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Networking

### Project 3 – WebChat Application

In this project, John Khalaf and I developed a websocket-based chatting application. This application consisted of a C#-based server backend and a HTML/CSS/JavaScript frontend. The server side of the application was developed by me and the frontend was developed by John Khalaf.

I learned primarily how to work with the HTTP protocol to initiate a websocket application. By using this websocket, we can stream data to and from a client (that being a web browser).

The known deficiencies with this project is the lack of private and/or multiple chatrooms. This is a feature I would have liked to include, however, that would have involved quite a bit more work and there just wasn't enough time to develop that feature within the project deadline.

The parts that were much easier to implement than expected was the multithreading required to handle connections to the server and messages that were being sent from client to client.

By far, the most difficult was getting the program to run at peak efficiency. Though I had multiple threads running, I had to redesign the software to act upon operating system blocking functionality.

Overall, this is one of the coolest and most enjoyable projects I had ever worked on and I look forward to possibly developing it further over the summer.