SUBMITTED BY: ASMA ABDUL QADIR

ROLL NO:230664

DAY 4:

DYNAMIC FRONTEND COMPONENTS OF GENERAL E- COMMERCE (HEKTO)

INTRODUCTION:

This report outlines the development, features, and future prospects of our e-commerce furniture website, which focuses on selling high-quality sofas and chairs. The platform is designed to offer a seamless shopping experience through intuitive navigation, dynamic content management, secure payment integrations, and scalable architecture. Leveraging the latest web technologies, our goal is to meet the evolving demands of the modern online furniture market.

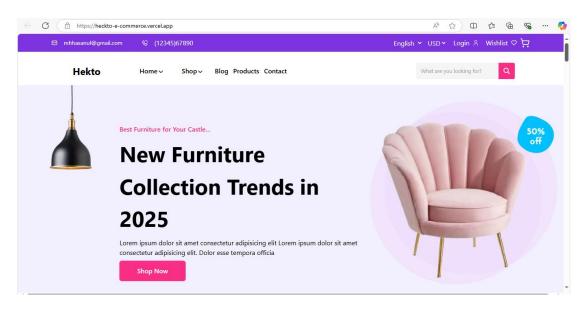
Project Overview

Our e-commerce website specializes in stylish and comfortable furniture, primarily sofas and chairs. The product pages are designed to provide comprehensive details, including size, material, color options, high-resolution images, and pricing. Users can easily navigate through product categories, check stock availability, and add items to their cart or wishlist, enhancing the overall shopping experience.

Key Features:

- User-Friendly Home Page:
- Clean layout with highlighted product categories and promotions

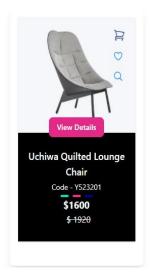
• Easy navigation for seamless browsing.



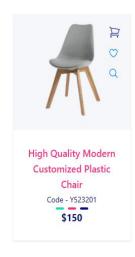
Dynamic Product Pages:

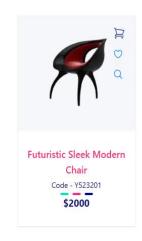
- Detailed descriptions with high-quality images.
- Dynamic content fetched from Sanity CMS.
- Real-time stock availability and discount displays.

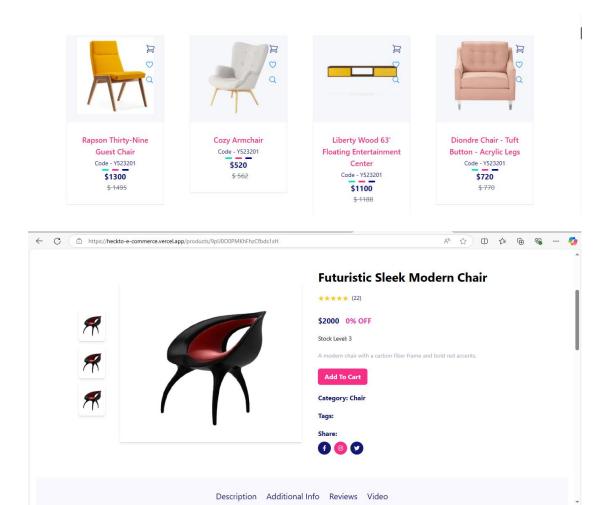
Our Products





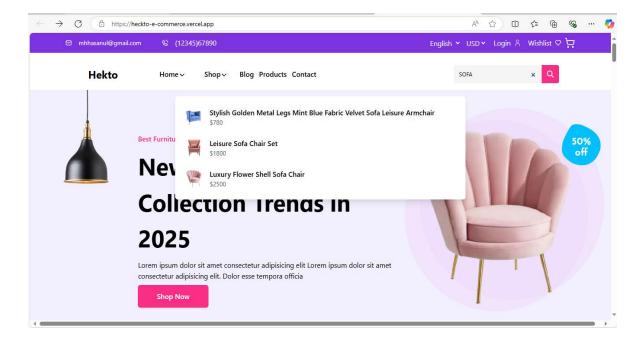






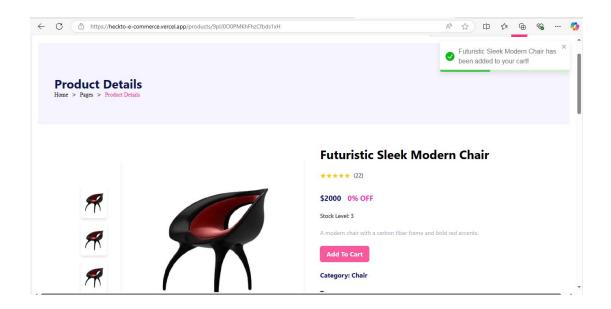
Advanced Product Search:

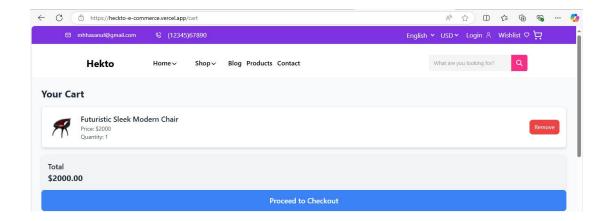
- Dynamic search bar with real-time suggestions.
- Integrated filters for refined results.

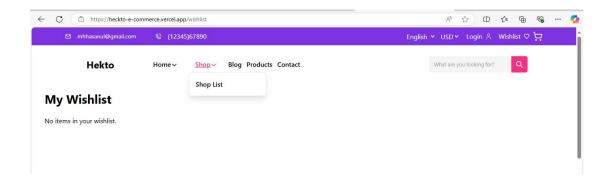


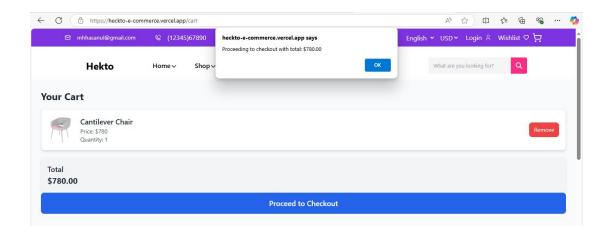
Cart & Wishlist Functionality:

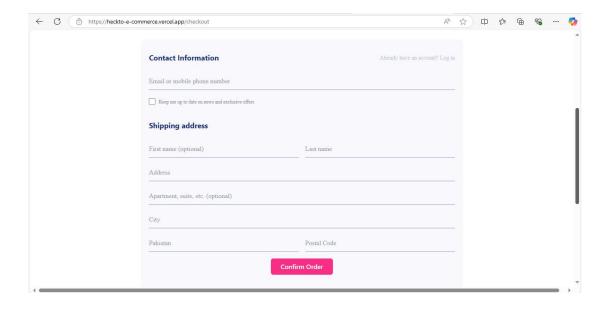
- Add to Cart with quantity updates.
- Wishlist with duplicate prevention and notifications.
- Cart item count displayed on the navbar.

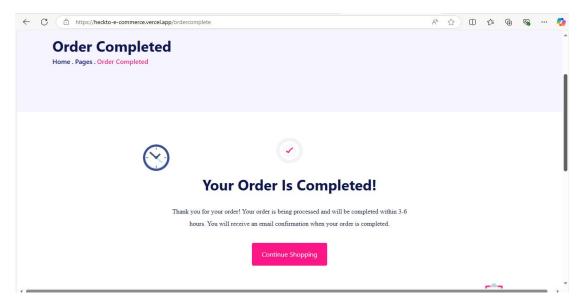












Technical Implementation:

Next.js & Dynamic Routing:

- Utilized Next.js for server-side rendering and dynamic routing.
- Product detail pages generated on-demand using dynamic routes.

Sanity CMS Integration:

• API-driven content management for easy updates.

• Real-time data fetching without manual intervention.

Reusable Design System:

- Tailwind CSS for consistent, responsive design.
- Efficient styling with a utility-first approach.

React Hooks:

- useState for managing states like cart items and user status.
- useEffect for handling side effects such as API calls.
- useContext for global state management across components.

Market Trends & Future Prospects

The online furniture market is evolving rapidly, driven by increased digital adoption and consumer demand for convenience. Key trends include:

Personalization:

• Customizable furniture options and personalized recommendations.

AR & VR Integration:

Virtual room planners for enhanced user engagement.

Sustainable Practices:

• Emphasis on eco-friendly materials and transparent sourcing.

Mobile-First Design:

• Optimizing for mobile users as m-commerce continues to grow.

Our platform is built with scalability in mind, ensuring adaptability to these trends. The flexible architecture allows for easy integration of new features, making the website future-proof and ready for continuous growth.

Conclusion

Our e-commerce furniture website combines user-centric design with cutting-edge technology to deliver an exceptional shopping experience. With a strong foundation in Next.js, Sanity CMS, and React, the platform is optimized for performance, scalability, and future market demands. The integration of secure payment gateways and dynamic content management positions us for long-term success in the competitive online furniture market.