

ZUHAIB *AHMED*



ABOUT

Name: Zuhaib Ahmed

Roll Number: 40770

Email: Zuhaibahmed3213951@gmail.com

Day 3 Hackathon

API Integration and Data Migration Process

Objectives:

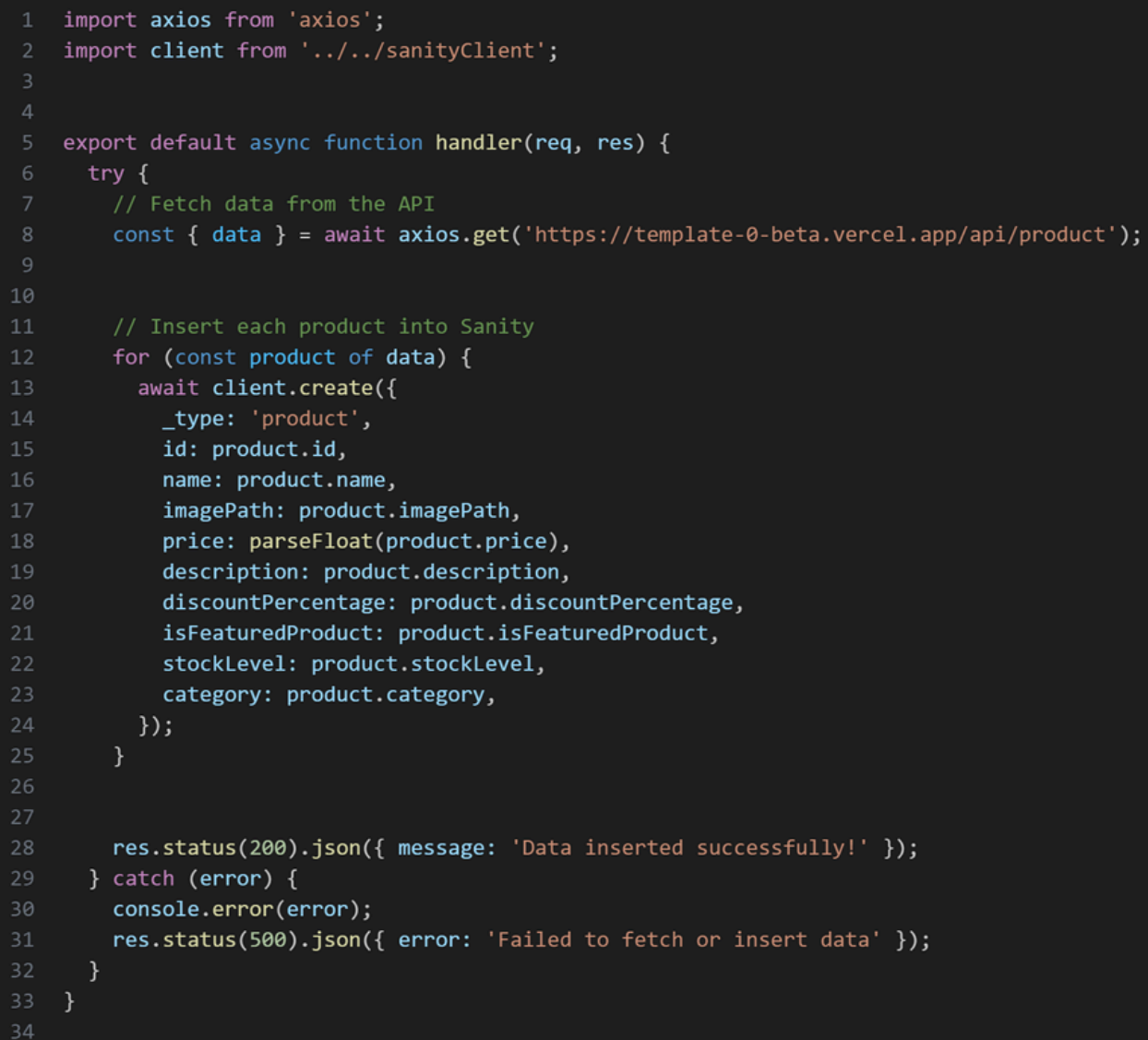
- Set up API integration in a Next.js app.
- Move data from external APIs into Sanity CMS.
- Make sure the schemas are validated and properly matched with the data sources.

Key Takeaways:

- Learn how to implement API integrations.
- Understand how to transfer data from APIs to a CMS.
- Customize and validate schemas in Sanity CMS to ensure smooth data compatibility.

Custom Data Migration Script

This script allows you to easily transfer data from Sanity CMS to an E-commerce Marketplace database. The process follows these main steps:



```

1  import axios from 'axios';
2  import client from '../..../sanityClient';
3
4
5  export default async function handler(req, res) {
6    try {
7      // Fetch data from the API
8      const { data } = await axios.get('https://template-0-beta.vercel.app/api/product');
9
10
11     // Insert each product into Sanity
12     for (const product of data) {
13       await client.create({
14         _type: 'product',
15         id: product.id,
16         name: product.name,
17         imagePath: product.imagePath,
18         price: parseFloat(product.price),
19         description: product.description,
20         discountPercentage: product.discountPercentage,
21         isFeaturedProduct: product.isFeaturedProduct,
22         stockLevel: product.stockLevel,
23         category: product.category,
24       });
25     }
26
27     res.status(200).json({ message: 'Data inserted successfully!' });
28   } catch (error) {
29     console.error(error);
30     res.status(500).json({ error: 'Failed to fetch or insert data' });
31   }
32 }
33
34

```

Proposed Solution

1 - Sanity API Configuration:

- Connect to Sanity's API using a preset dataset and project ID, secured with an API token.
- Store sensitive information like the project ID and dataset securely in environment variables.

2 - Retrieving Data from Sanity:

- Use GROQ queries to pull organized content from Sanity CMS.
- This includes important product details like categories, descriptions, and pricing.

3 - Mapping and Adjusting Data:

- Restructure the fetched data to make it compatible with the app's schema.

4 - Inserting Data into the Database:

- Insert the data into the database through a REST API or direct commands.
 - Error handling ensures everything moves smoothly without issues.
-

CLIENT PAGE CODE



```
1
2  import { createClient } from '@sanity/client';
3  import {projectId, dataset, token} from './env';
4
5  const client = createClient({
6    projectId,
7    dataset,
8    useCdn: false,
9    token
10  });
```

Schema Code

The schema defines how content is structured in Sanity CMS. Main parts of the schema include:

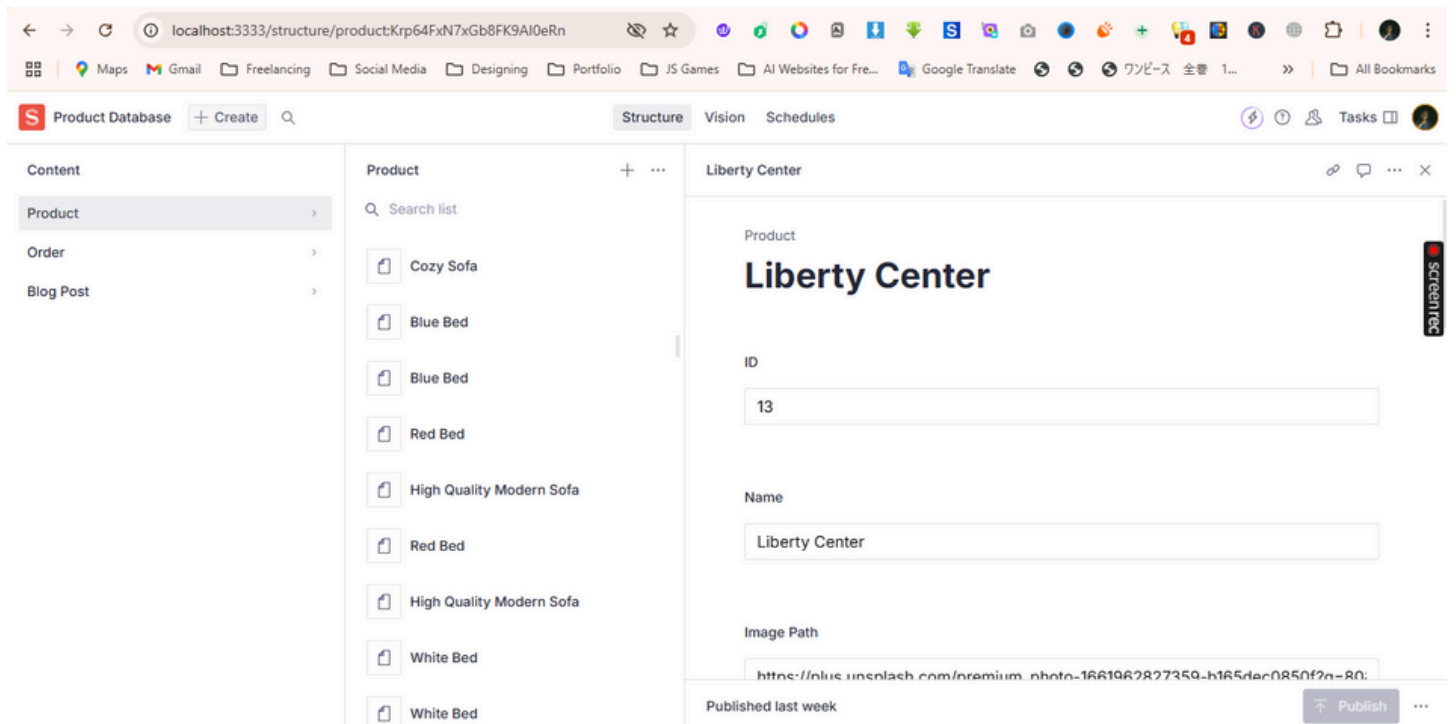
- **Title:** The product name.
- **Slug:** A unique identifier for product URLs.
- **Description:** A detailed description of the product.
- **Price:** The product's price.
- **Image:** A field to store product images.



```
1  export default {
2    name: 'product',
3    title: 'Product',
4    type: 'document',
5    fields: [
6      {
7        name: 'id',
8        title: 'ID',
9        type: 'string',
10     },
11     {
12       name: 'name',
13       title: 'Name',
14       type: 'string',
15     },
16     {
17       name: 'imagePath',
18       title: 'Image Path',
19       type: 'url',
20     },
21     {
22       name: 'price',
23       title: 'Price',
24       type: 'number',
25     },
26     {
27       name: 'description',
28       title: 'Description',
29       type: 'text',
30     },
31     {
32       name: 'discountPercentage',
33       title: 'Discount Percentage',
34       type: 'number',
35     },
36     {
37       name: 'isFeaturedProduct',
38       title: 'Is Featured Product',
39       type: 'boolean',
40     },
41     {
42       name: 'stockLevel',
43       title: 'Stock Level',
44       type: 'number',
45     },
46     {
```

```
47     name: 'category',
48     title: 'Category',
49     type: 'string',
50   },
51 ],
52 };
53
```

Sanity Output



Products on UI

Featured Products

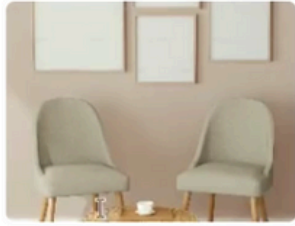


Chair Wibe

Price: \$1200.00

Discount: 10%

Add to cart



Armchair Chair Set

Price: \$850.00

Add to cart



Stylish Armchair

Price: \$780.00

Add to cart



Cozy Sofa

Price: \$520.00

Discount: 8%

Add to cart

[View more](#)

Day 3 - Success!

The API integration and data migration are now complete. This includes setting up the schema, fetching data from Sanity, and implementing dynamic routing for the marketplace.