CLOTH WEBSITE
SHOP.CO

E-COMMERCE MARKETPLACE

STRATEGIES TO ENHANCE YOUR ONLINE STORE'S PERFORMANCE

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DAY 3 - API INTEGRATION REPORT SHOP.CO

REVIEWED API DOCUMENTATION:

I carefully reviewed the API documentation and understood how the **/products** endpoint works.

I analyzed the structure of the API response data, including the field names and their data types.

SET UP API CALLS:

I used Postman to test the API endpoint and ensure the data was being returned correctly.
In my Next.js project, I created utility functions to interact with the API.
I utilized fetch to make POST requests to the API endpoints and stored the responses in variables. To verify the data structure, I logged the API responses in the console.

COMPARED API DATA WITH SANITY SCHEMA:

I reviewed the API data structure and compared it with the existing schema in Sanity CMS. I identified discrepancies in field names and data types.

I UPDATED THE SANITY SCHEMA TO ALIGN WITH THE API DATA STRUCTURE. FOR INSTANCE:

- API Field: product_title Sanity Field: name
- API Field: price Sanity Field: price (with the correct data type)

I also added new fields in Sanity CMS to accommodate additional data from the API, as the API alone was insufficient to complete the product details on my website.

TO MIGRATE DATA FROM THE API TO SANITY CMS, I FOLLOWED THESE STEPS:

- I decided to use the provided API to fetch data and wrote a script to import it into Sanity CMS.
- I created a script folder and then created a migration (.mjs) file to fetch data from the API and transform it into the format required by Sanity CMS.
- I used the Sanity client library to upload the product data to the CMS. I ran the migration script to import the product data into Sanity CMS.
- I verified the imported data by checking the Sanity dashboard and ensuring that all fields were correctly populated.

PROJECT OVERVIEW: API INTEGRATION AND DATA MIGRATION TO SANITY CMS

In this project, I successfully integrated the provided API into my Next.js frontend and migrated product data into Sanity CMS. I adjusted the schema to align with the API data structure and ensured the data was accurately displayed in the frontend. This exercise provided me with valuable practical experience in API integration, data migration, and schema validation, which are essential skills for building scalable marketplaces.

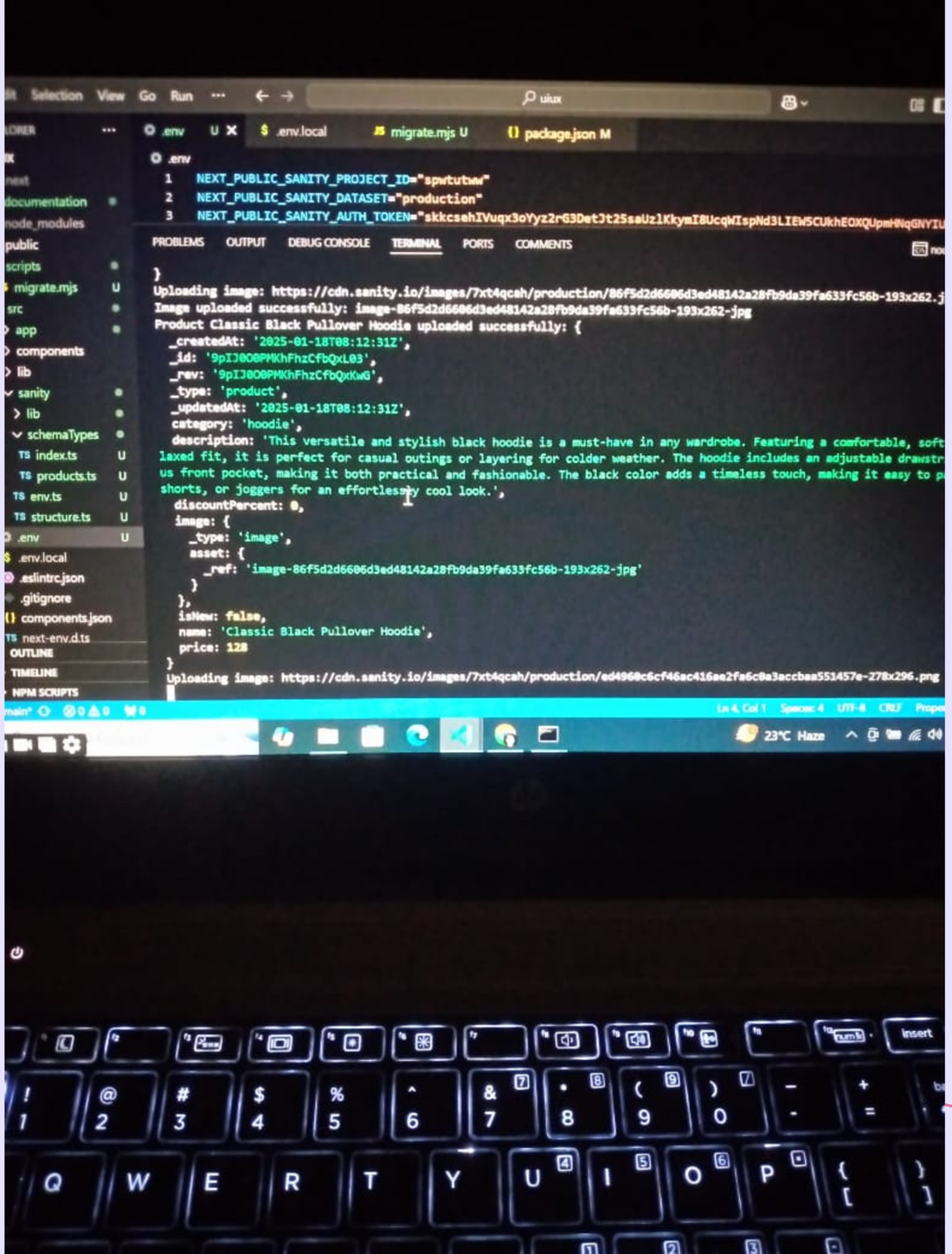
API Integration

Data Migration to Sanity CMS

Frontend Display (Accurate Data)

Task	Status
API Understanding	
Schema Validation	
Data Migration	
API Integration in Next.js	
Submission Preparation	


API

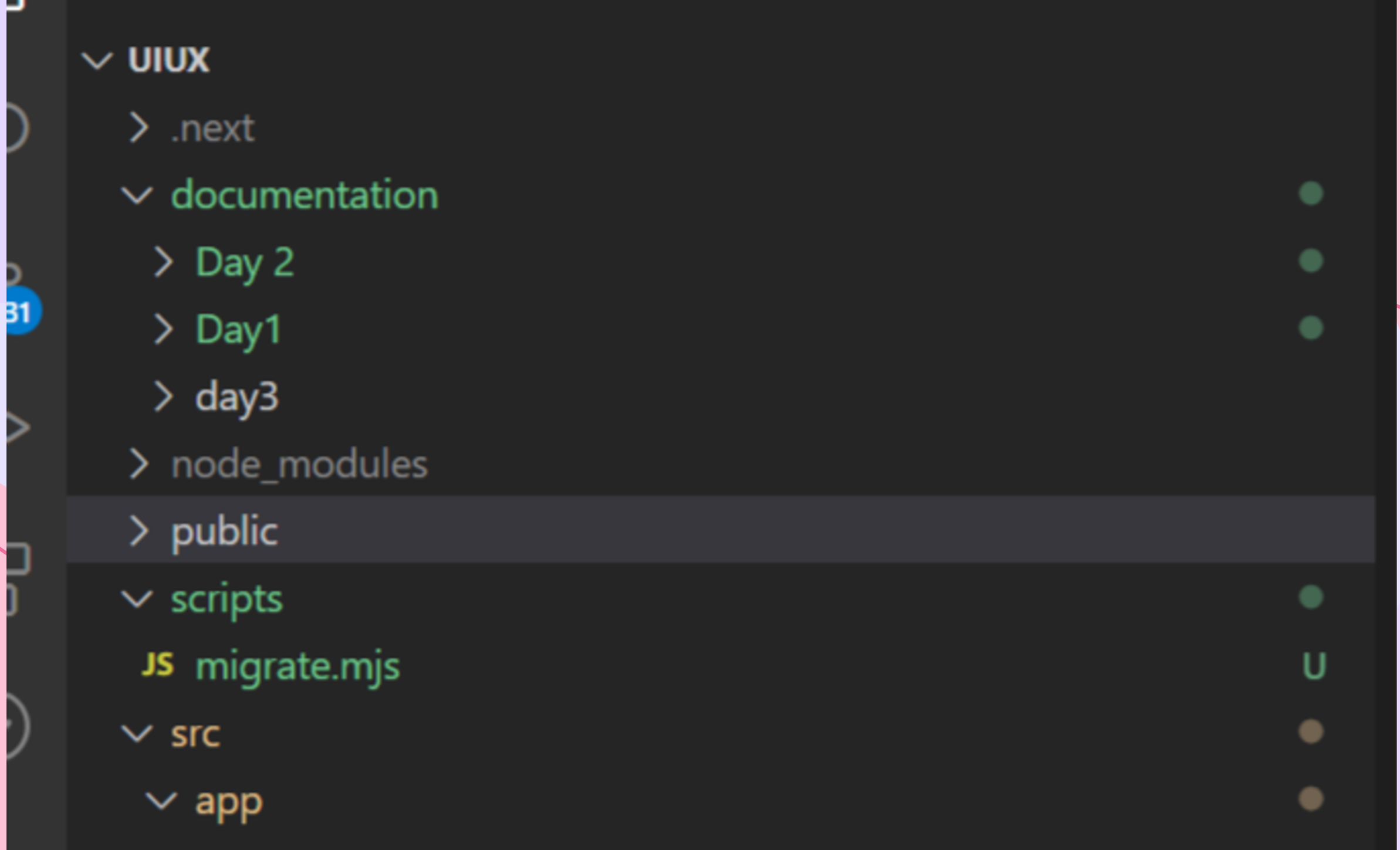

.env
.env.local
migrate.mjs U
package.json M
NEXT_PUBLIC_SANITY_PROJECT_ID="spwtutww"
NEXT_PUBLIC_SANITY_DATASET="production"
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
PORTS
COMMENTS
Uploading image: https://cdn.sanity.io/images/7xt4qcah/production/86f5d2d6606d3ed48142a28fb9da39fa633fc56b-193x262.j
Image uploaded successfully: image-86f5d2d6606d3ed48142a28fb9da39fa633fc56b-193x262-jpg
Product Classic Black Pullover Hoodie uploaded successfully: {
_createdAt: '2025-01-18T08:12:31Z',
_id: '9pIJ0O0PMKhFhzCfbQxL03',
_rev: '9pIJ0O0PMKhFhzCfbQxKwG',
_type: 'product',
_updatedAt: '2025-01-18T08:12:31Z',
category: 'hoodie',
description: 'This versatile and stylish black hoodie is a must-have in any wardrobe. Featuring a comfortable, soft
laxed fit, it is perfect for casual outings or layering for colder weather. The hoodie includes an adjustable drawstr
us front pocket, making it both practical and fashionable. The black color adds a timeless touch, making it easy to p
shorts, or joggers for an effortlessly cool look.',
discountPercent: 0,
image: {
_type: 'image',
asset: {
_ref: 'image-86f5d2d6606d3ed48142a28fb9da39fa633fc56b-193x262-jpg'
}
},
isNew: false,
name: 'Classic Black Pullover Hoodie',
price: 128
}
Uploading image: https://cdn.sanity.io/images/7xt4qcah/production/ed4960c6cf46ac416ae2fa6c0a3accbaa551457e-278x296.png
23°C Haze

client.ts

```ts
import { createClient } from 'next-sanity'

import { apiVersion, dataset, projectId } from '../env'

export const client = createClient({
  projectId:process.env.NEXT_PUBLIC_SANITY_PROJECT_ID,
  dataset:process.env.NEXT_PUBLIC_SANITY_DATASET,
  apiVersion:'2025-01-17',
  useCdn: true, // Set to false if statically generating pages, using ISR or tag-based revalidation
  token:process.env.NEXT_PUBLIC_SANITY_AUTH_TOKEN,
})

```

```
import { defineType } from "sanity"

export default defineType({
    name: 'products',
    title: 'Products',
    type: 'document',
    fields: [
        {
        name: 'name',
        title: 'Name',
        type: 'string',
        },
        {
        name: 'price',
        title: 'Price',
        type: 'number',
        },
        {
        name: 'description',
        title: 'Description',
        type: 'text',
        },
        {
        name: 'image',
        title: 'Image',
        type: 'image',
        },
        {
            name:"category",
            title:"Category",
            type: 'string',
            options:{
                list:[
                    {title: 'T-Shirt', value: 'tshirt'},
                    {title: 'Short', value: 'short'},
                    {title: 'Jeans', value: 'jeans'} ,
                    {title: 'Hoddie', value: 'hoodie'} ,
                    {title: 'Shirt', value: 'shirt'} ,
                ]
            }
        },
        {
            name:"discountPercent",
            title:"Discount Percent",
            type: 'number',
        },
        {
            name:"new",
            type: 'boolean',
            title:"New",
        },
        {
            name:"colors",
            title:"Colors",
            type: 'array',
            of:[
                {type: 'string'}
            ]
        },
        {
            name:"sizes",
            title:"Sizes",
            type: 'array',
            of:[
                {type: 'string'}
            ]
        }
    ],
})
```


{
"name": "uiux",
"version": "0.1.0",
"private": true,
"scripts": {
"dev": "next dev",
"build": "next build",
"start": "next start",
"lint": "next lint",
"migrate": "node scripts/migrate.mjs"
},


UIUX
.next
documentation
Day 2
Day1
day3
node_modules
public
scripts
migrate.mjs
U
src
app

Content

Products

Products

Search list

- Beige Slim-Fit Jogger Pants
- Black Athletic Jogger Pants with S...
- Black Striped T-Shirt
- Casual Green Bomber Jacket
- Checkered Shirt
- Classic Black Long Sleeve Button-...
- Classic Black Pullover Hoodie
- Classic Black Straight-Leg Jeans

Beige Slim-Fit Jogger Pants

Products

Beige Slim-Fit Jogger Pants

Name

Beige Slim-Fit Jogger Pants

Price

269

Published 10 hr. ago

Publish

```tsx

export default function Products() {
  const [products, setProducts] = useState<Iproducts[]>([]);
  const [loading, setLoading] = useState(true);
  const [error, setError] = useState<string | null>(null);

  useEffect(() => {
    // Fetch products with error handling
    const fetchProducts = async () => {
      try {
        setLoading(true);
        setError(null);
        const fetchedProducts: Iproducts[] = await client.fetch(
          `*[_type == 'products']{
            "imageUrl": image.asset->url,
            category,
            discountPercent,
            isNew,
            name,
            description,
            price,
            _id
          }[0...4]`
        );
        setProducts(fetchedProducts);
      } catch (err: any) {
        setError("Failed to load products. Please try again later.");
        console.error("Error fetching products:", err);
      } finally {
        setLoading(false);
      }
    };

    fetchProducts();
  }, []);

  if (loading) {
    return (
      <div className="flex justify-center items-center h-screen">
        <p>Loading products...</p>
      </div>
    );
  }

  if (error) {
    return (
      <div className="flex justify-center items-center h-screen">
        <p className="text-red-500 font-bold">{error}</p>
      </div>
    );
  }
```

```tsx

interface Iproducts {
  image: string[];
  discountPercent: number;
  isNew: boolean;
  name: string;
  description: string;
  price: number;
  _id: string;
  colors: string[];
  sizes: string[];
}

export default function SlugPage({ params }: { params: { id: string } }) {
  const [product, setProduct] = useState<Iproducts | null>(null);
  const [cartItem, setCartItem] = useState<any>(null);
  const [loading, setLoading] = useState(true);
  const [error, setError] = useState(false);

  useEffect(() => {
    const fetchProduct = async () => {
      try {
        setLoading(true);
        const products: Iproducts[] = await client.fetch(
          `*[_type == 'products']{
            "image": image.asset->url,
            category,
            discountPercent,
            isNew,
            name,
            description,
            price,
            _id,
            colors,
            sizes
          }`
        );

        const slug = products.find((item) => item._id === params.id);

        if (!slug) {
          setError(true);
        } else {
          setProduct(slug);
          setCartItem({
            id: slug._id,
            title: slug.name,
            image: slug.image[0],
            price: slug.price,
            size: slug.sizes[0],
            color: slug.colors[0],
            qty: 1,
            discount: slug.discountPercent,
          });
        }
      } catch (err) {
        setError(true);
      } finally {
        setLoading(false);
      }
    };

    fetchProduct();
  }, [params.id]);

  if (loading) {
    return <h1 className="text-center mt-28 font-bold">Loading...</h1>;
  }

  if (error || !product) {
    return <h1 className="mt-28 text-center font-bold">Product not found</h1>;
  }
```

NEW ARRIVALS

COURAGE GRAPHIC T-SHIRT

★★★★★

145 ~~0~~

Black Striped T-Shirt

★★★★★

120 ~~0~~

Gradient Graphic T-shirt

★★★★★

145 ~~0~~

Sleeve Stripe T-Shirt

★★★★★

130 ~~40~~

View all

TOP SELLING

sual Green Bomber Jacket

00.00 ~~20%~~

COURAGE GRAPHIC T-SHIRT

$145.00

Checkered Shirt

$178.00

Beige Slim-Fit Jogger Pants

$269.00 ~~10%~~

View all

Beige Slim-Fit Jogger Pants

★★★★★

269 ~~242.1~~ -10%

These beige jogger pants combine comfort and style with their relaxed yet modern fit. Designed with an elastic waistband and cuffed ankles, they provide a sleek, slim silhouette while offering a casual, sporty look. The soft fabric ensures all-day comfort, making them perfect for lounging or running errands. The neutral beige color adds versatility, allowing for easy pairing with a variety of tops. Whether you're pairing them with a t-shirt or a hoodie, these joggers are a must-have staple for a stylish, laid-back outfit.

Select Colors

Choose Size

M L S XXL

– 1 + Add to Cart

THANK YOU

LET’S ELEVATE YOUR E-COMMERCE SUCCESS