

## **Digital Systems And Service Development**

## Software Development Skills Front-End 2024-25

Learning Diary
Isuru Indrajith Kaldera Hollupathirage

I developed a fully responsive e-commerce website named "Vain" using HTML, CSS and JavaScript as per the requirement of Front-end Development course module. I have followed YouTube tutorial recommendations provided under this course, in order to develop the website. These tutorial recommendations served me as both technical as well as conceptual teaching resources. Accordingly, tutorials were really helpful in explaining not only methods of implementing features, but also why certain coding methods are used. Thus, I was able to grasp ideology behind "how" and "why" in frontend development.

The website I developed consists of several pages, they are **Home**, **Products**, **Product Detail**, **About Us**, **Login**, and **Sign In**.

I implemented a video banner on Home page using commercial advertisement sourced from YouTube while compressing it to 720p to facilitate smooth experience for the visitors by reducing the loading times on mobile devices and the size of the video. Further, it also features a promotional headline, a newsletter form, and links to social media and account options. Though initially, footer was built on the Home page, I later realized that I had missed it to include footer to the other pages. However, after the initial built I incorporated footer with About Us and Login to other pages as well.

When it comes to **Products page** represents a list of items using visually consistent cards styled with **CSS Grid**. Each product includes an image (sourced from **Freepik**), title, small description, price, and a "Buy Now" Call to Action (CTA) button for each product. Once a visitor clicked "Buy Now" button, visitor will be redirected to the particular **Product Description page**, where I implemented an image gallery with thumbnails, feature highlights, price block, and rating section for that product. This **Product Description page** provided a wholesome user experience with enhanced customer journey. Moreover, opened up an opportunity for me to practice layout alignment, semantic HTML structure, and dynamic content switching through image selection.

On the other hand, **About Us** page consisted of descriptive company details and a **Google Maps iframe**, indicating LUT University address based in Lahti, Finland. At this section I felt that the project is real and complete. In addition, I incorporated a fully working **FAQ accordion**, implemented using JavaScript and styled using techniques from the tutorial. This learning opportunity of replicating the FAQ section while following the tutorial helped me practically understand the way to create interactive components and keep the UI accessible and clean.

I also included **Login and Sign In pages**, where I created styled forms with input fields and submit buttons. Although these pages are static and not connected to a backend, they simulate a typical authentication flow and helped me understand layout consistency, placeholder text, form spacing, and how to apply utility classes for styling buttons and containers.

One of the biggest learning opportunities for me was developing **hamburger menu for mobile navigation**. Due to me background focused mainly on mobile app and game development, I had no hands-on experience with this kind of responsive web navigation. Thus, the tutorial taught me

how to use JavaScript to toggle menu visibility and how to apply media queries to ensure the layout adjusted properly across screen sizes.

Throughout the project development phases, I used **GitHub** for version control and logged each meaningful development step with commit messages. My commits include tasks like adding the footer, responsive queries, video components, FAQ section, and product-related layouts. Once development was complete, I deployed the site on **Netlify**, giving me experience in hosting and live site testing as well.

Likewise, rather than mere writing code, this project helped me improve my understanding of web architecture, code structuring, reusable design patterns, and responsive techniques. Most importantly, the YouTube tutorial helped me learn not only what to code, but also why it's coded that way. Accordingly, I now understand the practical benefits of using utility classes, CSS variables, Flexbox, Grid, semantic tags, and JavaScript for UI interaction.

Even though I already had a foundation in software and mobile game development, I had limited real-world experience in frontend web development. Hence, this project gave me the opportunity to strengthen my frontend capabilities and boosted my confidence in building and deploying complete, modern websites from scratch equipping me with additional hands on experience.