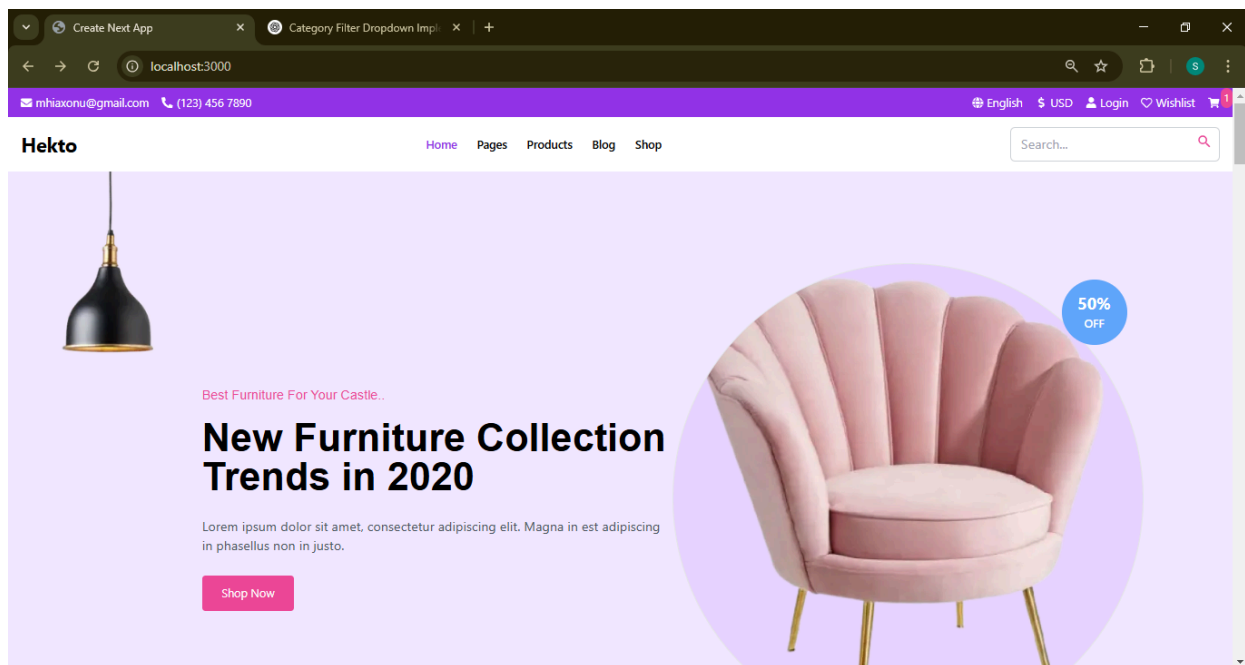


DAY4:dynamic frontend components-Ecommerce

Overview:

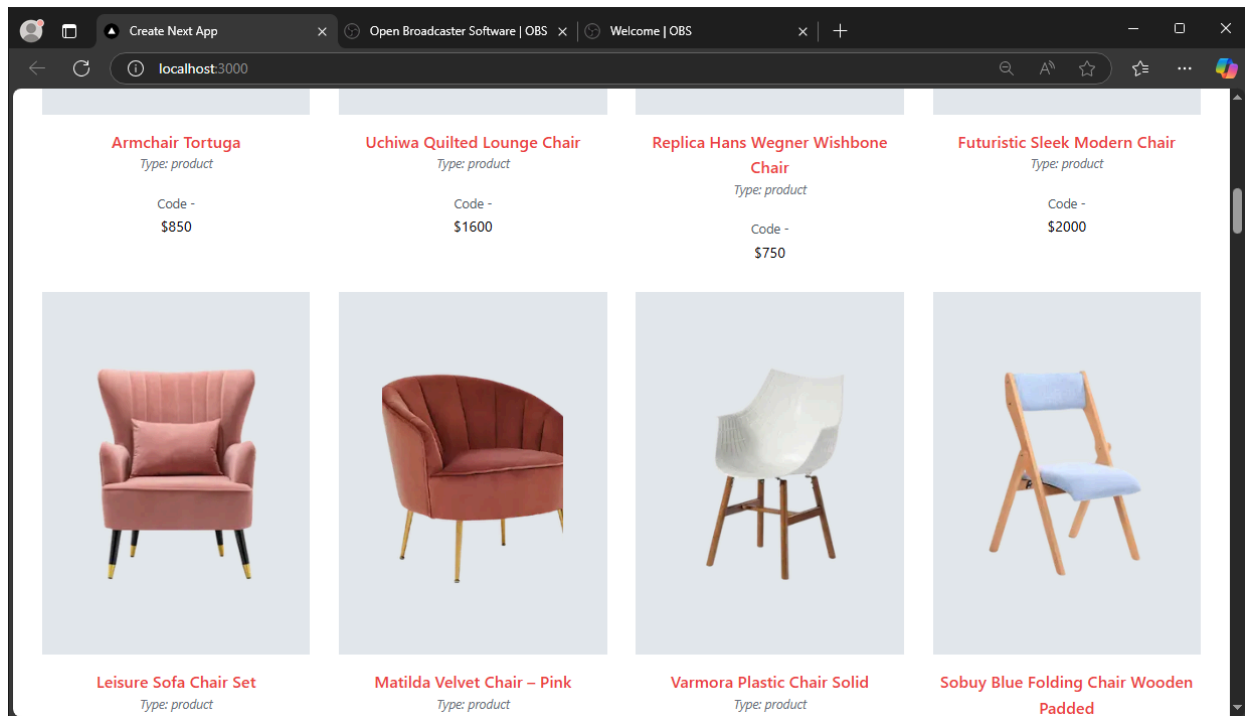
On Day 4, the focus was on developing dynamic frontend components for the marketplace application. These components ensure a seamless user experience by dynamically rendering product data, managing navigation, and providing interactive features such as filtering, searching, and cart functionality.



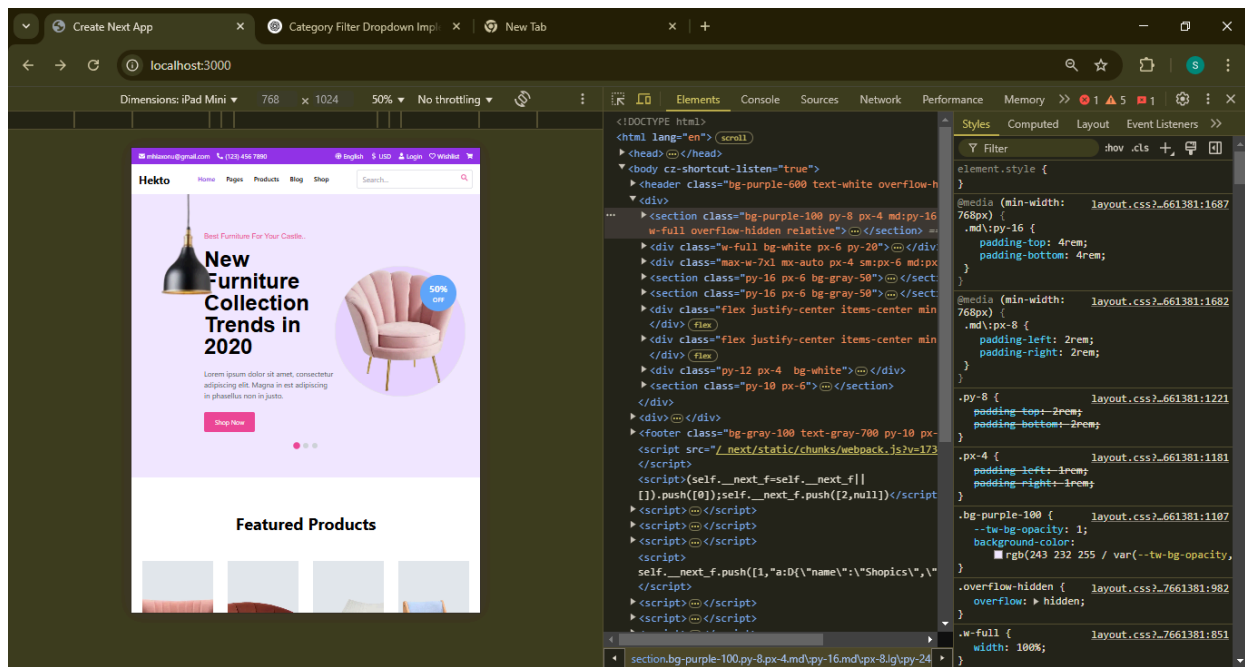
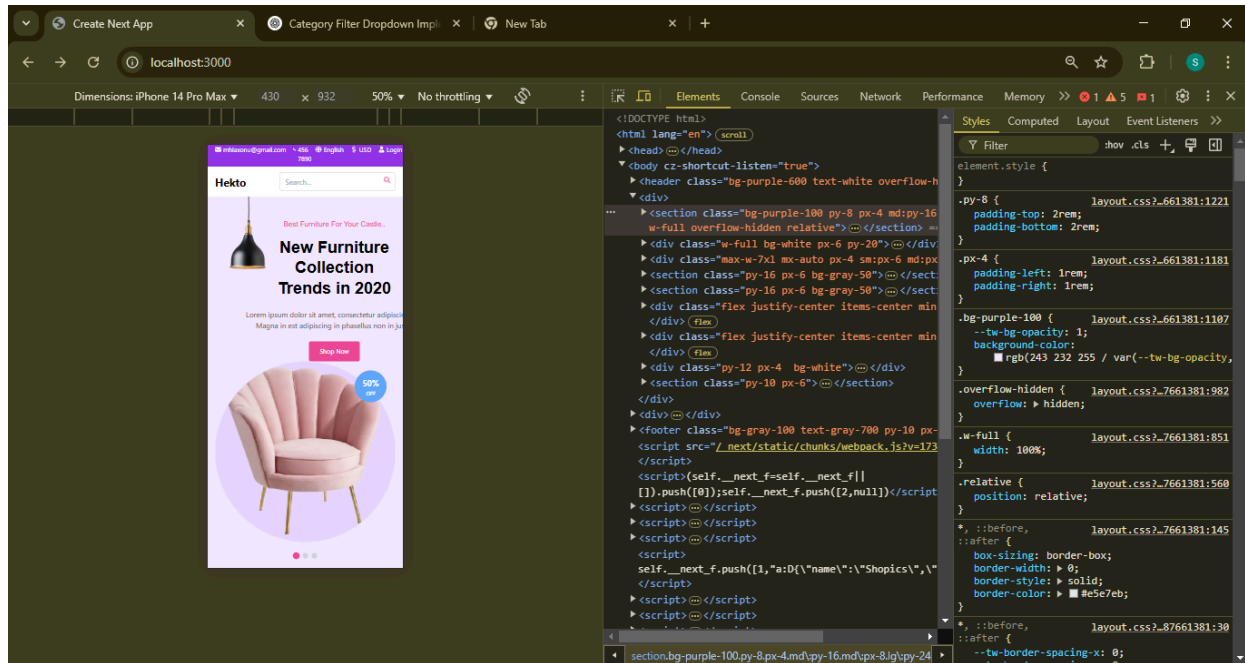
Key Deliverables

1. Product Listing Page

Developed a dynamic product listing page that displays products fetched from the API.

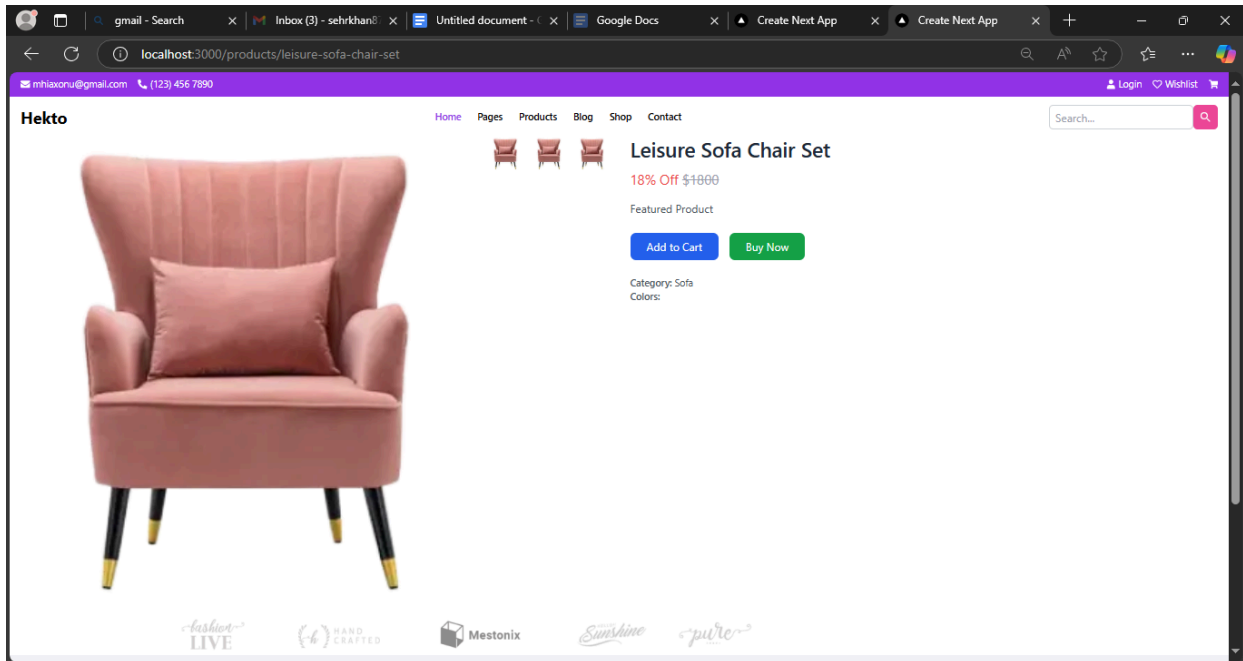


Implemented responsive design to ensure a consistent UI across all devices.



Used Next.js dynamic routing to generate links for each product leading to its detailed page.

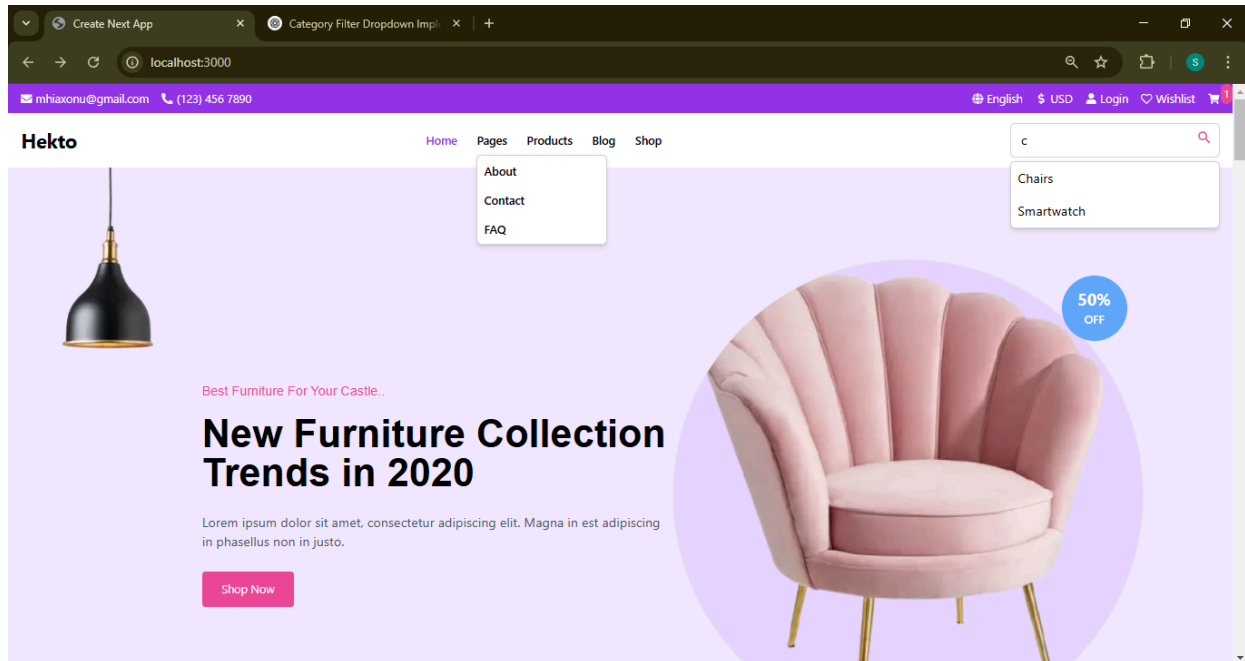
2. Individual Product Detail Pages



Created individual product pages with accurate routing using Next.js dynamic routes ([slug].tsx).
Fetches and displays detailed product information, including images, price, description, and available stock.
Ensured SEO-friendly URLs for each product.
Integrated an "Add to Cart" button for a smooth shopping experience.

3. Functional Category Filters

Implemented category-based filtering to allow users to browse products by specific categories.



Used React state management (Redux) to dynamically update the product list when a filter is applied.

Ensured smooth user experience with instant updates and optimized API calls.

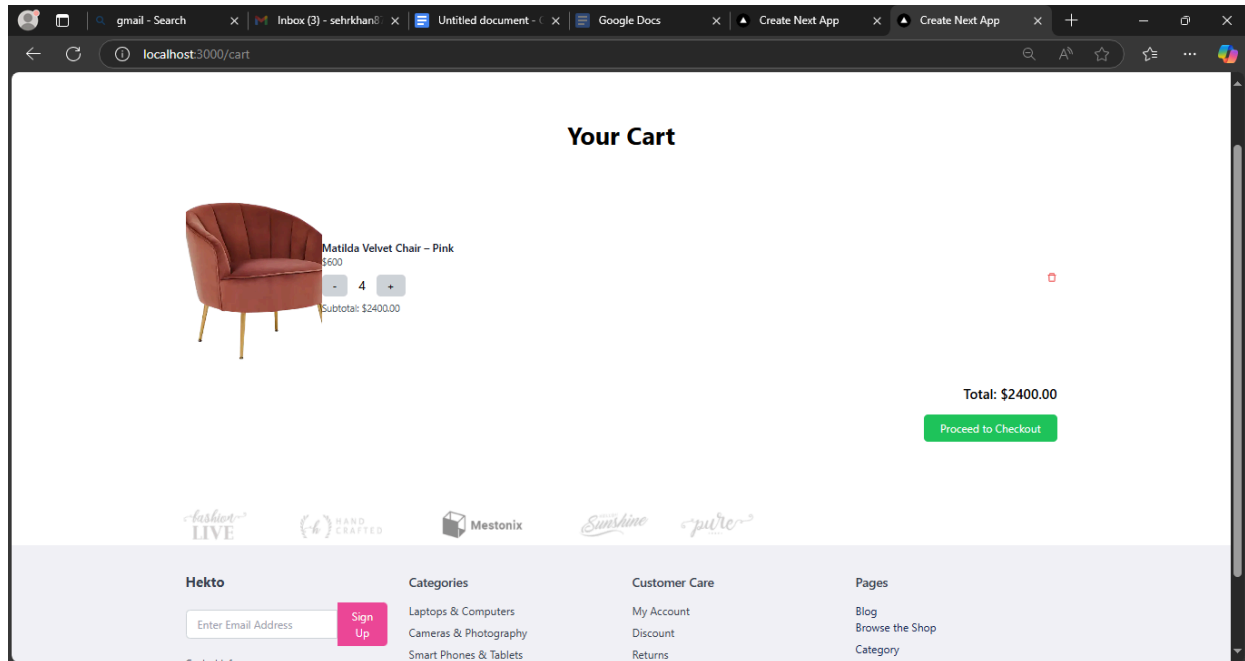
4. Search Bar

Added a fully functional search bar for quick product lookup.

Implemented real-time search suggestions for enhanced user experience.

Optimized search queries to improve performance and ensure accurate results.

5. Cart Functionality



Integrated a cart system that allows users to add and remove products.

Stored cart data in local storage to maintain state even after page refresh.

Displayed cart summary with item count and total price.

easy addition and removal of products from the

Conclusion:

The dynamic frontend components built on Day 4 significantly improved the user experience and functionality of the marketplace. With dynamic product pages, filtering, search, and cart features, the e-commerce platform is now more interactive and user-friendly.

