

HTTP Server - Networks (06-26951)

This is my submission for the first Networks assignment, which was to build a server that would correctly interact with most standard (modern) browsers.

Usage

```
cd 1526322/src/
```

```
make
```

```
./server < port >
```

This will compile the code and start a server on the provided port. Any pages to be served should be added on a new line of *files.txt* - any URI not listed in *files.txt* will **not** be served.

The following HTTP verbs are supported by the server: - GET

Behaviour

- When a null URI is requested, the server will return a 200 (OK) response with the index.html page as the body. With any other (servable) resource, the server will return a 200 (OK) response with the requested resource as the body.
- If a nonexistent (or non-servable) resource is requested, a 404 (File Not Found) response will be returned.
- If a request cannot be handled or is malformed, a 400 (Bad Request) response is returned.

In the future, there will be some differentiation implemented between nonexistent and non-servable resources, and a 403 error will be returned if the resource exists, but isn't whitelisted (as opposed to a 404).

Structure

- **server.c**: contains the main method (setup & accept loop) for the server.
- **http.h and http.c**: contain the structs and methods that handle creation, destruction and other methods (eg. sending) HTTP requests and HTTP responses.
- **freer.h and freer.c**: contain structs and methods used to handle allocated memory (and specifically freeing it upon termination).
- **.html/.css/.js/.txt/.png/.pdf/.gif/etc.:** images and files for the website itself.