#### HACKATHON\_DAY\_4

# "BUILDING DYNAMIC FRONTEND COMPONENTS – [COMFY]"

### Introduction

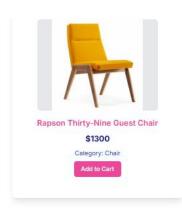
On Day 4, I focused on designing and developing dynamic frontend components for the marketplace. I worked on fetching and displaying data from Sanity CMS or APIs using reusable and modular components. This approach helps ensure better maintainability and scalability of web applications while improving user experience.

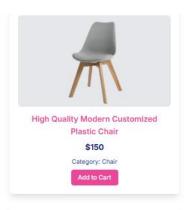
## **Learning Outcomes:**

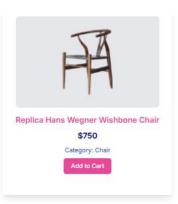
- Designed and developed dynamic frontend components that display marketplace data.
- Implemented reusable and modular component structures for scalability.
- Applied state management techniques to handle dynamic content efficiently.
- Ensured responsiveness and adhered to UX/UI best practices.
- Followed professional workflows to prepare for real-world client projects.

## **Key Components**

1. **Product Listing Component:** Displays all available products dynamically fetched from the backend with sorting and filtering options.





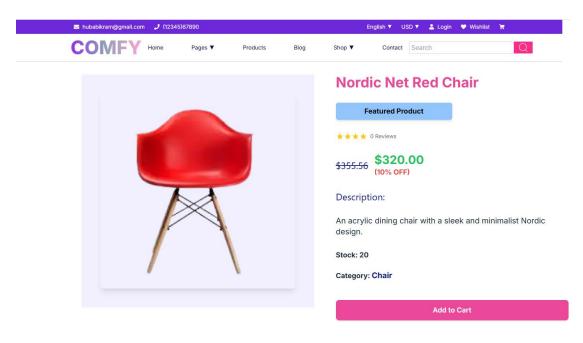


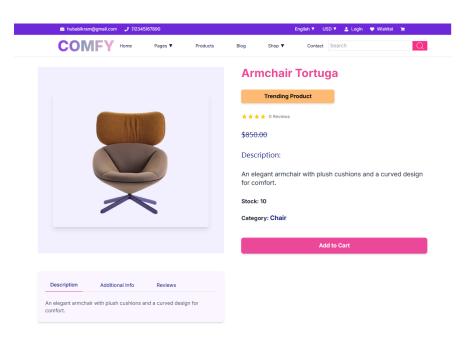




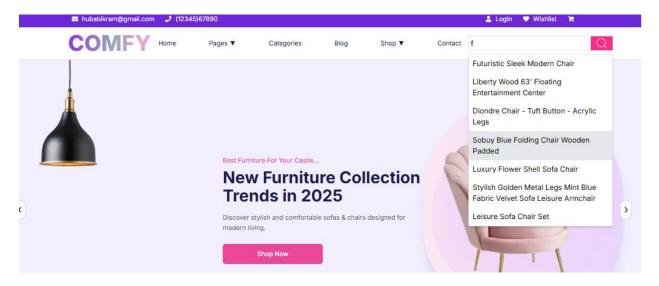


**2. Product Detail Component:** Shows detailed information about a selected product, including images, description, and pricing.

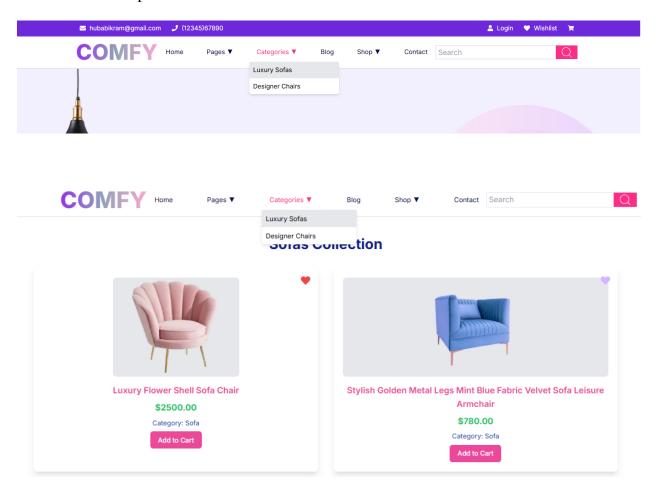




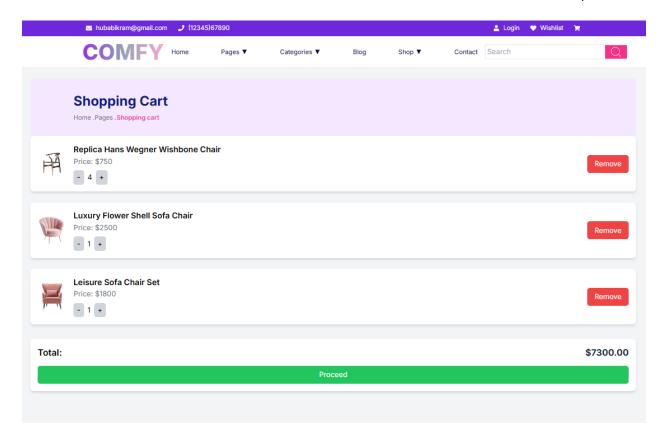
**3. Search Bar Component:** Enables users to quickly search for products by keywords or filters.



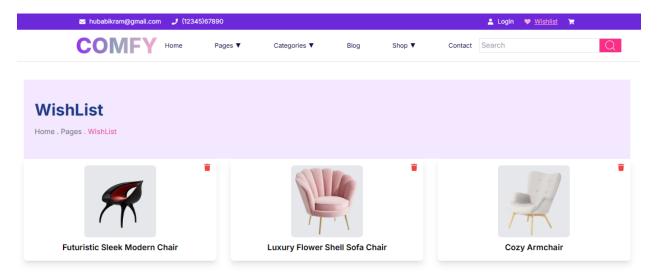
**4.** Category Component: Organizes products into different categories for better navigation and user experience.



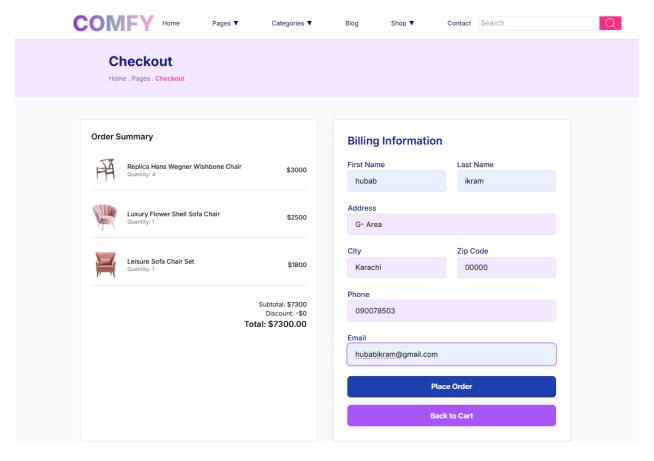
**5. Cart Component:** Allows users to add and manage products before proceeding to checkout.



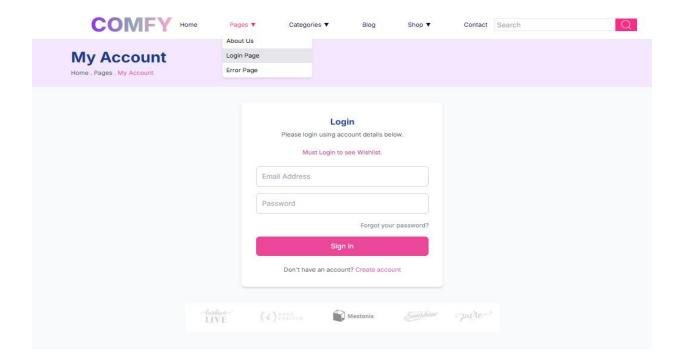
**6. Wishlist Component:** Lets users save their favorite products for future purchases.



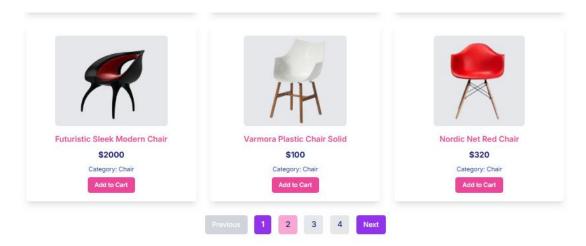
**7. Checkout Flow:** Handles the complete purchase process, including address entry, payment, and order confirmation.



**8. Login Authentication:** Ensures secure user access and personalized experiences using Clerk.



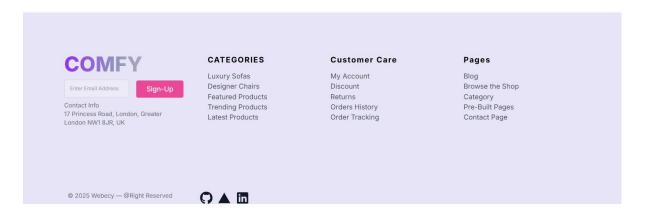
**9. Pagination Component:** Divides product listings into multiple pages for better performance and navigation.



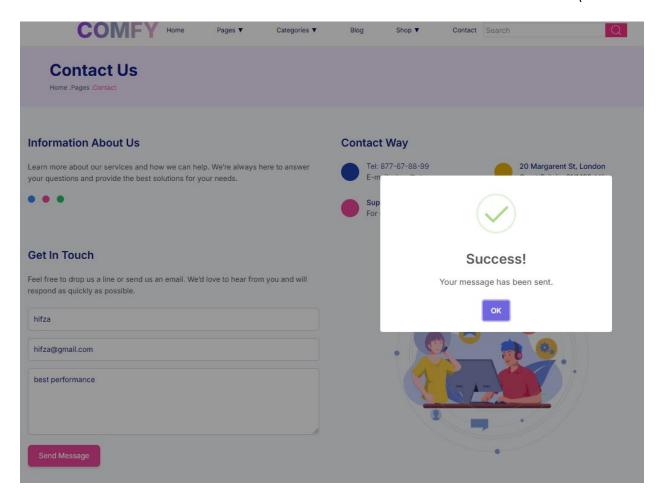
10. Navbar Component: Provides consistent navigation and branding across all pages.



11. Footer Component: Provides consistent navigation and branding across all pages.



**12. Contact Page Component:** Provides the facility to contact with the seller.



#### **Conclusion:**

Successfully developed dynamic frontend components for the marketplace, ensuring a modular and reusable structure. By integrating data from Sanity CMS and APIs, I created a scalable and responsive UI. Implementing state management techniques and following UX/UI best practices improved the overall user experience. This step has prepared me to handle real-world projects efficiently.

**SUBMITTED BY: HUBAB IKRAM** 

SLOT: MONDAY (2 TO 5 PM)

TASK GIVEN BY: SIR AMEEN ALAM

CLASS TEACHER: SIR ASHARIB ALI & AHMED RAZA SHAIKH