Nathan Bunch Professor Yates Networking March 26, 2018

Circle Webhost Experience

When we were given the task of building a webserver, I anticipated a *very* difficult project. However, this turned out to be a very enjoyable project. I had a lot of fun overall and really enjoyed working on it. I learned a lot about TCP/IP server connections and sockets and how a HTTP request is formatted. As working as a web developer professionally, I never really considered how a webserver operated and how the browser talks to the server to get data. I am glad that I was able to work on this project and learn much more about webservers than what I had known to begin with.

Probably the most challenging part about this project was handling bad input and storing changes when POST requests are received by the server. Whenever a user would enter input such as a html or script file, the server would run that code through the input being reprinted to the list of issues side of the page. For storing changes, I originally stored the issue entries into a file and a lot of my code was built on that, after realizing of how bad it really is (the code was breaking constantly), I made a concurrent dictionary for the storage of the entries.

Finally, in this project we utilized the TCP layer, and service layers of the network. We used TCP/IP connections as the basis for the functionality of the webserver, and then developed a webservice on top of that technology. Also, we made the server quite robust, and immune to html insertion, exceptions, and fixed a formatting error. Throughout this time we also realize that HTTP is a bad way to access the internet, since it is composed of an ASCII header and body (the body doesn't have to be ASCII and can be also other encodings) and can be easily messed with or changed.

Again, I really enjoyed this project, the knowledge I received from it and the time for coding it. I hope to be able to do another project like this soon.