Clothing E-Commerce Marketplace

Technical Documentation

Project Overview

This project is an e-commerce platform built using Next.js with Tailwind CSS for styling and Sanity CMS for backend content management. The website includes dynamic pages for products and categories, along with essential functionalities such as adding products to the cart and wishlist, search functionality with filtering options, and API integration for data management.

Steps Taken to Build and Integrate Components

1. **Dynamic Product Pages:**
    - Created a dynamic route for products, enabling users to view product details when clicking on a product.
    - Implemented an "Add to Cart" and "Add to Wishlist" feature.
2. **Dynamic Category Pages:**
    - Set up dynamic routing for categories, allowing users to view products within a selected category.
3. **Search Functionality:**
    - Implemented a search field that dynamically displays products matching the entered letters or words in their titles.
    - Integrated a min-max price filter within the search functionality for refined results.
4. **Sanity CMS Integration:**
    - Connected the project with Sanity CMS as the backend.
    - Enabled product addition, updates, and deletion from the CMS, reflecting changes in real time.
5. **Custom API and Data Fetching:**
    - Developed a custom API to fetch product data.
    - Migrated data from the API to Sanity and utilized GROQ queries for efficient data retrieval.
6. **Deployment:**
    - Successfully deployed the project, ensuring all functionalities worked post-deployment.

Challenges Faced and Solutions Implemented

1. Creating Dynamic Pages and API Integration

Challenge: Implementing dynamic pages for products and categories while ensuring smooth data fetching. **Solution:** Built custom API endpoints, integrated Sanity CMS, and used GROQ queries for efficient data retrieval.

2. Deployment Issues

Challenge: Encountered multiple build errors while deploying the project. **Solution:** Debugged and resolved build-related issues, ensuring all dependencies and configurations were correctly set.

3. Search Functionality Not Working After Deployment

Challenge: The search feature worked locally but failed in the deployed version. **Solution:** Identified and fixed CORS issues by adding the deployment link in the allowed origins.

4. Add to Cart and Wishlist Functionality Issues

Challenge: Products were added to the cart, but upon opening the cart, the quantity displayed as 0. **Solution:** Fixed state management issues to correctly update and display cart items, ensuring proper synchronization.

Best Practices Followed During Development

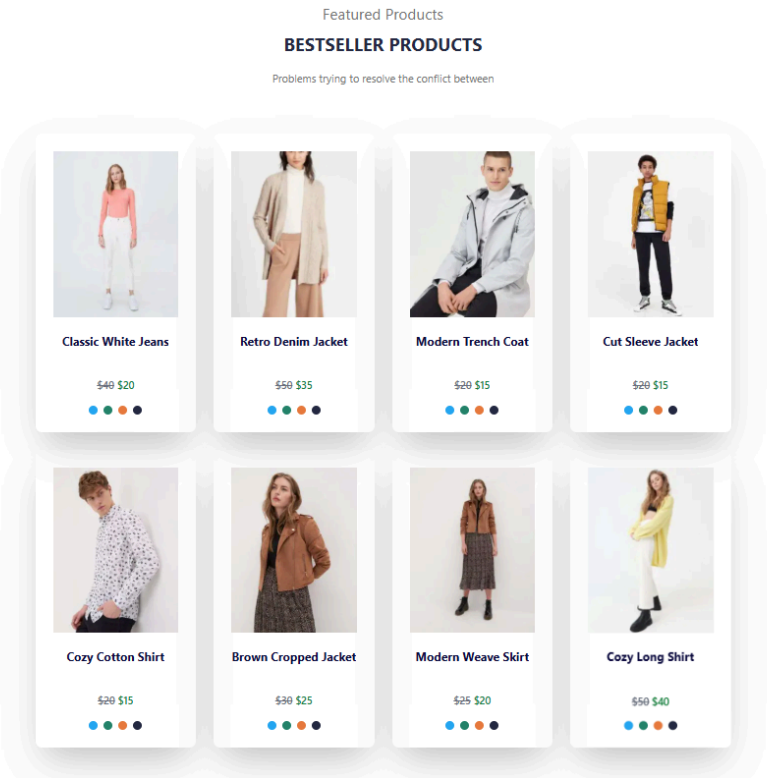
- Used **Next.js dynamic routing** for efficient page rendering.
- Followed **modular component structure** for maintainability.
- Utilized **Sanity CMS** for backend management to ensure scalability.
- Implemented **client-side and server-side rendering** where necessary for optimal performance.
- Debugged and resolved deployment issues using **CORS policies** and **API optimization**.
- Ensured **state management consistency** in cart and wishlist functionalities.

Conclusion

This project successfully implemented an e-commerce platform with dynamic pages, efficient product management via Sanity CMS, and essential e-commerce functionalities. Overcoming technical challenges strengthened the project, making it more robust and scalable. The integration of custom APIs, search functionality, and deployment debugging has ensured a smooth user experience.

Add, update, and remove items from the cart.

Go to product → product details page (dynamic route) → add to cart → select color and size → then add to cart → product will add to cart successfully → add to cart quantity increase according to product length. On click delete icon the product will remove from cart.



Bandage

Home Shop Blog About Contact Team

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Beige Bomber Jacket

(10 Reviews)

$35 ~~$45~~

A trendy beige bomber jacket crafted from high-quality fabric. Featuring a sleek design, ribbed cuffs, and a comfortable fit, it's a perfect mix of style and functionality.

Color:

Size:

S M L XL

Quantity: - 1 +

Add to Cart Buy Now

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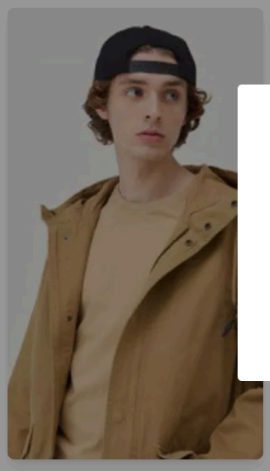


Beige Bomber Jacket

(10 Reviews)

ed from high-quality fabric. Featuring a sleek design, ribbed
erfect mix of style and functionality.

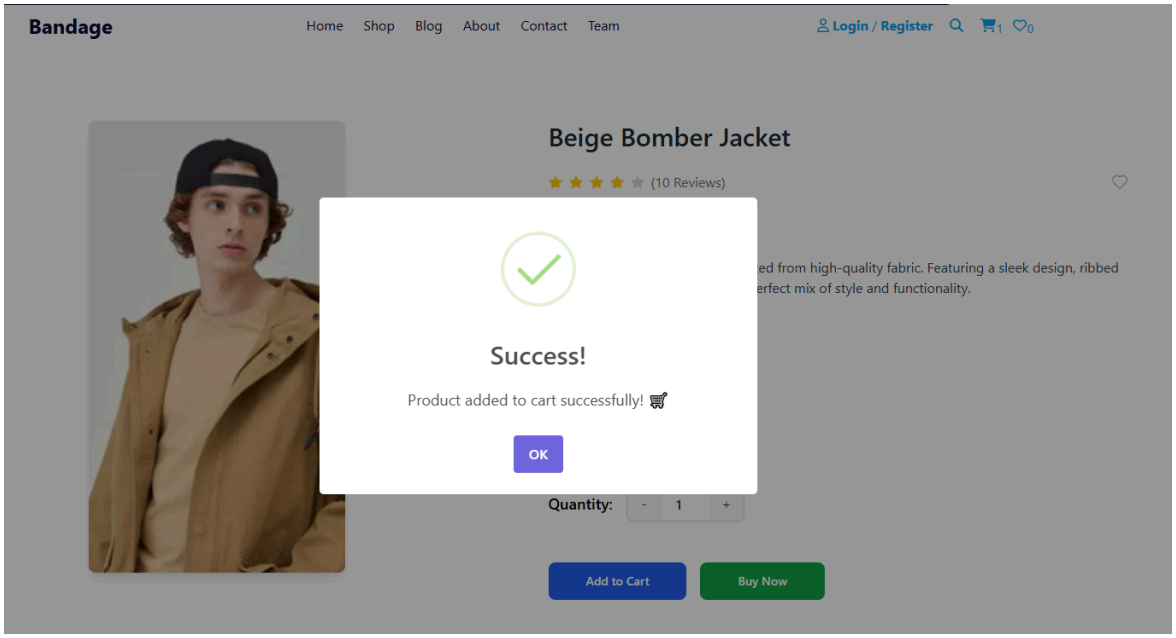
Oops!

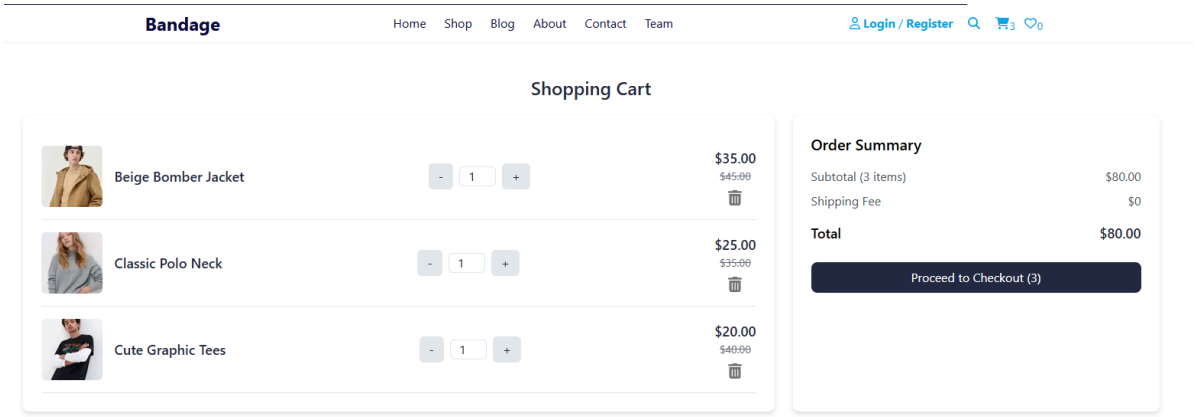
Please select a color and size!

OK

Quantity: - 1 +

Add to Cart Buy Now


Bandage
Home Shop Blog About Contact Team
Login / Register
Beige Bomber Jacket
(10 Reviews)
Success!
Product added to cart successfully!
OK
Quantity:
Add to Cart
Buy Now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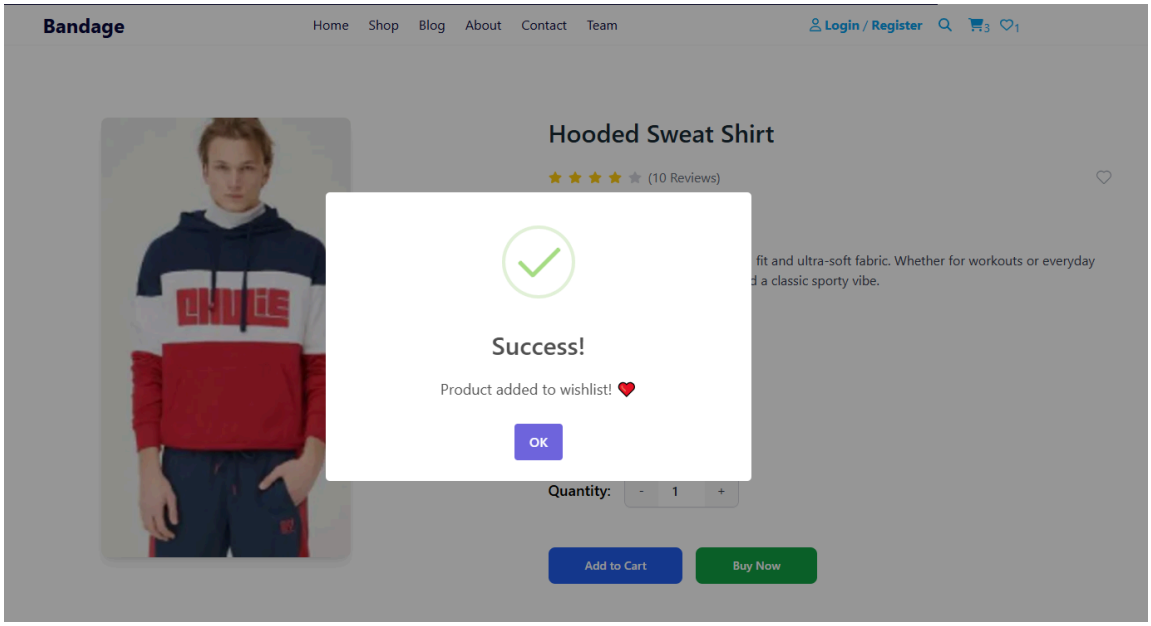
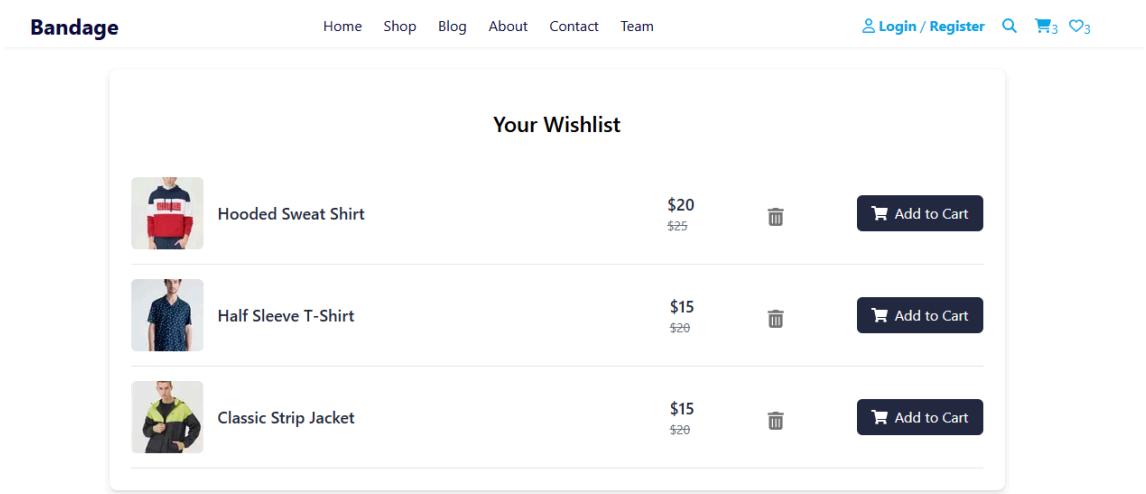
Shopping Cart
Beige Bomber Jacket
$35.00
$45.00
Classic Polo Neck
$25.00
$35.00
Cute Graphic Tees
$20.00
$40.00
Order Summary
Subtotal (3 items) $80.00
Shipping Fee $0
Total $80.00
Proceed to Checkout (3)



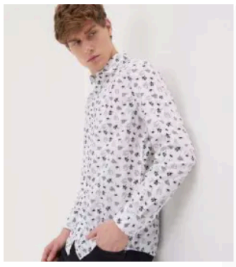


Filters and search: Validate accurate results based on user inputs.

Search Products

Shirt

Min Price: 0 Max Price: 1000



Cozy Cotton Shirt

~~Rs20~~ Rs15

Cozy Long Shirt

~~Rs50~~ Rs40

Hooded Sweat Shirt

~~Rs25~~ Rs20

Half Sleeve T-Shirt

~~Rs20~~ Rs15

Search Products

Shirt

Min Price: 15 Max Price: 20

Cozy Cotton Shirt

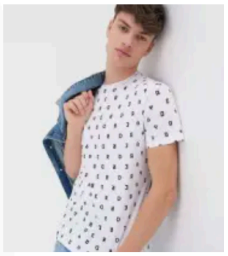
~~Rs20~~ Rs15

Hooded Sweat Shirt

~~Rs25~~ Rs20

Half Sleeve T-Shirt

~~Rs20~~ Rs15



Printed T-Shirt

~~Rs30~~ Rs20