

Hackathon Day 4: Dynamic Frontend Components and State Management

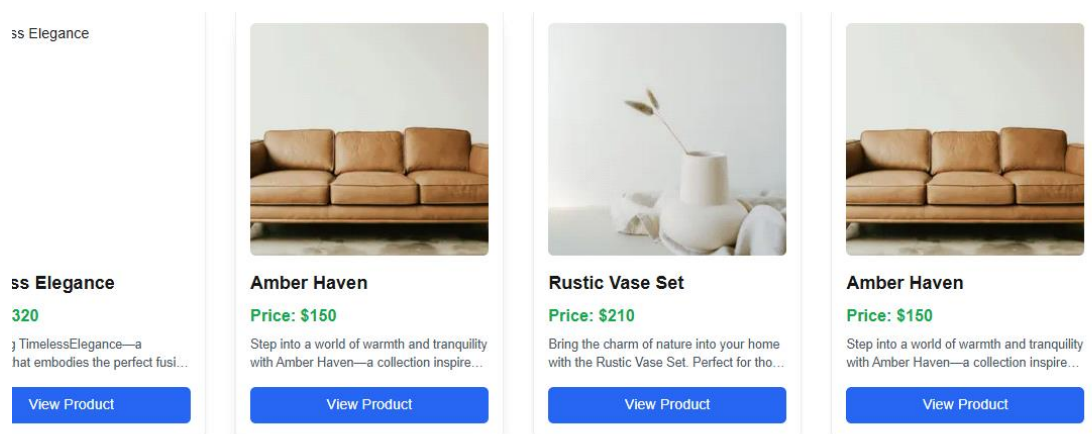
Objective:

On the fourth day of the Marketplace Builder Hackathon 2025, the focus was on developing and implementing dynamic frontend components to display marketplace data retrieved from Sanity CMS or APIs. This involved structuring the application efficiently, enhancing usability, and ensuring seamless interaction between components. The goal was to create an engaging and responsive user interface that dynamically adapts to fetched data.

Key Implementations:

Product Listing Page:

- 1) Developed a dynamic product listing page by fetching product data from Sanity CMS.
- 2) Ensured optimized data handling by implementing efficient API calls.
- 3) Designed reusable and modular components to maintain a clean and organized code structure. I prepare to display only four products instead of all for clarity and visibility.



Product Detail Page:

- 1) Implemented dynamic product detail pages by integrating slugs into Sanity CMS schemas.
- 2) Each product was assigned a unique slug for dynamic routing and efficient data retrieval.

3) Designed the page to display comprehensive product details, including name, price, description, and images.

4) Prioritized seamless navigation and clear presentation to improve readability and engagement.

Filter Implementation:

1) Developed a filtering mechanism that allows users to refine product searches efficiently.

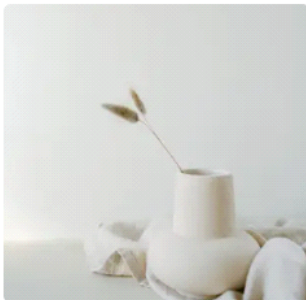
2) Implemented filtering based on product names, enabling users to find items like Timeless Elegance, Rustic Vase Set, and Amber Haven quickly.

3) Ensured real-time updates and a smooth user experience by integrating state management techniques.

Explore our fresh, new styles to elevate your wardrobe.

Rustic

All Categories



Rustic Vase Set

Price: \$210

Bring the charm of nature into your home with the Rustic Vase Set. Perfect for tho...

View Product

Category Component:

1) Created a dedicated category component to categorize products into distinct sections such as Home, Fashion, and Electronics.

2) Implemented a user-friendly interface for effortless navigation through various product categories.

3) Enhanced product discoverability, ensuring an intuitive browsing experience for users.

New Arrivals - Discover Our Latest Collection

Explore our fresh, new styles to elevate your wardrobe.

All Categories



Pagination Component:

- 1) Developed a pagination component to efficiently handle large sets of products.
- 2) Implemented logic for dynamic page navigation, ensuring users can browse through multiple pages seamlessly.



Our Products

Tools and Technologies Used:

Sanity CMS: Managed and fetched product data dynamically.

React Hooks: Utilized for managing component state and lifecycle efficiently.

Redux Toolkit: Implemented for state management and handling global state efficiently.

Conclusion:

Day 4 of the hackathon was a valuable opportunity to work on real-world frontend challenges, emphasizing the importance of dynamic data handling and scalable component design. The integration of state management, filtering functionalities, and dynamic routing significantly enhanced the interactivity and usability of the application. These implementations not only improved the user experience but also laid a strong foundation for future projects. By focusing on modularity, reusability,

and performance optimization, the development process became more streamlined and maintainable. The knowledge and experience gained from this phase will be instrumental in tackling more complex frontend development tasks moving forward