COMP 4621 Report (code.c file)

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1. Implement the HTTP server

int main(int argc, char \*argv[])

follow the material in lab

initialize server socket

initialize server address

bind the socket to the server address

keep processing incoming requests

1. Support parse for different files. Such as HTML, CSS, JPG

void html\_parser(int socket, char \*file\_name)

Merge the file name that requested and path of the root folder.

Find the file size.

Send the header for succesful respond.

Read the html file to buffer.

Send the content of the html file to client.

void jpeg\_parser(int socket, char \*file\_name)

Merge the file name that requested and path of the root folder.

Read the file to buffer. If not the end of the file, then continue reading the file.

Send the file of the jpeg to client.

1. Support multiple threads.

int main(int argc, char \*argv[])

In the main function, the server create a thread for each request.

void \*connection\_parser(void \*socket\_descriptor)

After receiving a TCP connection request and the socket descriptor, it will establish a TCP connection through another port and provide services for the request in a separate thread. If there is a maximum number of requests at the same time, other requests will be rejected. After receiving the Message, it will start parsing and get the file name and extension.

1. Implement two new features or optimization for transmission.

Not enough time to implement

1. Prepare several HTML files for testing.

The content of the HTML files include my name, student ID, one image and one link to PDF file.

HTML\_File\_Testing\_1(.html)

HTML\_File\_Testing\_2(.html)

styles(.css)