Product Listing Page:

I separate the page into two main components: Products and ProductList. The Products component acts as the container, combining the FilterSection and ProductList. The ProductList component handles the rendering of the product grid and display the products with their names, prices, and images.

The FilterSection is for sorting mechanism, I used useFilterContext hook to access the filtered products and sorting preferences. Filtered products for search product's name.

Product Details Page:

I used the useParams hook from react-router-dom to extract the product ID from the URL. This ID is then used to fetch detailed product information using the getSingleProduct function from the product context with Axios.

I've also included a breadcrumb-style navigation bar (PageNavigation) at the top to guide users.

The main content section is divided into two columns. The left column (product_images) displays product images using the MyImage component. It fetches images and handles responsive display.

The "Add to Cart" section includes a button that triggers the addToCart function from the cart context. It also uses the AddToCart component, so users can adjust the quantity before adding the product to their cart.

Summary

For this assignment, I chose to use ReactJS to build the components, manage the state, and handle the UI and react-router-dom to handle navigation between different pages. I feel more comfortable and confident using them due to my existing skills and experiences.

Given my exposure to the Context API with useReducer during my trainee time, I chose it for state management.

For styling, I chose styled components because allows to write CSS within JavaScript, and reusable styled components to manage styles for individual components. For icon, I used react-icons to easily setup and includes a lot of icons. I also used style-components along with framer-motion for loading animation. Even my experience with animation is limited, I just wanted to explore this area further.

For state management, I have chosen to utilize the Context API from React. The Context API, coupled with the useReducer hook, provides a straightforward and efficient way to manage state within the application. I have created contexts dedicated to managing product data, sorting preferences, and cart updates.

To ensure a responsive design, I've structured the components and styles to prioritize mobile users, and then I've used media queries to for the larger screens layout. I used styled components for responsive design because of its flexibility. Media queries are implemented to adjust styling based on the screen size.

I have followed best practices for HTML semantics, ensuring that the document structure is meaningful and properly labelled using appropriate tags like <nav>, <section>, and <article>. Also, I've checked that keyboard navigation is supported throughout the application.

Github: https://github.com/amirahnasihah/ecommerce-app

Deploy: https://ecommerce-app-alpha-henna.vercel.app/