

"DAY 3 - API Integration Report - HECTO"

SUBMISSIONS:

API integration process

This section details the steps for integrating and importing data into Sanity using a custom script.

Steps:

1. Setup Script File

- *Created a folder named scripts in the project directory.*
- *Inside scripts folder, created a file import-data.mjs.*
- *This file contains the logic for importing data into the Sanity dataset.*

Code snippets for API integration

```
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;  
  }  
}
```

```
async function importData() {  
  try {  
    console.log('Fetching Product Data From API ...');  
  
    const response = await axios.get("https://next-  
ecommerce-template-4.vercel.app/api/product")  
    const products = response.data.products;  
  
    for (const item of products) {  
      console.log(`Processing Item: ${item.name}`);  
  
      let imageRef = null;  
      if (item.imagePath) {  
        imageRef = await  
uploadImageToSanity(item.imagePath);  
      }  
    }  
  }  
}
```

2.Environment Configuration

- Added an .env file in the root directory to securely store the following environment variables:
 - **SANITY_PROJECT_ID**
 - **SANITY_DATASET**

- ***SANITY_API_TOKEN***

- *Used dotenv to load these variables into the script.*

3. Script Logic

- *Installed the required packages using npm install:*

npm install axios dotenv

- *Imported the required packages in the import-data.mjs script:*

import axios from 'axios';

import dotenv from 'dotenv';

dotenv.config(); // Load environment variables

- *Implemented logic in import-data.mjs to fetch and send data to Sanity's API using axios.*

4. Package.json Configuration

- *Added a custom script to the package.json file for easy execution:*

"scripts": {

"import-data": "node ./scripts/import-data.mjs"

}

5. Running the Script

- *To execute the script, run the following command in the terminal:*

npm run import-data

- *This command sends the provided data to the Sanity dataset one by one.*

Notes:

- *Ensure the .env file contains valid values for the environment variables before running the script.*
- *Make sure the Sanity schema matches the structure of the data being imported*

“This process ensures a streamlined method to integrate and send data to Sanity via API, leveraging modular scripting and environment variables for security and flexibility.”

Adjustments made to schemas.

I updated my schema to include all the required fields based on the data, such as productName, id, description, image, and others.

Code snippets for schemas

After installing Sanity in my project, I created a product.ts file in the schemaTypes folder and configured the schema as follows:

1. In product.ts:

Defined the product schema.

2. In index.ts:

Imported and integrated the product schema:

```
import { type SchemaTypeDefinition } from  
'sanity';
```

```
import product from './product';
```

```
export const schema: { types:  
SchemaTypeDefinition[] } = {
```

```
  types: [product],
```

```
};
```

This setup ensures the product schema is registered in Sanity.

Migration steps and tools used

Migration Steps

1. Install Sanity CLI and Initialize Project:

- Installed Sanity CLI using:
- `npm install -g @sanity/cli`
- Initialized the Sanity project with:
- `sanity init`

2. Define Schema Files:

- Created schema files (`product.ts` and others) in the `schemaTypes` folder.
- Updated the `index.ts` file to integrate and export all schema definitions.

3. Environment Setup:

- Configured a `.env` file to store Sanity credentials (`SANITY_PROJECT_ID`, `SANITY_DATASET`, `SANITY_API_TOKEN`).

4. Data Integration Script:

- Created an `import-data.mjs` script to import data into Sanity via API.
- Utilized `Axios` for API calls and `dotenv` for secure access to environment variables.

5. Run Data Import:

- Executed the following command to migrate data to Sanity:
- `npm run import-data`

6. Verify and Publish Changes:

- Verified imported data in the Sanity Studio and published any required updates.

Tools Used For Migration:

- **Sanity CLI:** For project setup and schema management.
- **Node.js Packages:**

- **axios:** To handle API requests.
- **dotenv:** To manage environment variables securely.
- **Code Editor:** Used for defining schema and creating scripts (e.g., VSCode).
- **Terminal:** For executing commands and running scripts.

These steps and tools ensured a smooth migration and data integration process.

Screenshots of:

API calls.

The screenshot shows a VS Code editor with the Explorer sidebar on the left displaying a project structure. The main editor area shows the `.env` file with the following content:

```
1 NEXT_PUBLIC_SANITY_PROJECT_ID="5s8n6hny"
2 NEXT_PUBLIC_SANITY_DATASET="production"
3 SANITY_API_TOKEN="skjglow7smzEPIbX2MDP79HfYmvTbG68wzqK0qaXwMffJQpTqQ1jV2zMScpMSpukF7YNJPV6tmJ48dmkc21scanNnUKrG7IpiAm8yD5CeSYi77"
```

Below the editor, the TERMINAL panel shows the output of running `npm run import-data`:

```
247 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities

C:\Users\Tesla Laptops\Desktop\Data Migration\next-ecommerce-template-4>npm run import-data

> sanity-nextjs@0.1.0 import-data
> node src/scripts/import-data.mjs

Fetching Product Data From API ...
Processing Item: Tribù Elio Chair
Uploading Image : https://next-ecommerce-template-4.vercel.app/product/chair (5).png
Image Uploaded Successfully : image-9967004db2d5e1235db7525ed72aaa32bc4f95a7-720x522-png
Uploading Chair - Tribù Elio chair to Sanity !
Uploaded Successfully: D24vb8qimRtY37EYq5o8q
```


public

scripts

import-data.mjs U

src

app

sanity

lib

schemaTypes

index.ts U

product.ts U

env.ts U

structure.ts U

.env.local

.eslintrc.json

.gitignore

next-env.d.ts

next.config.mjs

package-lock.json M

package.json M

postcss.config.mjs

README.md

sanity.cli.ts U

sanity.config.ts U

tailwind.config.ts

tsconfig.json

import docx from 'docx';

import { fileURLToPath } from 'url';

import path from 'path';

PROBLEMS

OUTPUT

PORTS

DEBUG CONSOLE

TERMINAL

Node.js v20.11.1

C:\Users\Tesla Laptops\Desktop\HECTO DATA MIGRATION\hecto-templatefigma>npm run import-data

> hecto-templatefigma@0.1.0 import-data

> node ./scripts/import-data.mjs

Fetching Product Data From API ...

Processing Item: Tribù Elio Chair

Uploading Image : https://next-ecommerce-template-4.vercel.app/product/Chair (5).png

Image Uploaded Successfully : image-9967004db2d5e1235db7525ed72aaa32bc4f95a7-720x522-png

Uploading Chair - Tribù Elio Chair to Sanity !

Uploaded Successfully: 0e0ztuJY6NWdyb1BEUwEBT

Processing Item: Armchair Tortuga

Uploading Image : https://next-ecommerce-template-4.vercel.app/product/Chair (35).png

Image Uploaded Successfully : image-d6aed5e3bb1c45542716cb31036c740f1113625e-1398x1194-png

Uploading Chair - Armchair Tortuga to Sanity !

Uploaded Successfully: 0e0ztuJY6NWdyb1BEUwEEEx

Processing Item: Uchiwa Quilted Lounge Chair

Uploading Image : https://next-ecommerce-template-4.vercel.app/product/Chair (6).png

Image Uploaded Successfully : image-2e1f600d17d0908be26d3768263fa9b3d7fe4ead-402x402-png

Uploading Chair - Uchiwa Quilted Lounge Chair to Sanity !

The screenshot shows a Visual Studio Code editor with the 'package.json' file open. The file contains the following JSON:

```
{
  "name": "sanity-nextjs",
  "version": "0.1.0",
  "private": true,
  "scripts": {
    "dev": "next dev",
    "build": "next build",
    "start": "next start",
    "lint": "next lint",
    "import-data": "node src/scripts/import-data.mjs"
  },
  "dependencies": {
    "@sanity/image-url": "^1.1.0",
    "@sanity/vision": "^3.69.0",
    "axios": "^1.7.9",
    "dotenv": "^16.4.7",
  }
}
```

The terminal output shows the following steps:

```
Uploading Image : https://next-e-commerce-template-4.vercel.app/product/Chair (23).png
Image Uploaded Successfully : image-90a8d692777c7c2b80c7e49916bdce829702c35d-342x342-png
Uploading Chair - Cantilever Chair to Sanity !
Uploaded Successfully: D24vb8qimRXtY37Eyq5p9p
-----

Processing Item: Luxury Flower Shell Sofa Chair
Uploading Image : https://next-e-commerce-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: NxaIkVf0z91aTr5xFqcj1p
-----

Data Import Completed Successfully !

C:\Users\Tesla Laptops\Desktop\Data Migration\next-e-commerce-template-4>
```

Data successfully displayed in the frontend.

PRODUCTS FETCH FROM API DATA



Tribù Eliio Chair

A sleek outdoor chair with natural wooden elements and a modern look.

\$1200
10% OFF

Add To Cart



Armchair Tortuga

An elegant armchair with plush cushions and a curved design for comfort.

\$850

Add To Cart



Uchiwa Quilted Lounge Chair

A spacious lounge chair with a quilted back and soft cushioning.

\$1600
20% OFF

Add To Cart



Stylish Golden Metal Legs Mint Blue Fabric Velvet Sofa Leisure Armchair

A luxurious armchair with velvet fabric and golden metal legs.

\$780

Add To Cart



Basson Thirty-Nine Guest Chair

A mid-century modern chair with clean lines and durable materials.

\$1300
15% OFF

Add To Cart



Replica Hans Wegner Wishbone Chair

Classic wishbone chair with a dark walnut frame and cord seat.

\$750
30% OFF

Add To Cart



Diondre Chair - Turf Button - Acrylic Legs

A tufted chair with acrylic legs for a chic, modern touch.

\$720
7% OFF

Add To Cart



Matilda Velvet Chair - Pink

A vibrant pink velvet chair with a retro-inspired design.

\$600
15% OFF

Add To Cart



Varmora Plastic Chair Solid

Durable and lightweight plastic chair for everyday use.

\$100
25% OFF

Add To Cart

Your Cart Items:

Your Cart is Empty! Add some Products

Hekto

Enter your email address

Sign Up

Contact Info

17 Pincasso Road, London, Greater London NW1 8JR, UK

Categories

Laptops & Computers
Cameras & Photography
Smart Phones & Tablets
Video Games & Consoles
Waterproof Headphones

Customer Care

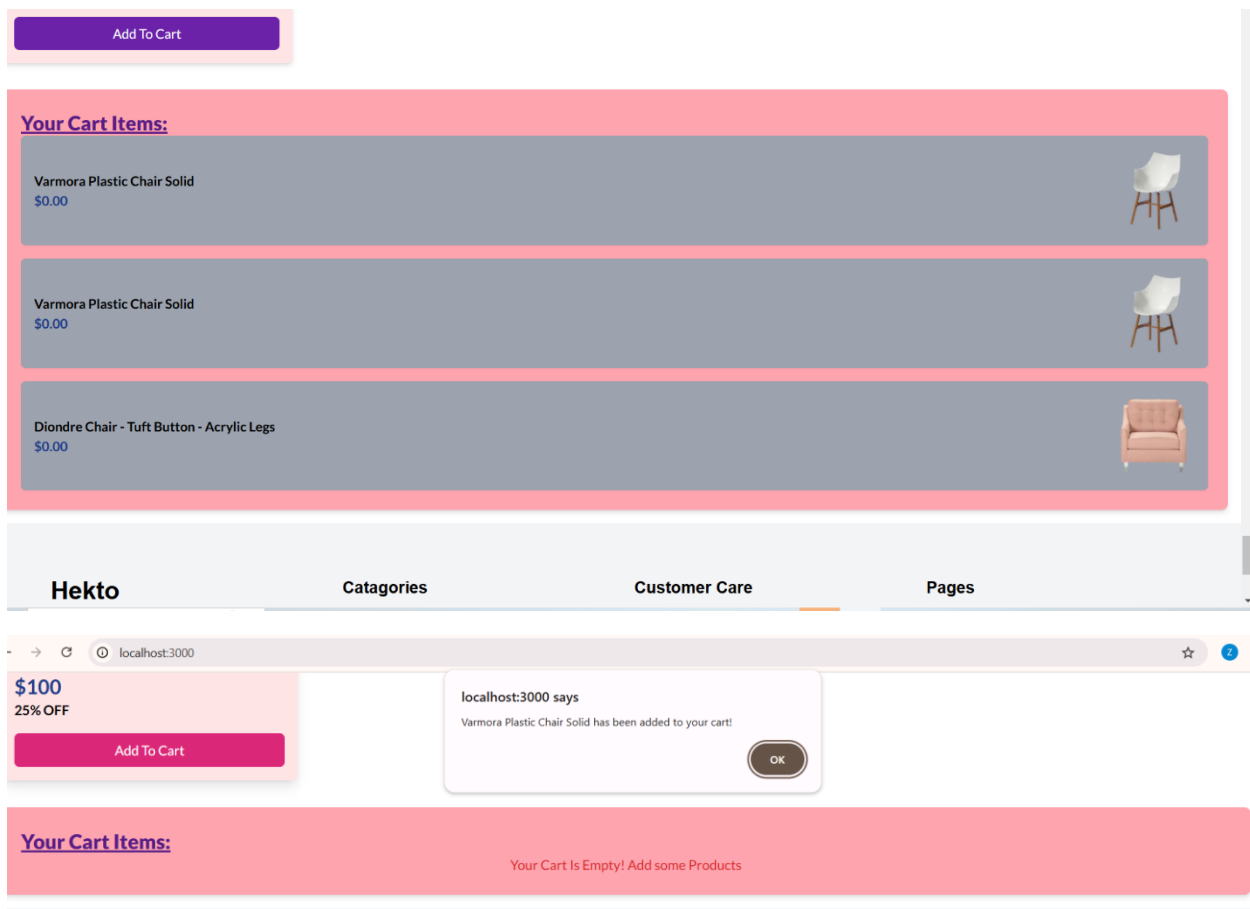
My Account
Discount
Returns
Order History
Order Tracking

Pages

Blog
Browse the Shop
Category
Pre-Built Pages
Visual Composer Elements
WooCommerce Pages

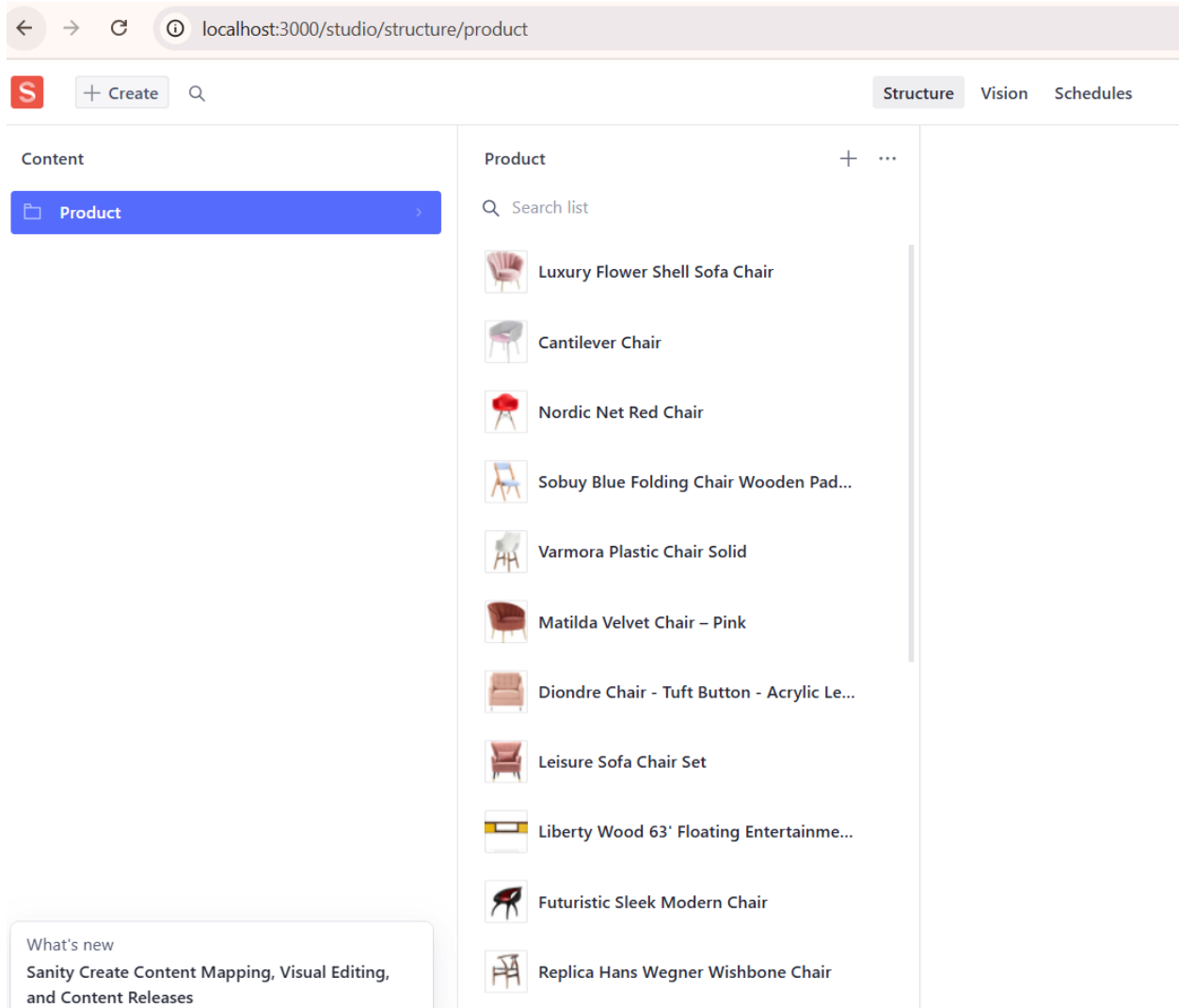
© Webecy - All Rights Reserved.





Populated Sanity CMS fields.

Data Migration:



Conclusion of Day3:

This setup lays the foundation for efficient data management and future scalability.