Internship Report – Day 13

During my internship at Surfboard Payments, I learned how to connect a server in VS Code using JavaScript. The instructors guided us through setting up a server and explained key concepts such as handling requests and responses. I gained an understanding of how servers process client requests and send responses, ensuring seamless communication between the frontend and backend.

I also learned about essential terminal commands for installing and managing npm (Node Package Manager). This knowledge helped me efficiently set up a development environment by using commands like `npm init` to initialize a project, `npm install` to add dependencies, and `npm start` to run the server. Understanding these commands made it easier to manage project dependencies and automate tasks within the development workflow.

We explored the role of Node.js in backend development, particularly its ability to handle asynchronous operations and support real-time applications. The instructors introduced us to Express.js, a web framework that simplifies server-side routing and request handling. I practiced creating a basic server using Express and setting up different routes to handle requests from a browser. This exercise helped me grasp how backend frameworks streamline development and improve code organization.

Additionally, I learned about debugging and troubleshooting server issues. The instructors provided useful techniques for identifying errors, such as checking port conflicts, verifying dependencies, and using console logs effectively. Through this, I understood the importance of debugging tools in ensuring smooth server operation.

Apart from server-side concepts, I was introduced to HTML and CSS for web development in VS Code. I learned how HTML structures a webpage using elements like headings, paragraphs, lists, links, images, and tables. The instructors explained the significance of attributes such as 'href' for links and 'src' for images, which play a crucial role in web page functionality.

For styling, I learned how CSS is used to enhance a website’s visual appearance. We covered

three methods of applying CSS: inline, internal, and external. I now understand that using external stylesheets improves code maintainability and separation of concerns. The instructors also introduced me to different CSS selectors, including element selectors, class selectors, and ID selectors, helping me style elements efficiently.

A key concept I learned was the CSS box model, which explains how margins, borders, padding, and content interact to define an element's space on a webpage. This understanding helped me structure and align elements properly. I also explored media queries and responsive design principles, which allow web pages to adapt to different screen sizes, improving usability across devices.

By practicing coding examples in VS Code, I applied my knowledge of HTML and CSS to create structured web pages. The hands-on experience helped reinforce layout design, typography, and color application. Initially, I faced challenges with element alignment and CSS specificity, but with guidance from the instructors, I learned how to resolve these issues efficiently.

By the end of the session, I felt more confident in using HTML, CSS, and JavaScript for web development. I also became familiar with VS Code features such as syntax highlighting, auto-completion, and live server previews, which enhance productivity. The structured teaching approach deepened my understanding of essential development concepts and best coding practices.

Overall, the sessions were highly educational and provided me with a solid foundation in both frontend and backend development. Learning about server setup, HTML structure, CSS styling, and debugging techniques has strengthened my technical skills. Today's session has motivated me to explore advanced JavaScript and backend development further. My internship at Surfboard Payments continues to be an enriching learning experience, and I look forward to expanding my knowledge in upcoming sessions.