Senny Lu Professor Zhou COMP 4610 5/29/25

GUI I HW 1 Set up, GitHub, and First Web Page Reading Summary

I learned that a web developer can take on many different roles when it comes to creating a website. A web designer focuses on a website's look and user experience, while a front-end developer implements what the web designer creates. The front-end developer usually works on what the user sees, while the back-end developer works on the functionality of the site behind the scenes. The back-end developer may work on data storage, authentication, security, etc. Finally, a full-stack developer works on both the front-end and back-end, but usually, they would specialize in one or the other.

A web developer also uses many different tools and languages. These tools include Git/GitHub and Visual Studio Code. A front-end developer usually works with HTML, CSS, and JavaScript. HTML is like the skeleton of a website—it contains the data that the website uses, such as images or text—while CSS is like the skin of a website; it contains the formatting and structure of the web page. Last but not least, JavaScript is like the muscles of the website—it allows the website to move and interact with the user through input and output. These three tools work together to create a dynamic, visual, and functional web experience. A back-end developer may pick different languages depending on the situation; some popular ones include Node.js, Ruby, and Python. Node.js is popular because it is a JavaScript environment and is used for web servers. Ruby is good for web applications, and Python is used for automation.

In this assignment, I was able to get a light exposure to web development and the tools and languages each role uses. It is very interesting to see how each role connects with the others to create a website.