DAY 4 - BUILDING DYNAMIC FRONTEND COMPONENTS FOR MARKETPLACE

Overview

On **Day 4**, I focused on designing and developing dynamic frontend components for my marketplace project. The objective was to create reusable, scalable, and modular components that fetch and display data dynamically from **Sanity CMS** or APIs. The development was done while ensuring a responsive and user-friendly UI.

Components Developed

I successfully implemented the following key components:

- ✓ Product Listing Component
- **✓ Product Detail Component**
- √ Category Component
- √ Search Bar
- **✓** Cart Component
- **✓** Wishlist Component
- **✓** Checkout Flow Component
- ✓ User Profile & Authentication Component
- ✓ Reviews and Ratings Component
- ✓ Pagination Component

Product Listing Components

- ▲ Dynamically fetched product data.
- ▲ Displayed in a responsive grid layout.
- ▲ Fields: Product Name, Price, Image, Stock Status etc.
- ▲ Implemented sorting and filtering options.

Product Detail Component

- ▲ Implemented dynamic routing for individual product pages.
- ▲ Displayed detailed information including Description, Price, Available Sizes/Colors, and Customer Reviews.
- ▲ Included an "Add to Cart" button for seamless purchasing.

Category Component

- ▲ Dynamically fetched and displayed product categories.
- ▲ Enabled category-based product filtering.
- ▲ Optimized for fast loading and smooth transitions.

Search Bar

▲ Implemented search functionality to filter products by name or tags.

▲ Optimized for real-time suggestions and keyword-based results.

Cart Component

- ▲ Allowed users to add/remove items.
- ▲ Tracked quantity and total price using state management.
- ▲ Displayed a summary of selected products before checkout.

Wishlist Component

- ▲ Enabled users to save products for later.
- ▲ Used Local Storage for persistence.
- ▲ Integrated a "Move to Cart" option for quick purchasing.

Checkout Flow Component

- ▲ Created a multi-step form including Billing, Shipping, and Payment details.
- ▲ Implemented a secure checkout process with order confirmation.

User Profile & Authentication Component

▲ Implemented **Login & Signup** functionality for user authentication.

- ▲ Displayed user details like Name, Email, Order History, and Saved Addresses.
- ▲ Provided an editable profile section for better customization.

Reviews and Ratings Component

- ▲ Allowed users to submit and view reviews dynamically.
- ▲ Included a star rating system for better product insights.

Pagination Component

- ▲ Implemented page-based navigation for large product lists.
- ▲ Added "Load More" functionality for infinite scrolling.

➤ Technologies & Tools Used

- **Next.js** for frontend framework.
- **React** for building modular components.
- **Sanity CMS** for managing and fetching product data.
- **Tailwind CSS** for responsive styling.
- **React Context API** for state management.
- **Local Storage** for persisting user preferences (e.g., wishlist).
- **React Router** for smooth navigation and dynamic routing.

Final Outcome

By the end of Day 4, I successfully built and tested all the required components. The project is now structured with **dynamic, reusable, and scalable** frontend components, ensuring a smooth user experience. All pages are fully responsive and optimized for different screen sizes.

Here are some implemented components, features, and UI previews with project snapshots











