HACKATHON: 03

DAY: 04

QAHIR ISHAQ 00460710

Dynamic Fronted Components

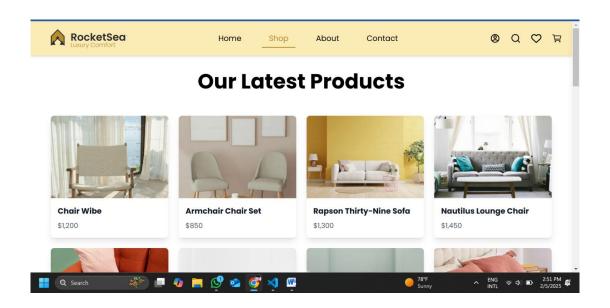
1. Introduction

This document gives a simple overview of the interactive features created for a furniture marketplace. The goal is to make it easy for users to browse, select, and buy products. Important features include a product list, individual product pages, user signup/login, a shopping cart, checkout, wishlist, search bar, and more.

2. Functional Components

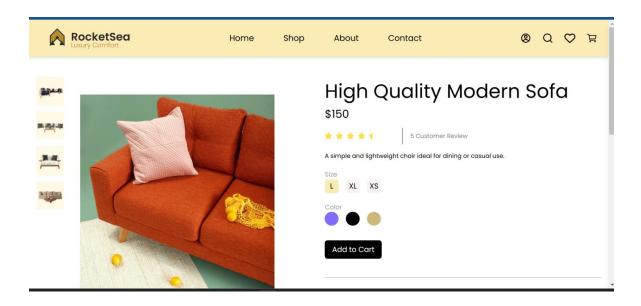
a. Product Catalog Page

- Showcases all available footwear dynamically, featuring images, titles, costs, and stock details.
- Merchandise is retrieved via an API, ensuring the latest inventory data is displayed.
- Users can refine their search by categories such as Chair wibe, Sofa etc.



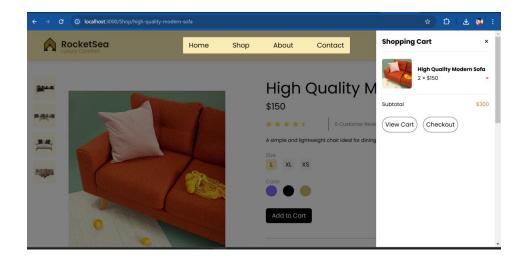
b. Individual Product Information Pages

- Every item has a dedicated page displaying specifications, visuals, available sizes, and pricing.
- Next.js dynamic routing (/product/[id]) facilitates the automatic rendering of product details.
- Live data retrieval ensures customers always access the most current information.



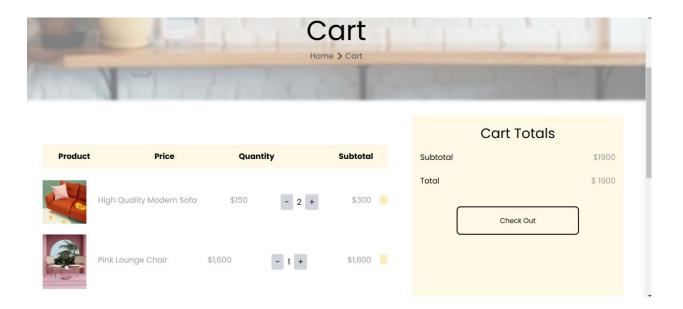
c. Shopping Cart Page

- Lists products added by the user, offering options to adjust quantities or remove selections.
- Incorporates centralized state management using React Context API or similar tools.
- The overall cost updates in real-time based on cart modifications.



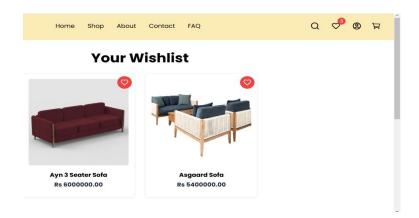
d. Order Completion Page

- Enables users to input delivery details, select a payment option, and review their purchase summary.
- Includes a structured form to gather user information and dynamically displays order specifics.
- Payment gateway integration ensures safe and seamless transactions.



e. Favorites Page

- Allows customers to bookmark products for future consideration.
- Supports adding and removing items while preserving data using local storage or a backend system.

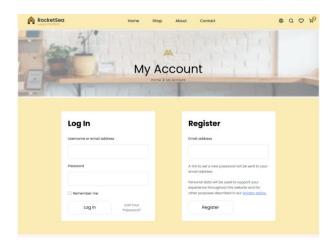


f. Registration Page

- New users can create an account by submitting credentials.
- Features form validation and redirects users upon successful sign-up.

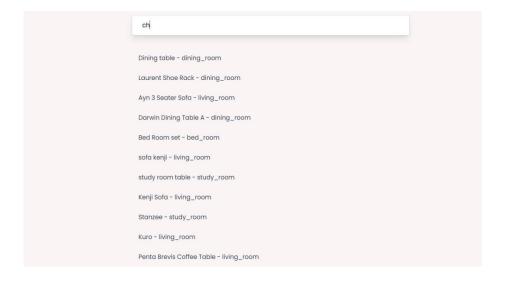
g. Membership Invitation Page

- Encourages visitors to join by showcasing platform advantages.
- Incorporates a registration form with live input validation.



h. Search Functionality

- Enables users to look up furniture based on attributes such as name or category.
- Offers instant search results and predictive suggestions.



3. Challenges & Resolutions

- Managing Cart & Wishlist: Keeping track of the cart and wishlist across different pages was difficult.
 Solution: Used React Context API and local storage to store cart and wishlist data.
- **Improving Speed:** The website needed to load faster. **Solution:** Used lazy loading and code splitting to make pages load quickly.

4. Conclusion

This initiative effectively incorporated interactive frontend modules for an engaging footwear marketplace. Key functionalities such as dynamic product showcasing, a streamlined checkout process, a wishlist, and a responsive search feature contributed to a high-performance and expandable eCommerce solution. Obstacles related to managing global state and retrieving data dynamically were mitigated through industry best practices, ensuring a smooth and intuitive user journey.