

Day 3 API Integration (Furniture)

1. Introduction

This report documents the integration process of migrating external data from a REST API into the Sanity CMS for "Hekto," a furniture e-commerce platform. The goal is to automate content management for products such as sofas, chairs, office desks, and other furniture categories, ensuring seamless backend updates and synchronization with the Next.js frontend.

Key objectives include:

- Fetching product and category data (furniture-related) from an external API.
- Structuring and migrating this data to Sanity CMS.
- Displaying the migrated data dynamically on the frontend.

2. API Integration Overview

- **API Name:** The external marketplace API, hosted at:
<https://next-ecommerce-template-4.vercel.app/api/product>.
-
- **Data Fetched:**
 - **Products:** Details such as product titles, prices, descriptions, categories (e.g., sofas, chairs), images, etc.
 - **Categories:** Furniture categories like "Sofas" "chairs", etc., associated with products.
- **Sanity Client:** Used to manage and store fetched data in the CMS, ensuring compatibility with the defined schema structure

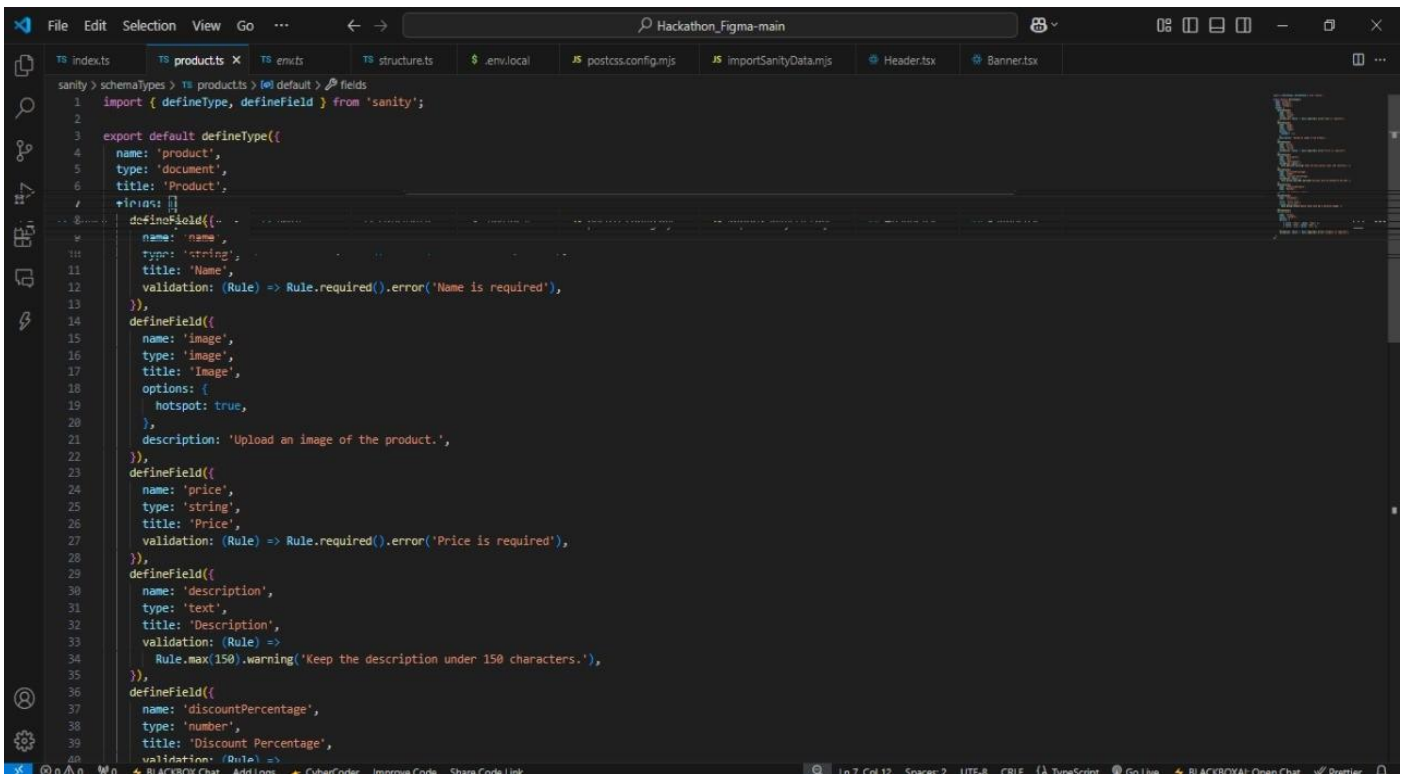
3. Schema Structure Changes

The product schema was enhanced to better represent furniture product details. Key updates include:

Updated Fields:

- **name (string):** The furniture product's name (required).
- **image (image):** Images showcasing each furniture item.
- **price (string):** The product price (required).
- **description (text):** A brief product description (max 150 characters).
- **discountPercentage (number):** The discount percentage (0 to 100).
- **isFeaturedProduct (boolean):** Flag indicating if the product is featured.
- **stockLevel (number):** Tracks stock levels (must be positive).
- **category (reference):** Links products to specific furniture categories.

Snippet of Updated Product Schema:



```
1 import { defineType, defineField } from 'sanity';
2
3 export default defineType({
4   name: 'product',
5   type: 'document',
6   title: 'Product',
7   *fields: []
8 }, {
9   defineField({
10    name: 'name',
11    type: 'string',
12    title: 'Name',
13    validation: (Rule) => Rule.required().error('Name is required'),
14  }),
15   defineField({
16    name: 'image',
17    type: 'image',
18    title: 'Image',
19    options: {
20      hotspot: true,
21    },
22    description: 'Upload an image of the product.',
23  }),
24   defineField({
25    name: 'price',
26    type: 'string',
27    title: 'Price',
28    validation: (Rule) => Rule.required().error('Price is required'),
29  }),
30   defineField({
31    name: 'description',
32    type: 'text',
33    title: 'Description',
34    validation: (Rule) =>
35      Rule.max(150).warning('Keep the description under 150 characters.'),
36  }),
37   defineField({
38    name: 'discountPercentage',
39    type: 'number',
40    title: 'Discount Percentage',
41    validation: (Rule) =>
```

4. Migration Steps and Tools Used

Tools Used:

1. **Sanity Client:** To interact with the Sanity CMS (via [@sanity/client](#)).
2. **Node.js & Fetch API:** For fetching data from the API and uploading it to Sanity.
3. **Environment Variables:** For secure storage of sensitive data like API tokens.
4. **Sanity Image Tool:** To upload and manage furniture images in the CMS.

Migration Steps:

1. **Set Up Environment:**
 - Installed required dependencies: `@sanity/client`, `dotenv`.
 - Configured `.env.local` for secure storage of API keys.
2. **Sanity Client Setup:**
 - Created a `sanityClient` instance using project ID, dataset, and API token.

```
sanity > lib > client.ts > client
1  import { createClient } from 'next-sanity'
2
3  import { apiVersion, dataset, projectId } from '../env'
4
5  export const client = createClient({
6    projectId,
7    dataset,
8    apiVersion,
9    useCdn: true, // Set to false if statically generating pages, using ISR or tag-based revalidation
10 })
11
```

3. Fetch Data from API:

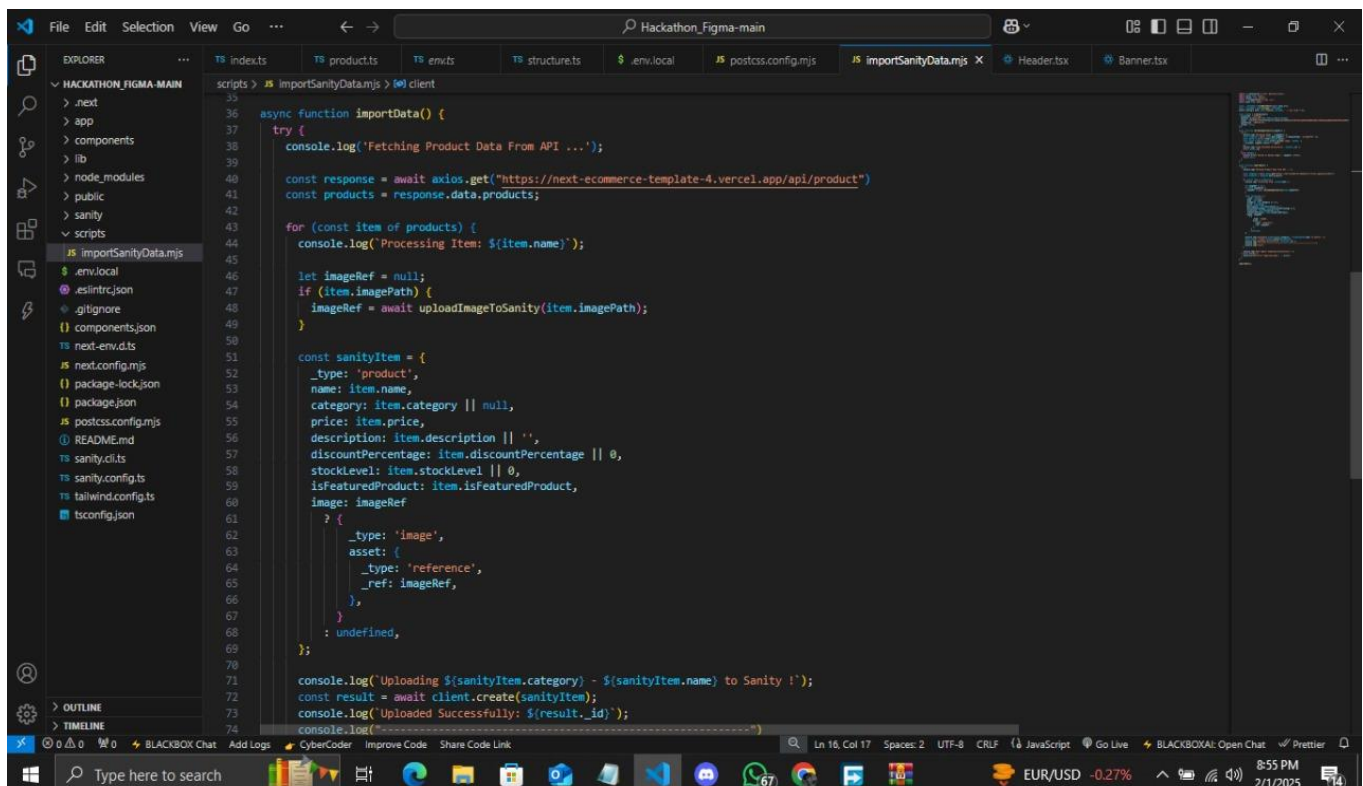
- Used `fetch` to retrieve furniture product and category data from the API.

4. Upload Images to Sanity:

- Uploaded furniture images using the Sanity asset pipeline and retrieved asset IDs for linking.

```
async function uploadImageToSanity(imageUrl) {
  try {
    console.log(`Uploading Image : ${imageUrl}`);
    const response = await axios.get(imageUrl, { responseType: "arraybuffer" });
    const buffer = Buffer.from(response.data);
    const asset = await client.assets.upload("image", buffer, {
      filename: imageUrl.split("/").pop(),
    });
    console.log(`Image Uploaded Successfully : ${asset._id}`);
    return asset._id;
  } catch (error) {
    console.error("Failed to Upload Image:", imageUrl, error);
    return null;
  }
}
```

(Screenshot)API call in response



Data successfully display in Frontened


(Latest Products)

Latest Products

New Arrival


Best Seller

Special Offer



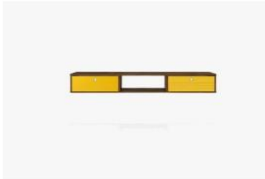
Stylish Golden Metal Legs Mint Blue Fabric Velvet Sofa Leisure Armchair

\$780 ~~\$65.00~~




Rapson Thirty-Nine Guest Chair

\$1300 ~~\$65.00~~




Liberty Wood 63' Floating Entertainment Center

\$1100 ~~\$65.00~~




Leisure Sofa Chair Set

\$1800 ~~\$65.00~~



Matilda Velvet Chair - Pink

\$600 ~~\$65.00~~




Nordic Net Red Chair

\$320 ~~\$65.00~~

(Featured Products)


Featured Products



Varmora Plastic Chair Solid

Code - Y523201


\$100



Tribù Elio Chair

Code - Y523201


\$1200



Hans Wegner Style Three-Legged Shell Chair

Code - Y523201

\$990

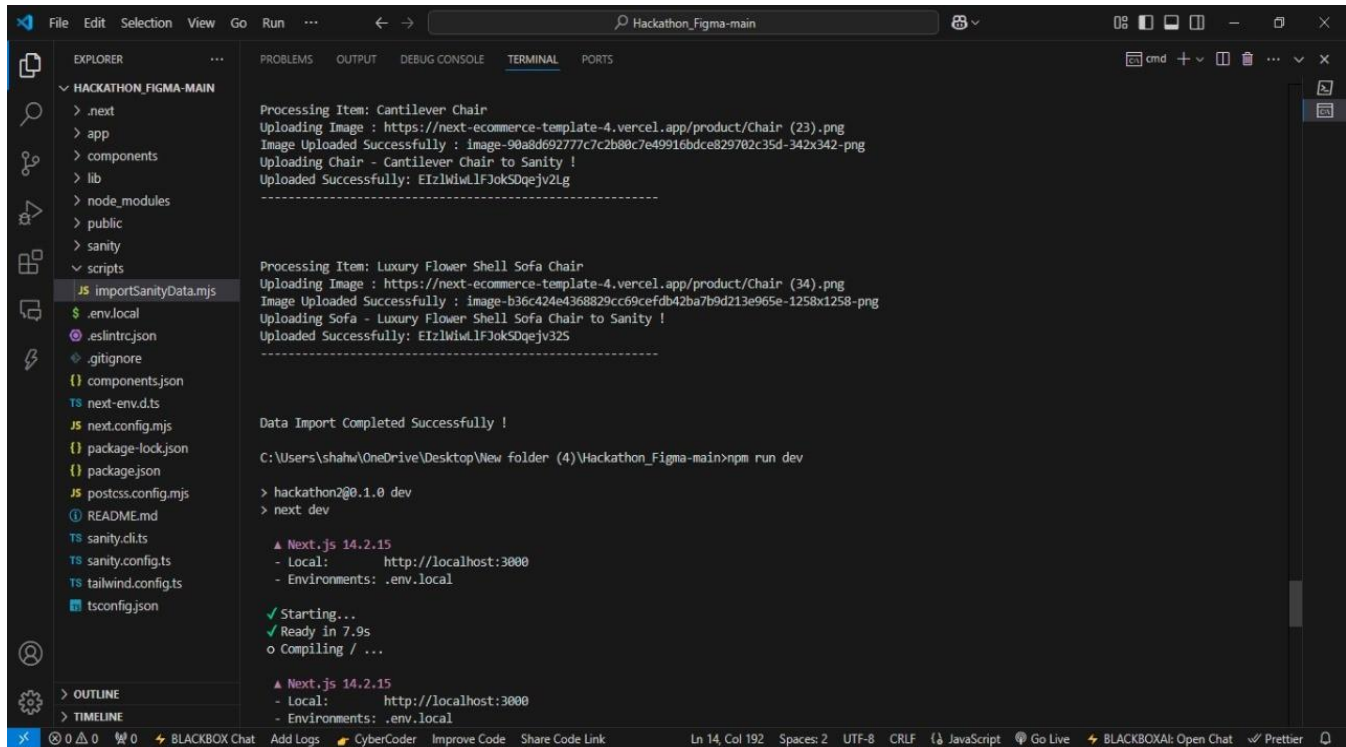


Sobuy Blue Folding Chair Wooden Padded

Code - Y523201

\$120

Terminal Snippet of successful data migration



```
Processing Item: Cantilever Chair
Uploading Image : https://next-ecommerce-template-4.vercel.app/product/Chair (23).png
Image Uploaded Successfully : image-90a8d692777c7c2b80c7e49916bdce829702c35d-342x342-png
Uploading Chair - Cantilever Chair to Sanity !
Uploaded Successfully: EIz1Wlwl1FJokSDqeJv2Lg
-----

Processing Item: Luxury Flower Shell Sofa Chair
Uploading Image : https://next-ecommerce-template-4.vercel.app/product/Chair (34).png
Image Uploaded Successfully : image-b36c424e4368829cc69cefdb42ba7b9d213e965e-1258x1258-png
Uploading Sofa - Luxury Flower Shell Sofa Chair to Sanity !
Uploaded Successfully: EIz1Wlwl1FJokSDqeJv32S
-----

Data Import Completed Successfully !

C:\Users\shahw\OneDrive\Desktop\New folder (4)\Hackathon_Figma-main>npm run dev
> hackathon2@0.1.0 dev
> next dev

▲ Next.js 14.2.15
- Local:      http://localhost:3000
- Environments: .env.local

✓ Starting...
✓ Ready in 7.9s
o Compiling / ...

▲ Next.js 14.2.15
- Local:      http://localhost:3000
- Environments: .env.local
```

Ecommerce Accessories & Fashion Items

About 9,620 results (0.62 seconds)

per page: Sort by: Best Match ▾ View:



Stylish Golden Metal Legs Mint Blue Fabric Velvet Sofa Leisure Armchair
780 ~~780030~~



Rapson Thirty-Nine Guest Chair
1300 ~~150030~~



Liberty Wood 63' Floating Entertainment Center
1100 ~~110030~~



Leisure Sofa Chair Set
1800 ~~180030~~



Matilda Velvet Chair - Pink
600 ~~60030~~



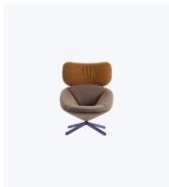
Nordic Net Red Chair
320 ~~32030~~



Luxury Flower Shell Sofa Chair
2500 ~~250030~~



Cozy Armchair
520 ~~52030~~



Armchair Tortuga



Uchiwa Quilted Lounge Chair



Diondre Chair - Tuft Button - Acrylic Legs



Yarmora Plastic Chair Solid

Final Check List

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