Day-4 Building Dynamic Frontend Components [Nike E-Commerce]

Introduction:

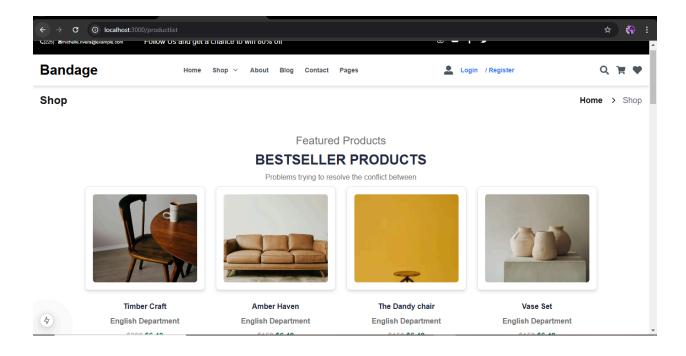
I worked on a niche ecommerce marketplace. I used the next js, tailwind CSS, and sanity for its development. In this document all details are included regarding development.

Steps For Implementation:

Steps Taken:

- Project Setup: Initialized Next.js app, front-end Tailwind CSS & HtML, and Sanity for CMS.
- **2. API Integration:** Connected fake APIs to fetch product details ,reviews, and user data.
- **3. Component Development:**Built UI components for product listing page, cart and checkout page.
- 4. **Deployment:** deployed using Versel for scalability.

1-Product Listing Page:



Product Listing Page:

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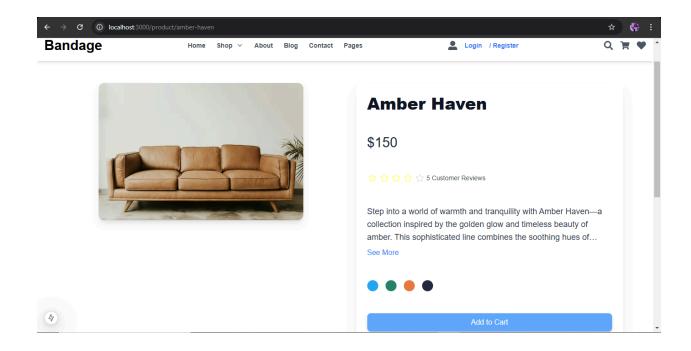
                                       import NavbarDark from "../components/navbarDark/page";
import Link from "next/link";
     ∨ HACKATHON -DAY-4
                                       Debug this code | Explain this function to me | Optimize this function's Speed | Generate Doc String | Generate Unit test export default function Productlist() { return (
                                                 <NavbarDark />
                                                {/* "Shop" aligned to the left */}
<div className="col-span-12 md:col-span-6 sm:col-span-12 gap-4 p-2 font-bold text-2xl">
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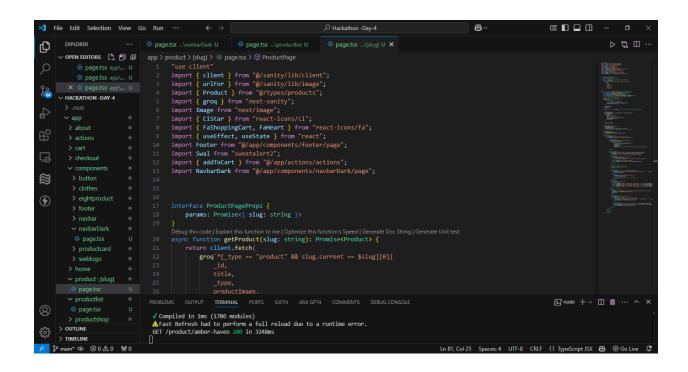
                                  GET /productlist 200 in 201ms

Compiled in 708ms (3179 modules)
GET /productlist 200 in 118ms
        * favicon.ico
      > OUTLINE
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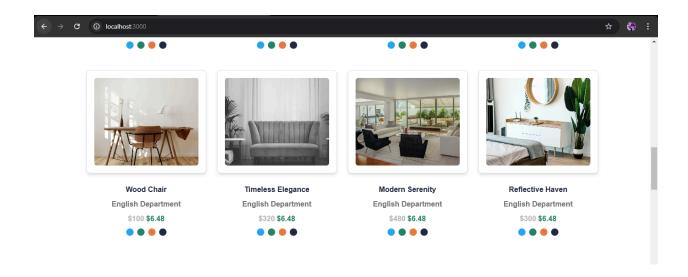
2-Product Detail Page:



Product Detail Code:



4-Related Products:



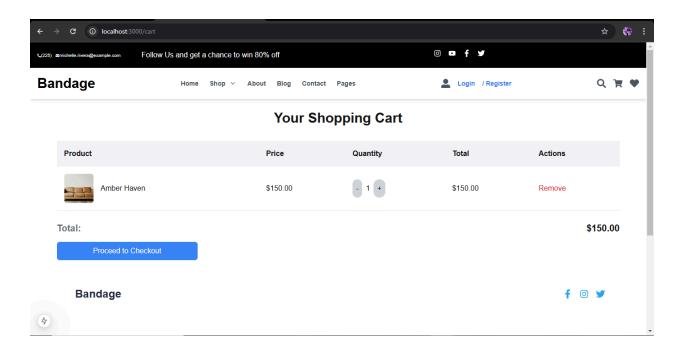
Related Products Code:

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                                    | Import EightProduct from "../components/eightproduct/page"; | import Footer from "../components/footer/page"; | import NavbarDark from "../components/navbarDark/page"; |
       X ∰ page.tsx app\... U
                                         Debug this code | Explain this function to me | Optimize this function's Speed | Generate Doc String | Generate Unit test export default function Home()
      V HACKATHON -DAY-4
                                                <div><NavbarDark />
8
                                                        <img src="/images/7.jpg" alt="" />
                                                      but things on a small scale. </hd>
<br/>
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dutton className="font-bold p-3 w-44 ■ text-white mt-9" style={{ background: "#2DC@71", fontSize: "24px"

→ productlist

                                                      <div stvle={{ background: "#FAFAFA" }} className="p-16">
                                                                                                                                                                   ☑ node + ∨ □ 蕳 ··· ^ ×
                                    ✓ Compiled in 871ms (2953 modules)
                                  GET / 200 in 213ms
GET /home 200 in 213ms
     > OUTLINE
      > TIMELINE
                                                                                                                                 Ln 1, Col 1 Spaces: 2 UTF-8 CRLF () TypeScript JSX 🔠 📵 Go Live
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3-Cart Page:



Cart Page Code:

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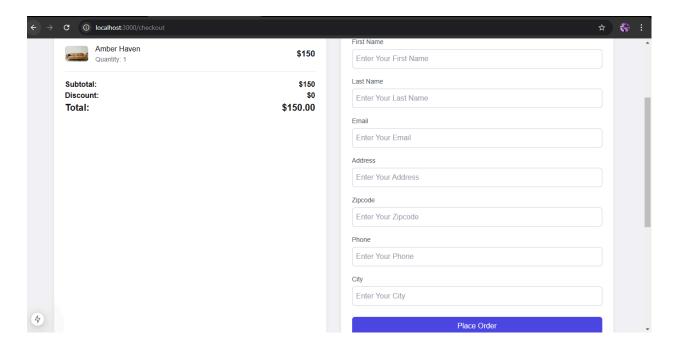
    page.tsx app\... U
    page.tsx app\... U

                                                                 import { Product } from '@/types/products';
import React, { useEffect, useState } from 'react';
import { getCartItems, removeFromCart, removeFromCart as removeFromCartAction, updateCartQuantity } from '../actions/acti
                                                                import Swal from Sweetalert2;
import Import { urlFor } from '@/sanity/lib/image';
import { useRouter } from 'next/navigation';
import AwabarDark from '../components/navbarDark/page';
import Footer from '../components/footer/page';
             page.tsx
8
                                                                 function CartPage() {
   const [cartItems, setCartItems] = useState<Product[]>([]);
                                                                     useEffect(() => {
    setCartItems(getCartItems());
}, []);
                > eightproduct
                                                                                Swal.fire({
   title: 'Are you sure you want to remove this item?',
   icon: 'warning',
   text: 'This action cannot be undone',
                                                                                       showCancelButton: true,
                                                                                                                                                                                                                                                                      ☑ node + ∨ □ · · · · ×
                                                        ⚠ Fast Refresh had to perform a full reload due to a runtime error.

GET /product/amber-haven 200 in 3248ms

GET /cart 200 in 57ms
         > OUTLINE
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                                                                                                                                                                                                              Ln 1, Col 1 Spaces: 4 UTF-8 CRLF () TypeScript JSX 🔠 📵 Go Live
```

4-Checkout Page:



Checkout Page Code:

Challenges Facing:

While working with **Next.js** and **React**, I faced several challenges, but each challenge gave me the opportunity to think in new ways and improve my skills. The first challenge was understanding **Next.js's** server-side rendering and static site generation, as both concepts were quite different. While handling **dynamic content**, I faced issues like managing loading states and optimizing **SEO** during data fetching. In **React**, I also struggled a bit with implementing component reusability, but when I made the code more modular and clean, I saw significant improvement. Performance optimization was another big challenge, like using lazy loading and code splitting to make the website faster. By solving all these issues, I feel much more confident and efficient in my projects.