BUILDING DYNAMIC FRONTEND COMPONENTS

Introduction

In my project, I had implemented four (4) dynamic components, such as **Product Detail Page**, **Category Page**, **Search Result and Add To Cart.** These make the user interface more interactive because they create content dynamically by choosing a product or category.

1. Product Detail Page

The Product Detail Page displays all the information regarding a specific product with its unique ID, known as productId. The page includes the following:

Dynamic Content Rendering:

- Fetching the productId from the URL via dynamic routing.
- Fetching the correct product details from a shared context (MyContext) for effective state management.

Features on the Page:

- Product Images: It will show several images, but the larger image is highlighted.
 The user gets a detailed view of the product.
- Product Details: Product name, price, availability, description, size options, and colors are populated dynamically.

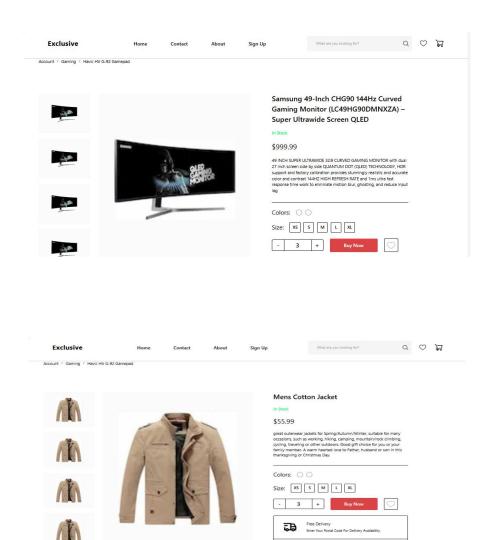
User Interaction:

- 1. Increment and decrement buttons for quantity selection.
- 2. "Buy Now" and "Add to Wishlist" buttons for easy shopping.

Services Section: Extra information on free shipping and return policies helps users build more trust

Related Items: Related products are displayed in a carousel fashion with real-time discounts and ratings.

Results:



2. Category Page

Category Page dynamically displays the products within a particular category. Here's what it does:

Dynamic Category Filtering:

- It pulls the category from the URL. It will know which products to show.
- It uses the shared context, MyContext, to show the products under the chosen category.

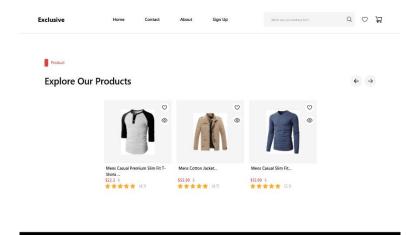
Features on the Page:

Product Display: Uses the reusable ProductCard component for displaying products to keep things consistent and modular.

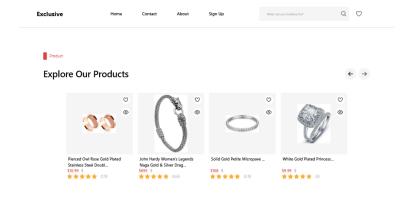
Fallback for No Data: If the products cannot be found in this category, the page may show a no data fallback to the users.

Results:

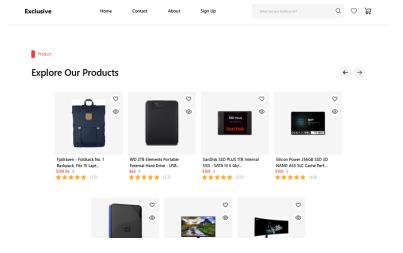
Category Men Clothes:



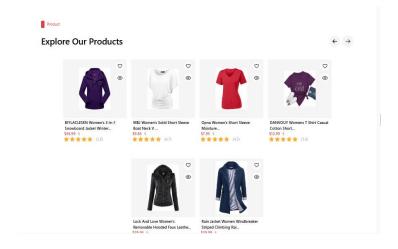
Category Accessories:



Category Electronics:



Category Women Clothes:

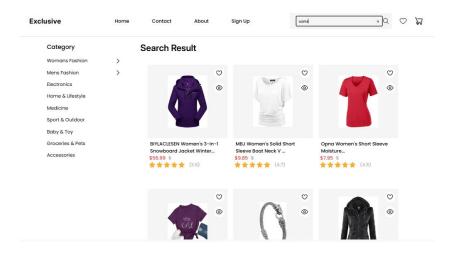


3. Search Functionality

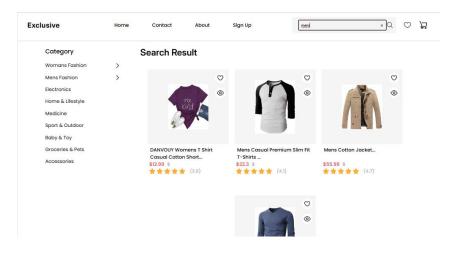
This feature enables users to look for products using keywords or phrases. It gives back dynamic results depending on user input. Main functionalities:

- Adding a search box which waits for user input and searches the product database.
- Providing relevant search results in real time.
- Handling cases like "no results found" with proper user feedback.

Result 01:



Result 02:



4. Add to Cart Functionality

The Add to Cart feature allows users to choose and add items to their cart for buying. It updates the cart dynamically with product information.

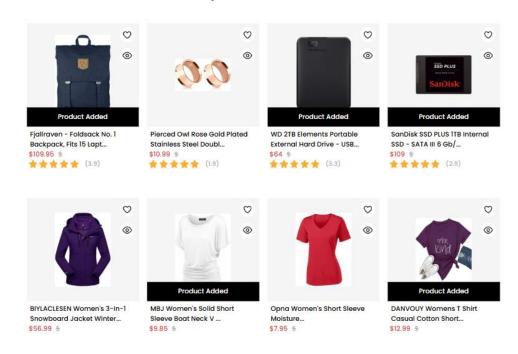
Major features:

- Placing products in the basket with dynamic quantity and price update.
- Showing an overview of chosen products in the cart.
- Persistent cart management to maintain chosen items through page reloads

Results:

Add Product in Cart:

Explore Our Products



Product Add Successfully in Cart:

