Day 4 - Dynamic Frontend Components [PERFUMA]

Core Features:

1. Dynamic Product Listing Page

 The product listing page dynamically showcases products by pulling data from Sanity. Each product is displayed with essential details such as its image, name, price, and a brief title, all presented in an attractive and user-friendly layout.

2. Product Detail Pages with Smooth Routing

 Each product detail page dynamically presents in-depth information about the selected product, including its title, complete description, price, and images. The use of dynamic routing in Next.js ensures users are effortlessly directed to the right page when selecting a product.

3. Category Filters, Real-Time Search, and Pagination

- Category Filters: Allow users to filter products by categories, such as "Electronics" and "Home Appliances."
- Search Bar: Enables a live search feature.
- Pagination: Breaks the product listing into smaller pages, improving performance and load times while also making navigation easier.

Code Deliverables:

• Key Components Developed:

- Product Card
- o Pagination
- o Wish List
- o Cart
- Comparison page

Development Journey:

1. Data Setup:

 Created a structured Schema containing product information, including ID, name, price, category, and image. Integrated data from Api.

2. Building Reusable Components:

o Developed modular components like Products, Shop, Cart.

3. Dynamic Routing Implementation:

 Employed Next.js dynamic routing to ensure smooth navigation to individual product pages based on user selection.

4. UI/UX Improvements:

- Integrated category filters, a real-time search bar, and pagination for better usability.
- Styled components using Tailwind CSS, optimizing the layout for responsiveness across different screen sizes.

Challenges Encountered & Solutions:

1. Optimizing Large Data Rendering:

 Solution: Implemented pagination to handle large datasets more efficiently, improving performance and reducing load times.

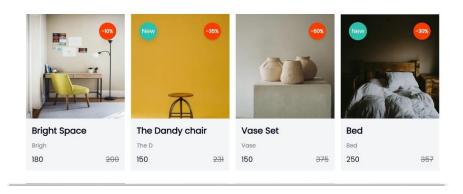
2. Ensuring Consistent Routing & Data Flow:

 Solution: Used Next.js dynamic routing combined with a centralized Sanity data structure to streamline product information management.

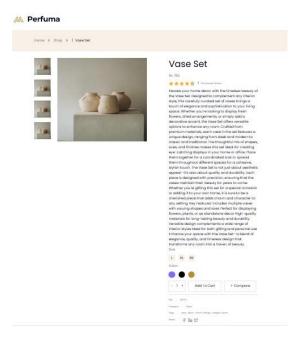
3. Creating a Responsive Design:

Solution: Applied Tailwind CSS to build flexible and responsive layouts that deliver a seamless experience across mobile and desktop devices.

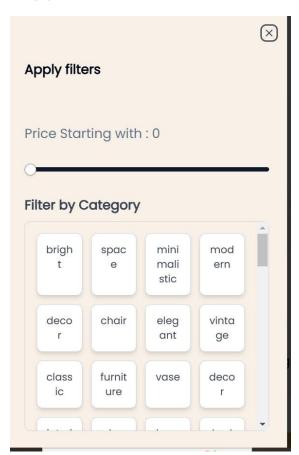
Product listings



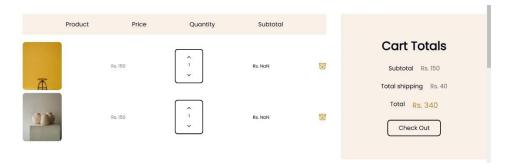
Product detail page:



Filters:



Cart:



Product Cart:

Wish list:

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Adopted Best Practices:

- Followed a component-driven architecture for ease of reuse and scalability.
- Utilized TypeScript for type safety and enhanced error management.
- Focused on ensuring a responsive, consistent design across various device types.

Developed Components for Media Mart:

- Product Card
- Product List
- Search Bar
- Add-to-Cart Button
- Wish List
- Pagination
- Header & Footer
- Product Comparison

Final Thoughts:

The Perfuma platform demonstrates the powerful integration of dynamic frontend components to provide a seamless and engaging user experience. By utilizing modern technologies like Next.js and Tailwind CSS, the platform ensures efficient data management, reusability, and responsive design. The user experience is optimized through features such as dynamic routing, category filters, real-time search, and pagination, all contributing to smooth navigation. The project's challenges were addressed with well-thought-out solutions and industry best practices, showcasing the strength of modern frontend development in delivering user-focused results.

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Day / Time: Tuesday -7 pm to 10 pm