Dynamic Frontend Components Documentation for Hecto

Day 4: Advancing the E-Commerce Project with Sanity, Next.js, and Stripe

Today marked a significant milestone in the development of my e-commerce project. The primary focus was on mastering **Sanity** CMS to dynamically manage product data, building a powerful frontend with **Next.js**, and integrating secure payment functionality with **Stripe**. Additionally, I implemented advanced user-focused features such as a multi-functional search bar, comprehensive product filters, and flexible layout options for displaying products.

Throughout this process, I leveraged tools like **React Hook Form** for better form handling, ensuring a smooth and interactive user experience. Here's a detailed breakdown of the features I achieved today.

Feature Overview

What I Achieved Today:

- 1. **Dynamic Product Data**: Customized the Sanity product schema and dynamically linked it to the Next.js frontend for seamless updates.
- 2. **Interactive Product Listings**: Displayed products with toggle options for grid and list layouts, improving usability.
- 3. **Search Functionality**: Built an advanced search bar to filter products by name, brand, category, and tags.
- 4. **Product Filters**: Implemented filters for brand, rating, price range, discount offers, and categories to personalize the browsing experience.
- 5. **Cart and Checkout**: Enabled an add-to-cart system with Stripe payment integration for secure and efficient transactions.
- 6. **Grid and List Layouts**: Created a toggle option to switch between grid and list layouts for better product visualization.

Detailed Features

1. Dynamic Product Listing

Products are dynamically fetched from the Sanity CMS and displayed on the frontend. The layout provides a seamless browsing experience, with options to toggle between grid and list views. This flexibility ensures users can view products in their preferred format.

Highlights:

- Real-time updates from Sanity to the frontend.
- Grid layout for a visually rich experience.
- List layout for more detailed product information at a glance.

Ecommerce Accessories & Fashion item

About 9,620 results (0.62 seconds)















Sobuy Blue Folding Chair Wooden Padded







Matilda Velvet Chair – Pink

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\$51 &ee

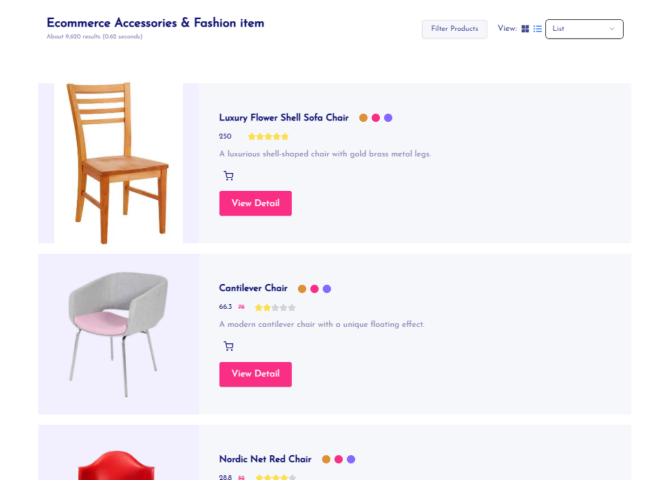


Diondre Chair - Tuft Button -Acrylic Legs



Leisure Sofa Chair Set

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\$147.6 \text{ \text{\tint{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tint{\tinit}\text{\texi\tint{\tint{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tinit}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\texi{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\ti}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\ticl{\titil\tiil\titil\titil\titil\titil\titil\tiil\tiil\titil\tiil\tiil\titil\til



2.Product Detail Page

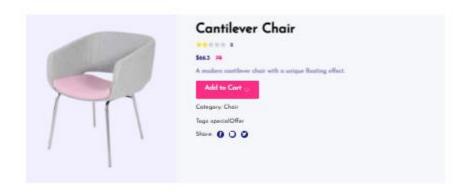
The Product Detail Page is designed to provide users with comprehensive information about a selected product. It combines a clean layout, responsive design, and interactive elements to enhance the user experience.

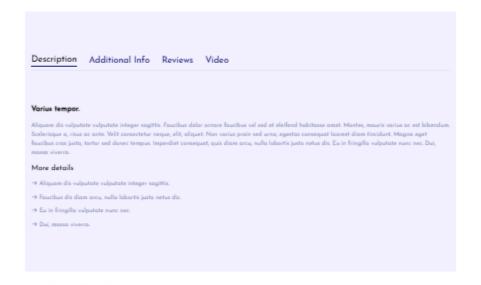
Features

- 1. **Dynamic Product Display**: The page dynamically fetches product details, including name, price, description, images, and specifications, directly from Sanity CMS.
- 2. Add to Cart Button: A prominent "Add to Cart" button allows users to instantly add items to their cart.
- 3. **Product Variants**: If applicable, users can select product variants such as color, or other specifications.
- 4. **Ratings and Reviews**: The page showcases user ratings and reviews, helping customers make informed decisions.

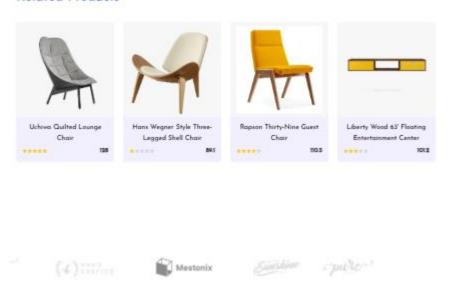
Key Highlights

- **Optimized for Mobile**: The layout adjusts seamlessly for mobile and desktop users.
- Real-Time Updates: Any changes in Sanity are reflected immediately on the Product Detail Page.





Related Products

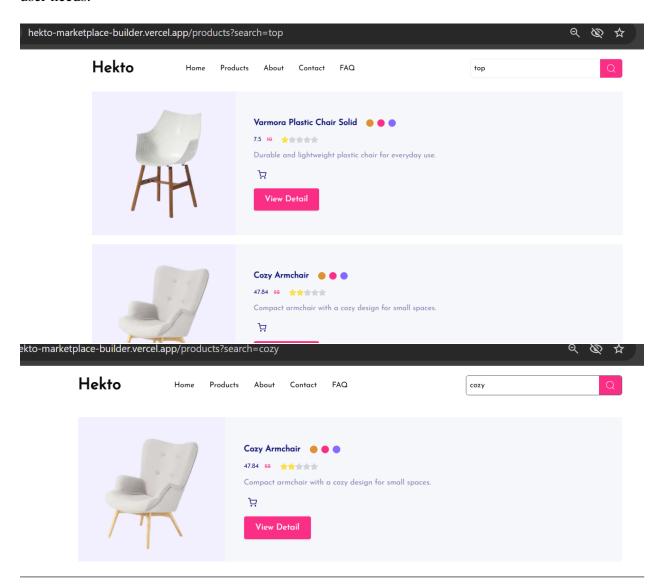


3. Advanced Search Bar

The search functionality is one of the standout features, enabling users to quickly find products based on:

- Name
- Brand
- Category
- Tags

This feature is designed for speed and accuracy, making product discovery intuitive and user-friendly. The ability to search across multiple parameters enhances usability and caters to diverse user needs.



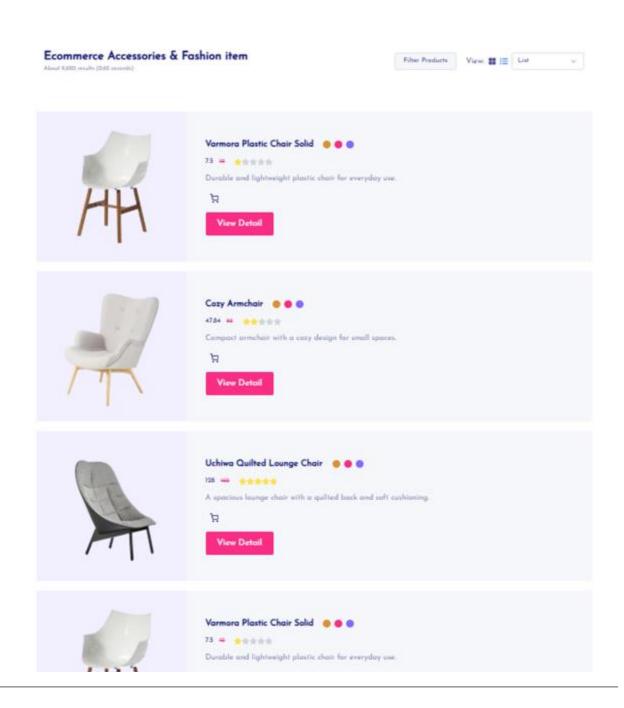
4. Product Filters

To refine their browsing experience, users can leverage advanced filters, including:

- **Brand Name**: Select from specific product brands.
- Rating: Filter by customer ratings for high-quality products.
- Price Range: Set a budget range for affordability.
- Discount Offers: Browse products with active discounts.
- Categories: Explore products within specific categories.

The filtering system is designed to be responsive, ensuring users can quickly find what they're looking for without delays.





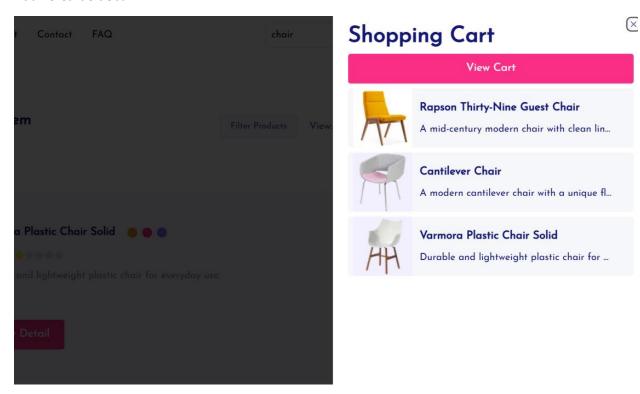
5. Add to Cart and Checkout

I implemented a cart functionality that allows users to add multiple products and proceed to checkout. This feature integrates **Stripe** for payment processing, ensuring a secure and hasslefree transaction experience.

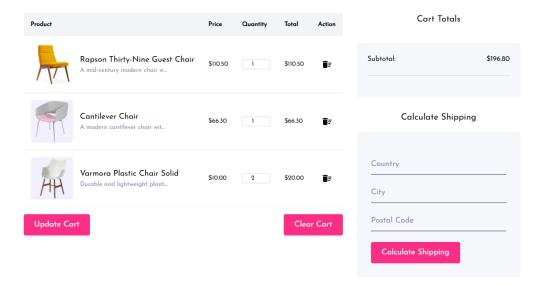
Highlights:

- Intuitive add-to-cart system with quantity management.
- Stripe integration for seamless payments.
- Checkout process designed for trust and simplicity.

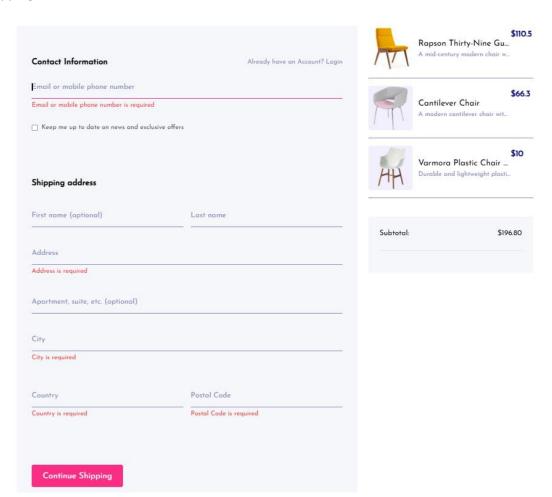
Add To Cart Sidebar:



Add To Cart Page:



Shipping Calculation:



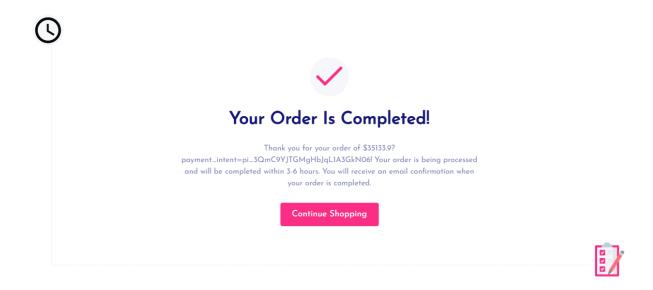
Payment With Stripe:

Hecto requested you to pay \$196.8 to place your order



6 Order Completed Page

The **Order Completed** page is designed to confirm the successful completion of a transaction while providing users with all the essential details of their purchase. It ensures clarity and builds trust with the user by reinforcing the security and success of the payment process.



Reflection and Tools Used

The day was both challenging and rewarding as I explored and implemented advanced features in the e-commerce project. Tools that played a crucial role in this journey include:

- Sanity CMS for dynamic content management.
- React Hook Form for efficient form handling.
- **Next.js** for building a fast and interactive frontend.
- Stripe for secure and seamless payment processing.

This experience not only enhanced my technical skills but also deepened my understanding of building scalable and user-centric web applications.