



E-COMMERCE MARKETPLCE

"NAVIGATING THE FUTURE OF ONLINE SHOPPING"







3

TABLE OF CONTENT

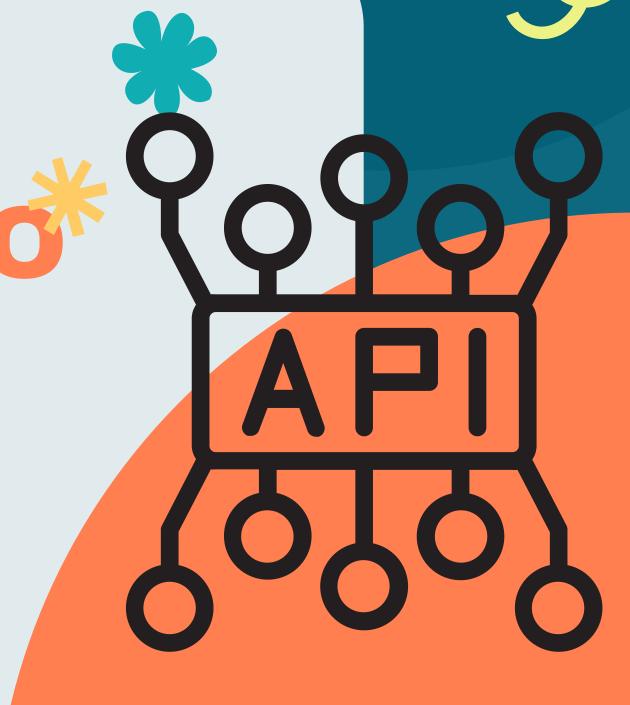
- API INTEGRATION AND DATA MIGRATION
- PROVIDED APIS
- UNDERSTAND THE PROVIDED API
- VALIDATE AND ADJUST YOUR SCHEMA

- DATA MIGRATION OPTIONS
- API INTEGRATION IN NEXT.JS
- SELF-VALIDATION CHECKLIST

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 fieldnames and their data types



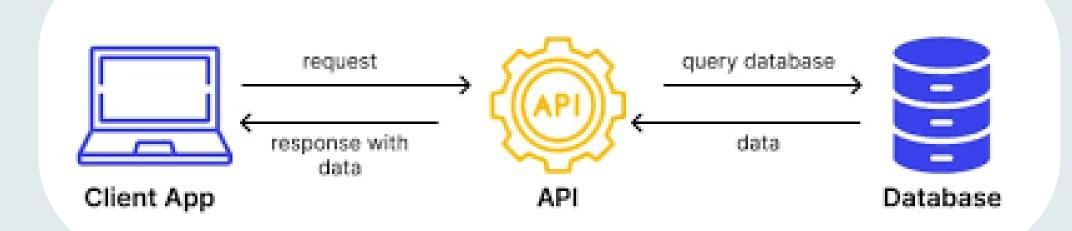


SET UP API CALLS:

I used Postman to test the API endpoint and ensurethe data was being returned correctly.In my Next.js project, I created utility functions tointeract with the API.I utilized fetch to make POST requests to the APIendpoints and stored the responses in variables. Toverify the data structure, I logged the API responsesin the console

TYPES OF API CALLS

API calls are the medium by which they interact. An API call, or API request, is a message sent to a server asking an API to provide a service or information



API METHODS

GET:
POST:

PUSH: DELETE

COMPARED API ** DATAWITH SANITY SCHEMA**



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

I UPDATED THE SANITY SCHEMA TO ALIGN WITH THE API DATASTRUCTURE. FOR INSTANC

API Field: product_title → Sanity Field: name

API Field: price → Sanity Field: price (with the correct datatype)

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

TO MIGRATE DATA FROMTHE API TO SANITY CMS, IFOLLOWED THESE STEPS

I DECIDED TO USE THE PROVIDED API TO FETCH DATA AND WROTEA 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 THEFORMAT REQUIRED BY SANITY CMS. I USED THE SANITY CLIENT LIBRARY TO UPLOAD THE PRODUCT DATA TOTHE CMS. I RAN THE MIGRATION SCRIPT TO IMPORT THE PRODUCTDATA INTO SANITY CMS. I VERIFIED THE IMPORTED DATA BY CHECKING THE SANITYDASHBOARD AND ENSURING THAT ALL FIELDS WERE CORRECTLYPOPULATED.



PROJECT OVERVIEW: API INTEGRATION ANDDATA MIGRATION TO SANITY CMS

In this project, I successfully integrated the provided API into my Next.js frontend and migratedproduct data into Sanity CMS. I adjusted the schema to align with the API data structure andensured 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 essentials kills for building scalable marketplaces.

API INTEDRIATION

Data Migration to SanityCMS

Frontend
Display(Accurate
Data)







40%

~

O .env U X 5 .env.local 8 migrate.mjs U () pedage.json M 2 NEXT_PUBLIC_SAWITY_DATASET="product
3 NEXT_PUBLIC_SAWITY_AUTH_TOKEN="skko ______ 23°C Haze ^ @ ™ Æ 64

Client.ts



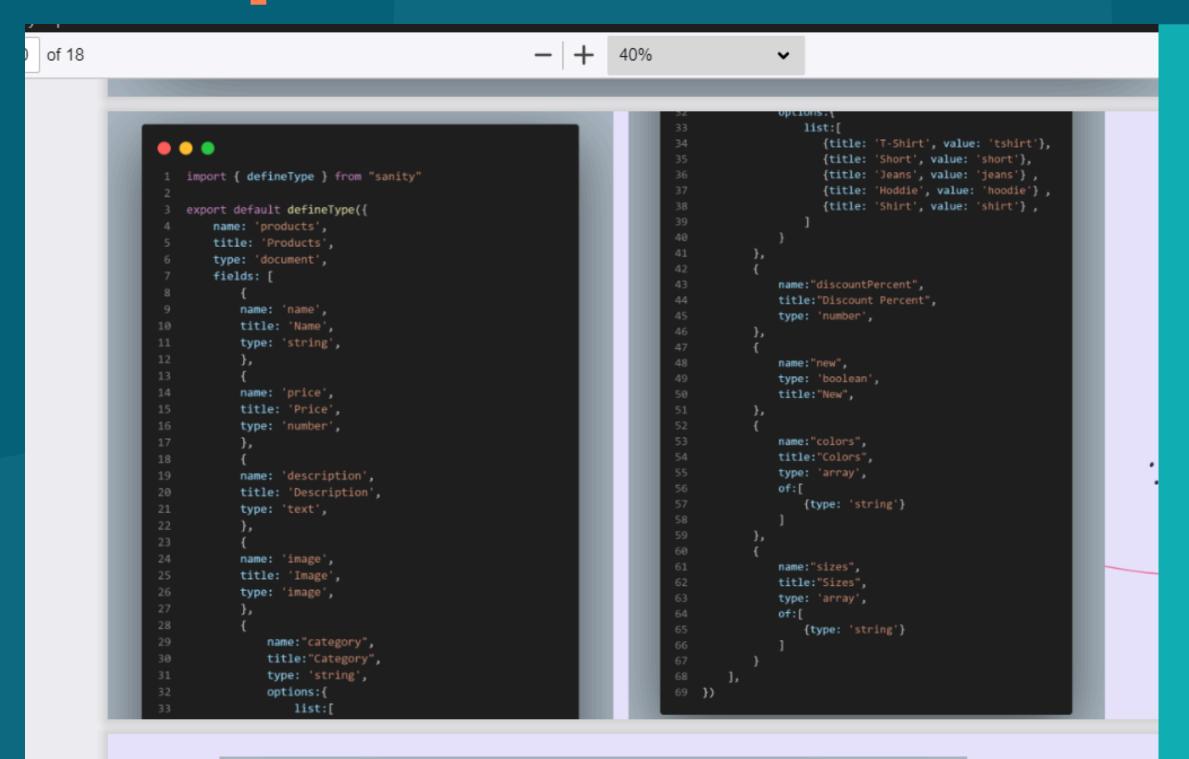
```
athon\next\server

import { createClient } from 'next-sanity'

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

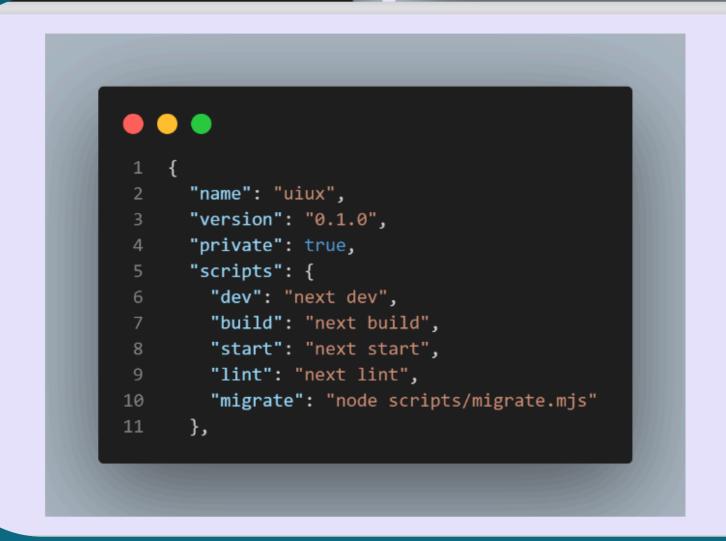
export const client = createClient({
    projectId:process.env.NEXT_PUBLIC_SANITY_PROJECT_ID,
    dataset:process.env.NEXT_PUBLIC_SANITY_DATASET,
    apiVersion:'2025-01-17',
    useCdn: true, // Set to false if statically generating pages, using ISR or tag-based revalidation
    token:process.env.NEXT_PUBLIC_SANITY_AUTH_TOKEN,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

products.ts



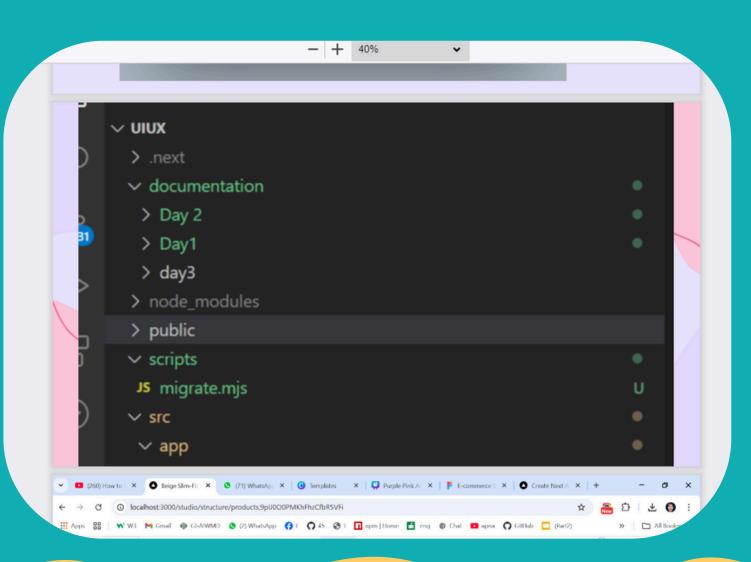


package.json

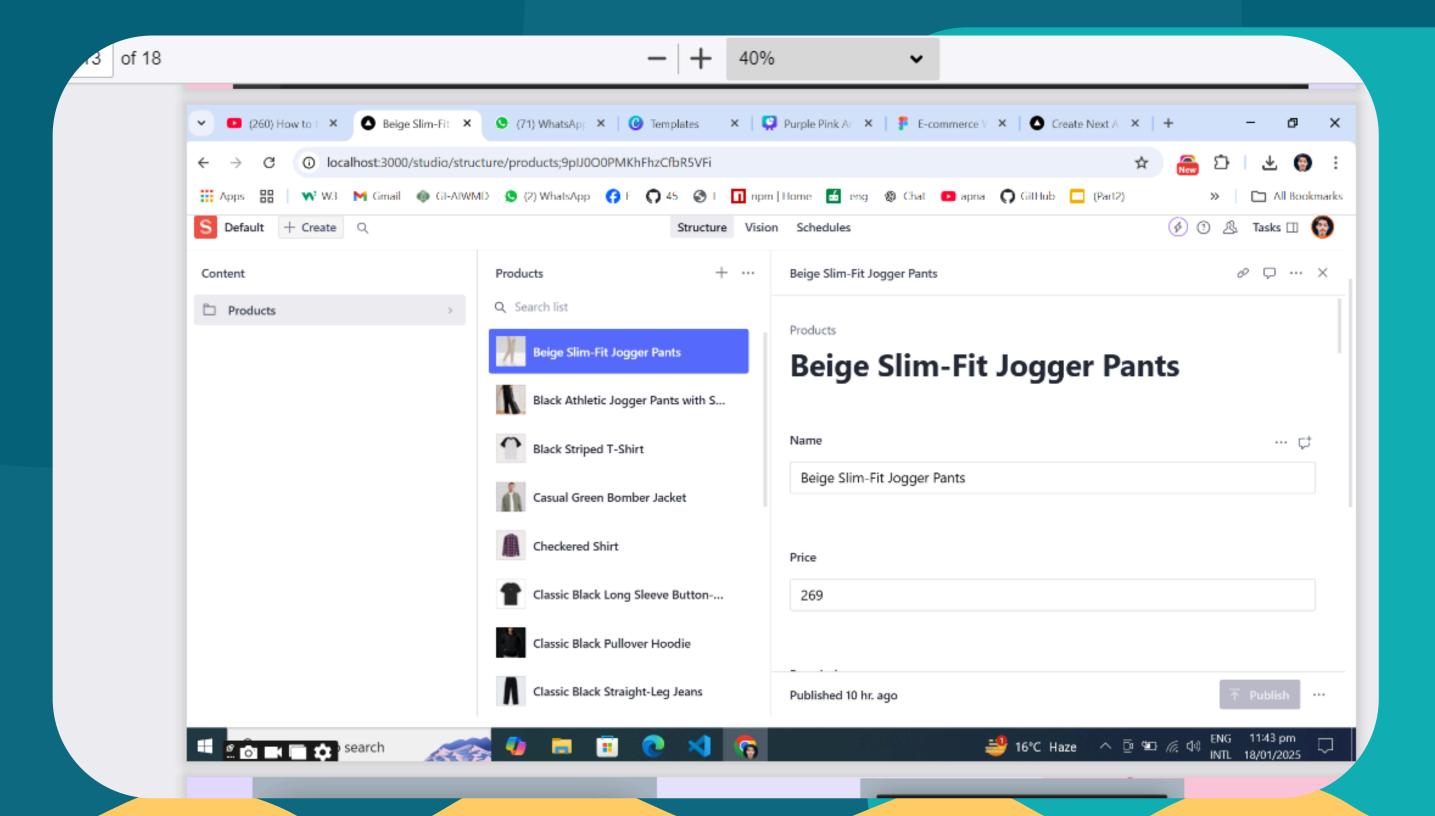




Data migrate file





































```
2 export default function Products() {
3 const [products, setProducts] = useState<Iproducts[]>([]);
    const [loading, setLoading] = useState(true);
    const [error, setError] = useState<string | null>(null);
    useEffect(() -> {
     const fetchProducts = async () => {
       setLoading(true);
        setError(mull);
        const [etchedProducts: Iproducts[] = await client.fetch(
          "imageUrl": image.asset->url,
        setProducts([etchedProducts);
       } catch (err: any) {
        setError("Failed to load products. Please try again later.");
        settouding(false);
     fetchProducts();
   if (loading) (
     - cp:Loading products...
      {error}
```

```
. . .
   interface [products {
   image: string[];

    prices number;

   expect default function Slugfage({ paramet }: { paramet { id: string } }) {
    const [product, setProduct] - useStatos[products | multi-(sull);
     const [leading, settording] = assetate(true);
const [error, settoror] = useState(false);
       const fotchFreduct + payer () +> {
            settlessing(true);
               category,
discountries
                name,
doser Lythian,
            const sing - products.flagccitem -> term._id --- params.idic
              set@ortDton()
               title: clug sime
                image: sing.image[8].
               proces save proces.
                size she sizes[1].
               color: sdug.colors[0].
          ) natuh (err) (
            setucading(folias);
        meture old classificat-Tract-center at 28 fant-bold">Loading....(hd);
         return and classification int-different centur funt-bold product not found into
```







.

. . . .

. .

9.5





