CS3357A COMPUTER NETWORKING

Assignment #1: Build a single thread web server.

Assignment Description

Using socket programming in your favourite programming language, develop a web server that handles HTTP requests, one at a time.
The server should be able to:

- Accept and parse HTTP GET requests.
- Search and retrieve the requested HTML file in the server's file system.
- If the requested HTML file is found, an HTTP response message including the header and the requested file should be created and sent to the client.
- If the requested HTML file is NOT found, the server should send a 404 HTTP message to the client.

Testing the server

Assume the server has an HTML file called hello.html. In the server code, assume you set the IP address to local host (http://127.0.0.1/) and the port to 9200. To test if the server is running as expected, run the server and type the following URL in a browser
http://127.0.0.1:9200/hello.html
If the server works appropriately, the hello.html file should be displayed in the browser.

Deliverables

You should submit the server-side code of the web server along with screenshots of the client browser displaying the file requested from the server.

Bonus

- Provide the client side code that sends a GET request to the running server and saves the received file.