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**AAD55400-Graduate Web Design I**

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## **Graduate Assignment Report**

### **Introduction**

During the first week of the Graduate Web Design I course, I was exposed to the essential fundamentals of web design, including coding environment and creating basic HTML pages. The first activities allowed me to set up a coding tool like VSCode, learn basic HTML document structures in W3Schools, and practice applying basic knowledge of basic coding techniques to create a "Hello World" page. This task familiarized me with the basic coding rules and provided a solid foundation for future designs.

### **Research on Domain Hosting & Environment Setup**

#### **Coding environments**

A good coding environment will help programmers save time, complete their work quickly and conveniently, and write better and more organized code. Editors and Integrated Development Environments such as Visual Studio Code (VSCode), Atom, and Sublime Text will support essential functions such as syntax highlighting, debugging tools, and extensions. Features of VSCode Widely used because of its extensive plugins, Git integration, and built-in terminal. Extensions such as code formatting, flexible IntelliSense features, and terminal integration are especially effective for improving work efficiency in web development. The Live Share feature supports real-time collaboration, while utilities such as ESLint and Prettier ensure code quality. Debugging features and git integration can support version control, sharing, and

branching directly in the editor. While integrated environments like Sublime Text are great for developers looking for simple, lightweight text processing tools that are easy to use for small projects, Sublime Text is a good choice for developers looking to streamline their software development process with speed and power. However, it lacks built-in features like debuggers or Live Share and relies on plugins like Sublime Merge for Git support. A developer looking to customize GitHub integration may consider an integrated environment like Atom. Atom goes a step further, offering full GitHub integration. Atom is handy, mainly if they use GitHub for everything. Atom trusts on plugins, and Atom's plugins are easy to install, allowing developers to customize them in any way they want. Additionally, Using version control tools like Git ensures code history is maintained while debugging, and linter tools help identify errors early, reducing rework.

### **Workflow Optimization**

Professional developers often use command-line tools such as CLI or Command Line Interface. CLI tool allows for the automation of repetitive task building. CLI frameworks such as Vite or Create React App enable developers to complete tasks and projects quickly, saving a lot of manual configuration. Additionally, project templates and workflows pre-configured with necessary features help speed up the early development phase.

### **Industry tools**

Tools in the body of work that speed up the development process include CSS generators and integrated development environments (IDEs) that help save time and reduce errors. For example, Emmet in VSCode simplifies repetitive HTML and CSS coding. ESLint and Prettier confirm consistent code formatting and error detection, promoting a clean and maintainable codebase.

## **Client Communication & Workflow**

Before starting work, developers often discuss and communicate with clients to understand and align client expectations. Tools like Trello and Asana exist to help with project tracking. In addition, design platforms like Figma assist clients in imagining the website layout before development begins. With tracking systems and consistently updated project progress information, both parties remain aligned on timelines, goals, and deliverables.

## **Conclusion**

Applying the strategies and tools technicians researched can make their workflow more efficient, collaborative, and aligned with industry standards. Choosing and leveraging the advantages of reliable hosting suppliers is needed to create an efficient coding environment, and optimization tools will enhance the quality of your web design projects. These activities streamline the development process and ensure the creation of scalable, secure, and user-friendly websites.