DAY 4

Building Dynamic Frontend Component

This documentation provide the detail information about the dynamic components that i have used in my project

FUNCTIONALITIES:

- 1)product listing page
- 2)product detail page
- 3)user profile
- 4)wishlist
- 5) add to cart functionality
- 6)categories section
- 7) order tracking component
- 8)search bar
- 9)checkout flow component
- 10)admin dashboard
- 11)login/signup page

FUNCTIONALITIES IN DETAILS

Product Listing Page:

The Product Listing Page serves as the main hub where users can browse and explore all available products on the website. This page dynamically fetches product data from **Sanity CMS**, ensuring that the products displayed are always up to date. The products are presented in an organized and visually appealing format, rendered in either a grid or list layout.

```
"use client";
import { sanityfetch } from "@/sanity/lib/fetch";
import { allProducts } from "@/sanity/lib/queries";
import ProductCard from "@/app/components/ProductCard"; // Import the reusable component
 imageUrl: string;
export default function ProductPage() {
 const [products, setProducts] = useState<Product[]>([]); // All products
 const [filteredProducts, setFilteredProducts] = useState<Product[]>([]); // Filtered products
 const [query, setQuery] = useState(""); // Search query
  useEffect(() => {
   const fetchProducts = async () => {
      const data: Product[] = await sanityfetch({ query: allProducts });
      setProducts(data);
      setFilteredProducts(data); // Initially show all products
    fetchProducts();
  const handleSearch = (event: React.ChangeEvent<HTMLInputElement>) => {
     onst searchValue = event.target.value.toLowerCase()
```

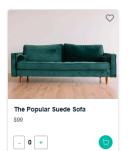
```
const filtered = products.filter((product) =>
 product.title.toLowerCase().includes(searchValue)
setFilteredProducts(filtered);
<section id="product" className="px-6 py-8">
 <div className="mb-6 flex justify-center">
     type="text"
     value={query}
     onChange={handleSearch}
     placeholder="Search for a product..."
     className="w-full sm:w-2/3 md:w-1/2 px-4 py-2 border ■border-gray-300 rounded-md focus:outline-none focus:ring-2
  <h1 className="□text-[#272343] font-sans text-[32px] mt-10 ml-11 font-semibold">
  All Products
 <div className="grid grid-cols-1 sm:grid-cols-2 md:grid-cols-4 gap-6 ml-11 mr-11 mt-12 mb-20">
   {filteredProducts.length > 0 ? (
     filteredProducts.map((product) => (
       <ProductCard key={product._id} product={product} />
```

All Products





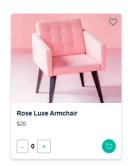










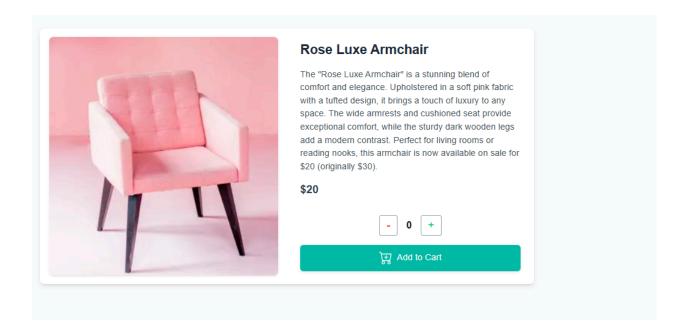




Product Detail Page:

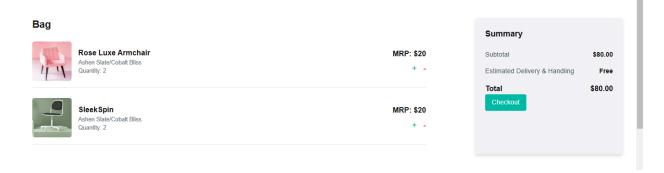
The Product Detail Page is a key section of the website where users can view in-depth information about a particular product. This page dynamically fetches detailed product data from Sanity CMS, including product images, descriptions, pricing, specifications, and availability. The page is designed to provide a seamless user experience with easy-to-navigate layouts and responsive design to ensure compatibility across devices. Users can also add the product to their cart or wishlist directly from this page, enhancing the overall shopping experience.

```
description: string;
 price: number;
 imageUrl: string;
export default function ProductDetailPage() {
  const { id } = useParams();
 const [product, setProduct] = useState<Product | null>(null);
 const [loading, setLoading] = useState(true);
 // ☑ Fix: Use `useCart` correctly
 const { state: cartState, dispatch: cartDispatch } = useCart();
 const { state: wishlistState, dispatch: wishlistDispatch } = useWishlist();
 const [isWishlisted, setIsWishlisted] = useState(false);
   const fetchProduct = async () => {
       const data: Product = await client.fetch(productById, { id });
       console.error("Error fetching product:", error);
       setProduct(null);
       setLoading(false);
```



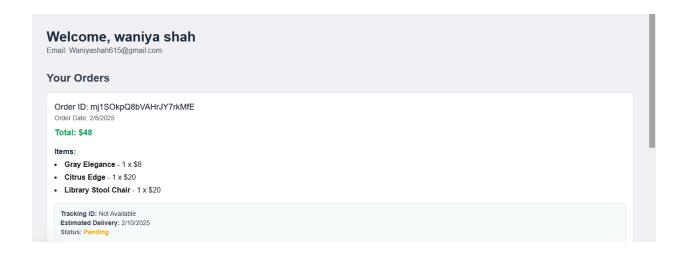
Cart Functionality:

The Cart Component is integral to the shopping experience, allowing users to view and manage their selected items before checkout.



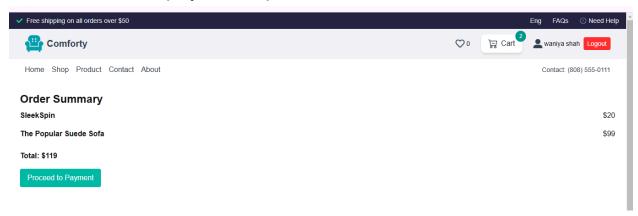
User Profile Component:

The User Profile page serves as a personalized dashboard where users can view their account details and manage preferences. In this section, users can exclusively view their **order history**, allowing them to track past purchases and check order statuses.



Checkout Component:

The Checkout page is the final step of the shopping journey, allowing users to review their order and complete the purchase. The page is designed with user-friendliness in mind, offering a clear and concise summary of the items in the cart, shipping information, and payment options.



Conclusion:

The website offers a seamless and user-friendly shopping experience, with an intuitive interface and easy navigation. The **Product Listing Page** allows users to explore a wide range of products displayed dynamically from **Sanity CMS**, providing them with various sorting and filtering options. The **Product Detail Page** gives users in-depth information about individual products, while the **Cart Component** and **Wishlist** functionality—powered by Context—ensures that users can easily manage their selections.

The **Checkout process** is simple and clear, guiding customers effortlessly from the cart to final payment. The **User Profile Page** enables users to view their order history, enhancing personalization and customer satisfaction.

Furthermore, the site is fully responsive, ensuring compatibility across devices, from desktops to mobile phones. Each component of the site has been designed with the end-user in mind, ensuring an engaging and streamlined experience for all.