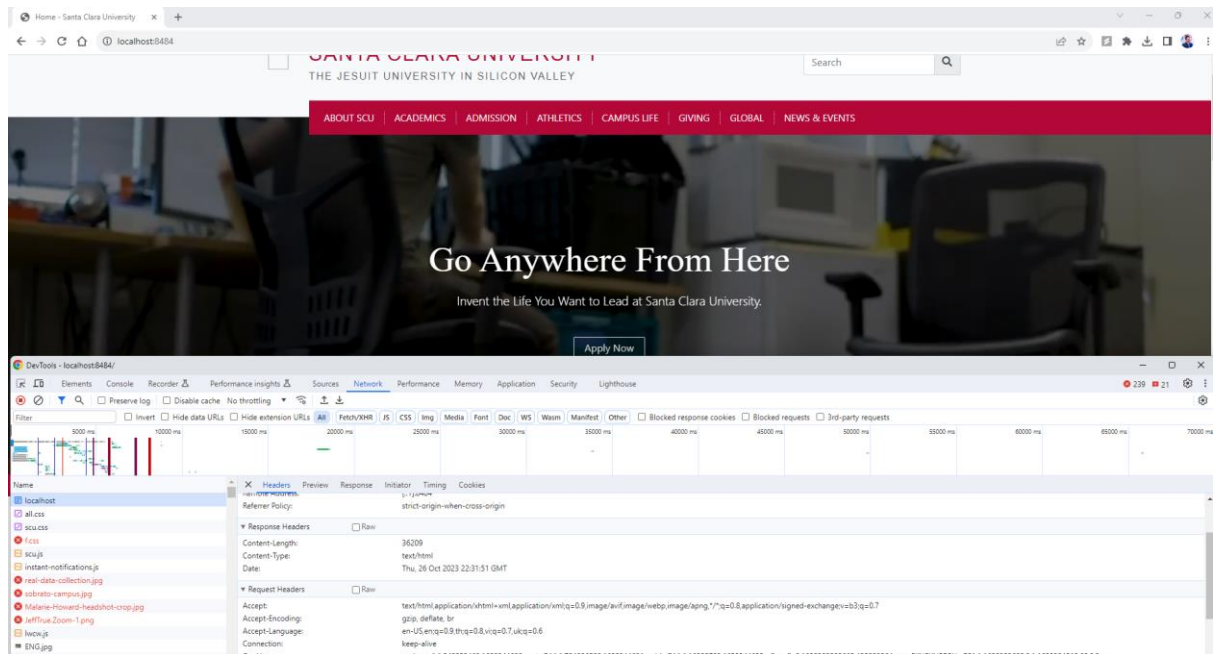
URL: localhost:8484/bad-request-400



e. 405 – Method Not Allowed



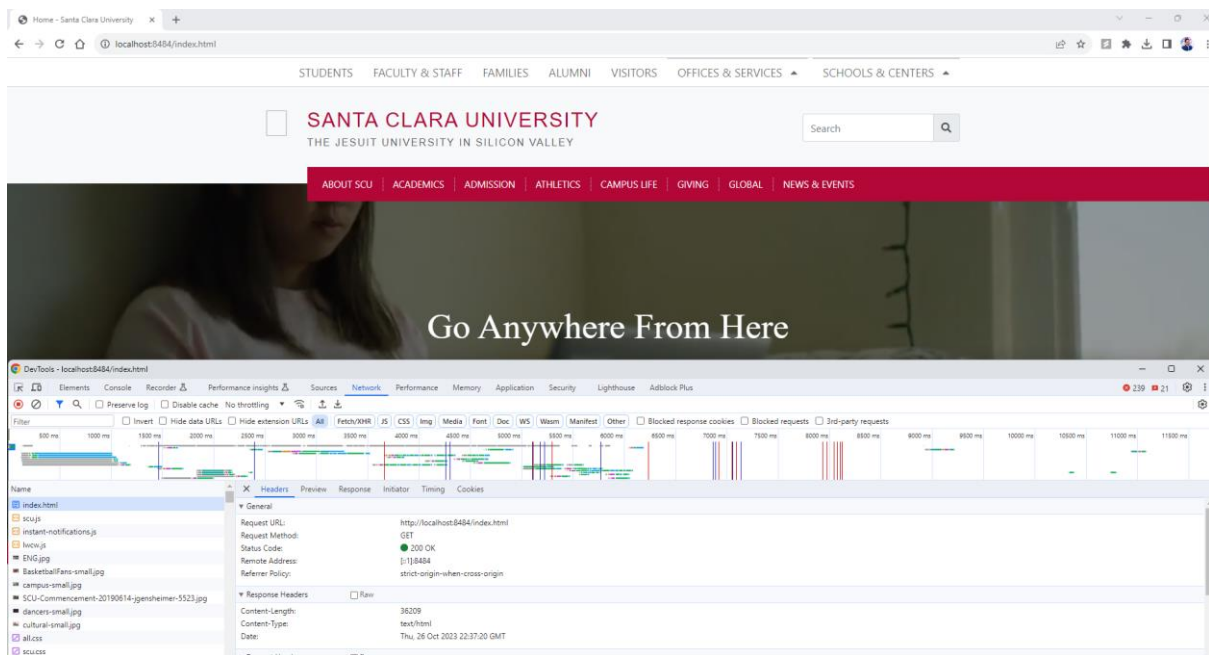
5. Handling Headers – content-type, content-length and Date headers are supported.
URL: localhost:8484



6. Handling File types

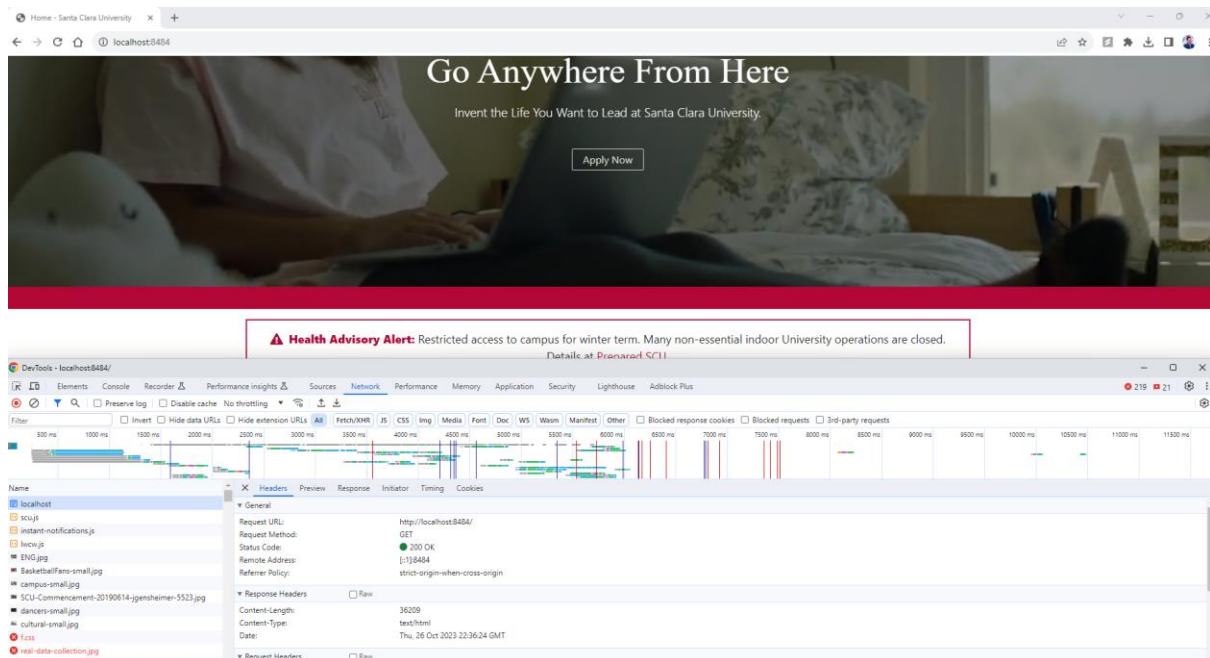
- a. Handle index.html when present in the URL

URL : localhost:8484/index.html

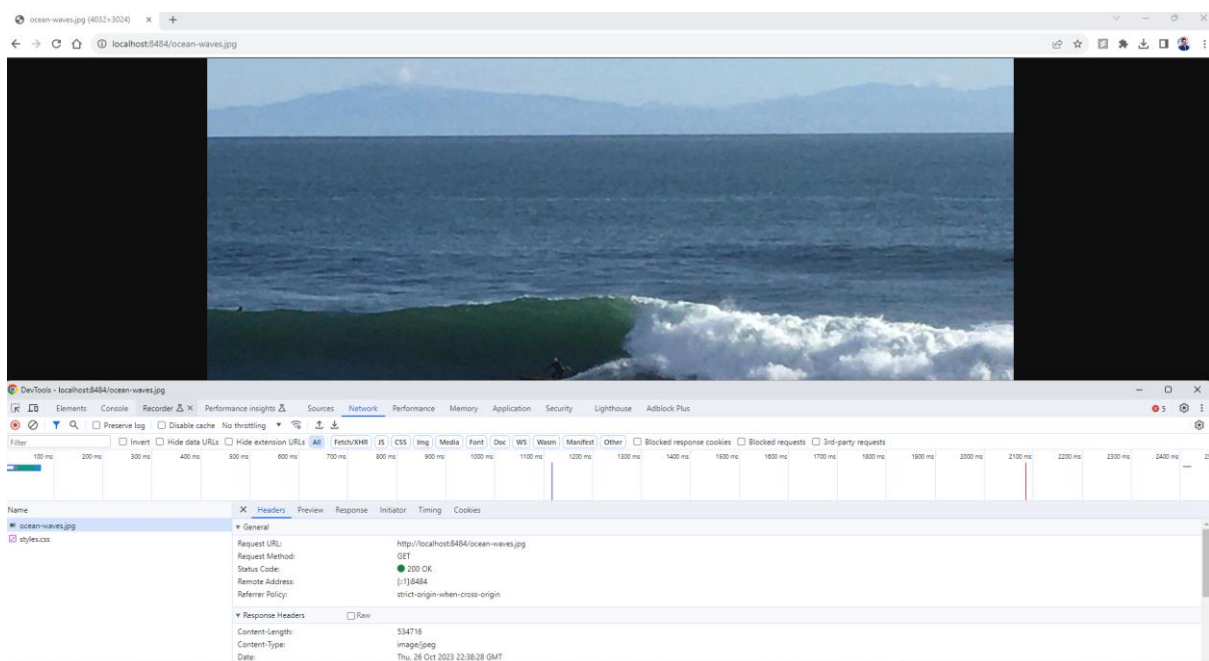


- b. Handle index.html when its not present in the URL

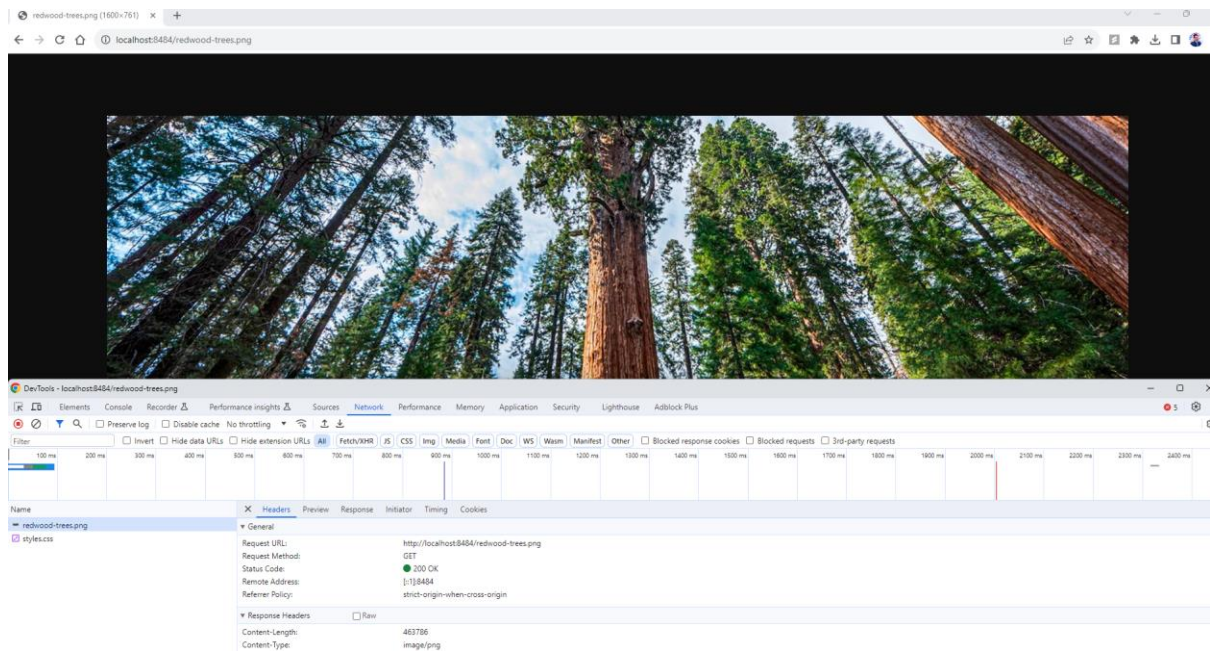
URL: localhost:8484



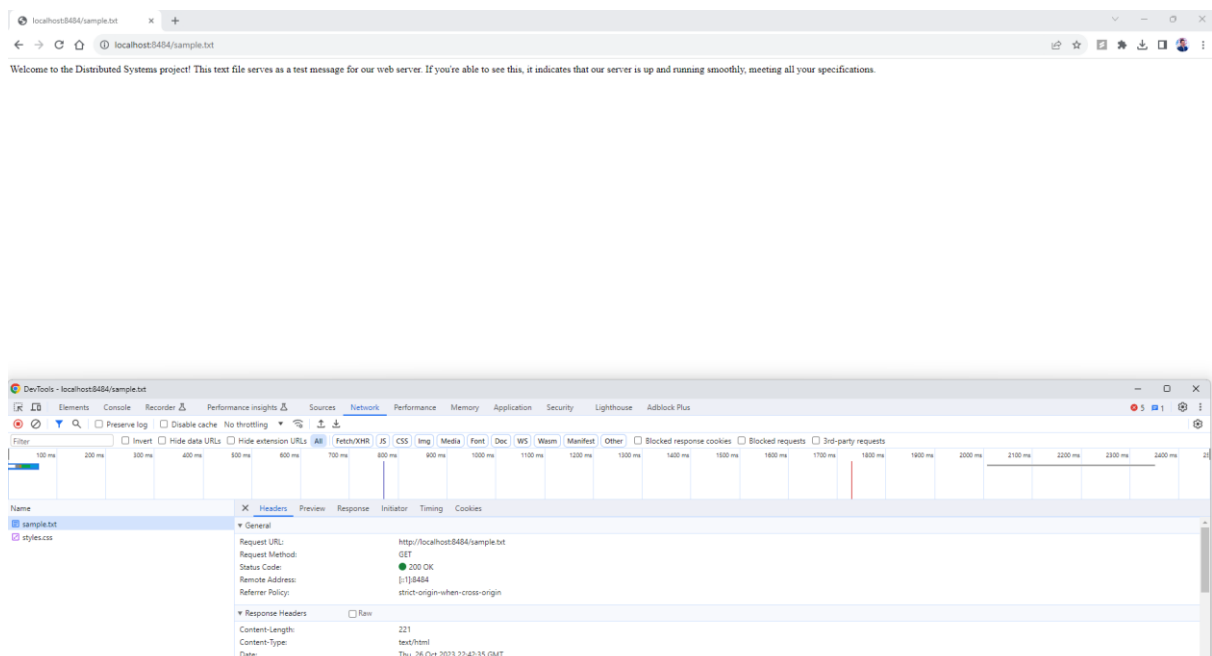
- c. Handle other file types such as .gif, .txt and .jpg
 - i. Handling .jpg file & URL: **localhost:8484/ocean-waves.jpg**



- ii. Handling .png file
URL: **localhost:8484/redwood-trees.png**



iii. Handling .txt file & URL: **localhost:8484/sample.txt**



iv. Handling .gif file URL: **localhost:8484/baby.gif**

