#### **Day 4:**

# Detailed Documentation for Dynamic Components and Functionalities.

This documentation provides a clear overview of the main features of a dynamic marketplace, highlighting how it uses modular design, reusable components, and integrates with Sanity CMS. Each feature is explained in simple terms, with a conclusion summarizing the overall approach.

#### Step 1:

Functionalities Overview The project implements the following core.

#### **Functionalities:**

- 1. Product Listing Page
- 2. Dynamic Route
- 3. Cart Functionality
- 4. Checkout
- 5. Price Calculation
- 6. Inventory Management Each functionality contributes to building a responsive and scalable marketplace.

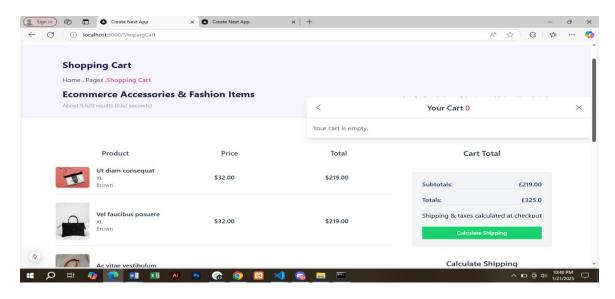
#### Step 2:

#### **Functionalities in Detail:**

### 1. Product Listing Page:

The Product Listing Page includes additional information that enhances the shopping experience. This may include product categories, filters, sorting options, customer reviews, and recommendations for similar products. All this data is dynamically fetched from Sanity CMS and displayed alongside the main product listings.

The Product Listing Page is the primary interface where users can view all the available products in a structured and visually appealing format. Products are displayed dynamically, fetched from Sanity CMS, and rendered in a grid or list layout.



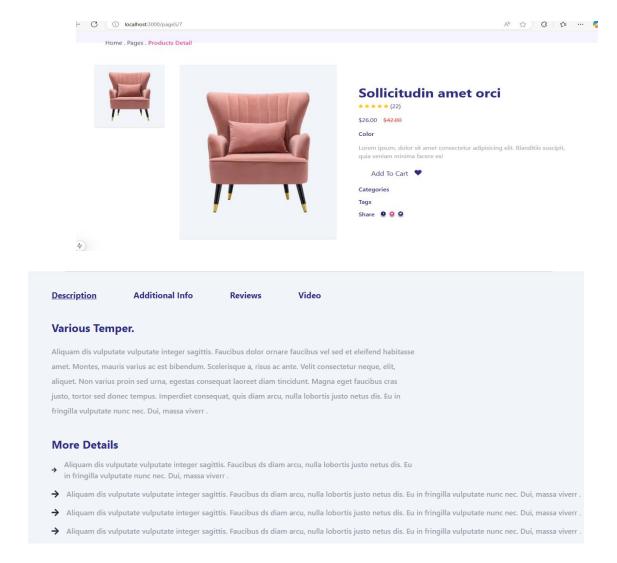
- Responsive design ensures compatibility across devices, from desktops to Mobile phones.
- Integration with Sanity CMS ensures real-time updates, so any product changes in the backend are instantly reflected.

#### 2. Dynamic Route:

Dynamic routing is used to create individual product detail pages, allowing users to see more detailed information about each product.

This includes related data such as product descriptions, specifications, pricing, available discounts, stock levels, customer reviews, and related or recommended products.

All this information is fetched dynamically from Sanity CMS, ensuring the content stays up-to-date.



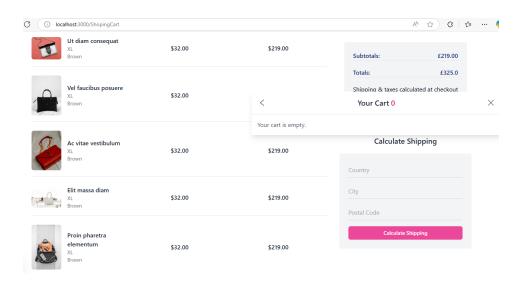
Every product has a unique identifier (ID or slug) used to dynamically generate its URL (e.g... /Featured Product/[slug]).

These pages are server-rendered to improve SEO and provide faster initial load times.

- Dynamic routes display details like product descriptions, images, price, stock status, and reviews.
- This approach ensures scalability, allowing new products to automatically generate corresponding pages without manual intervention.

#### **Cart Functionality:**

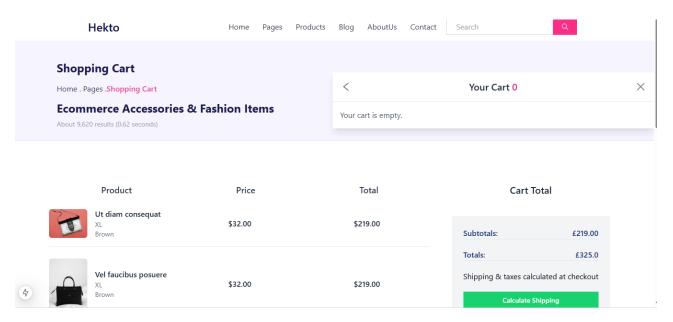
The Cart Functionality keeps track of the items a user selects, making shopping easy and smooth. It shows the selected products, updates quantities, and provides a summary of the total cost, helping users manage their purchases effortlessly.



## **Detailed Description:**

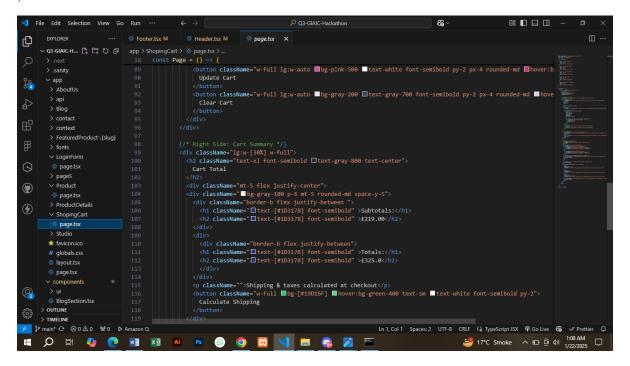
- A mini-cart displays a quick summary of selected items, while a detailed cart page offers options to edit or remove items.
- Cart data persistence is achieved using local storage or session storage, ensuring the cart remains intact even if the page is refreshed.
- Users can add products to their cart directly from the product listing or detail page.
- The cart dynamically updates quantities and calculates the total cost, ensuring a real-time experience.

#### **Price Calculation:**



Price Calculation dynamically computes the total cost of items in the cart, factoring in taxes, discounts, and other adjustments.

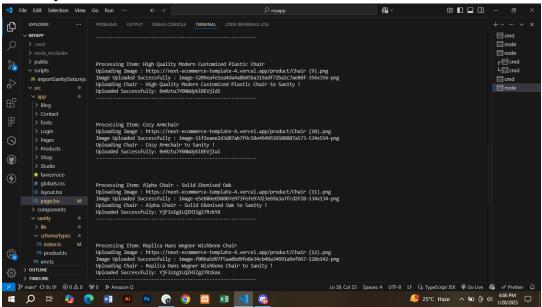
According Coding Shopping Cart, SubTotal, Total, Shipping Calculation, Checkout



# Step:3

# **Integration with Sanity CMS:**

Sanity CMS serves as the backend for managing and retrieving product data dynamic.



## **Conclusion:**

This documentation explains how to build dynamic and responsive marketplace components. By using Sanity CMS for backend management and modular frontend development, the application ensures it is scalable, efficient, and provides a great user experience.