Day 3: API Integration and Data Setup for Moosa’s furnishers

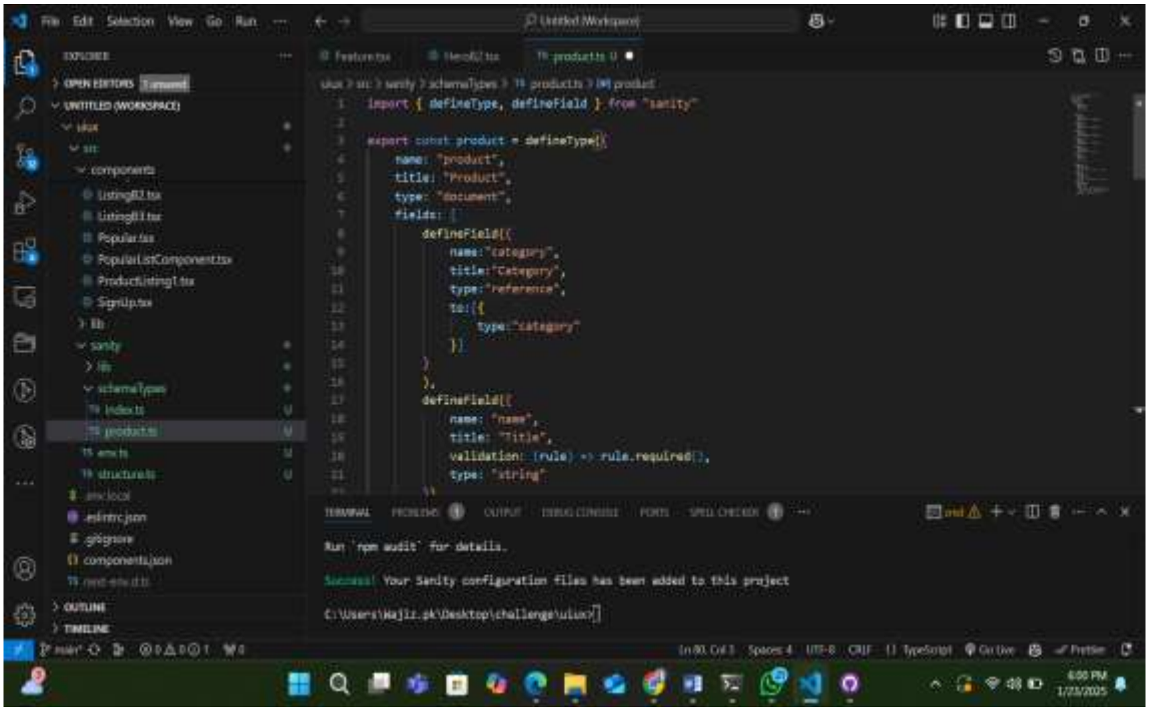
Overview

Day 3 focused on integrating Sanity CMS with the Moosa’s Furnishers website, creating structured schemas, fetching data using GROQ queries, and rendering it dynamically in a responsive Next.js application.

Key Highlights

1. Custom Schema Setup

- Schema Creation: Defined a schema for "Product Item" and “Categories” to structure data (e.g., menu items, specials, and location details).
- Validation Rules: Ensured data integrity with custom validations, like requiring positive prices and non-empty titles/descriptions.



```
import { defineType, defineField } from "sanity"

export const product = defineType({
    name: "product",
    title: "Product",
    type: "document",
    fields: [
        defineField({
            name:"category",
            title:"Category",
            type:"reference",
            to:[{
                type:"category"
            }]
        }
        ),
        defineField({
            name: "name",
            title: "Title",
            validation: (rule) => rule.required(),
            type: "string"
        }),
```

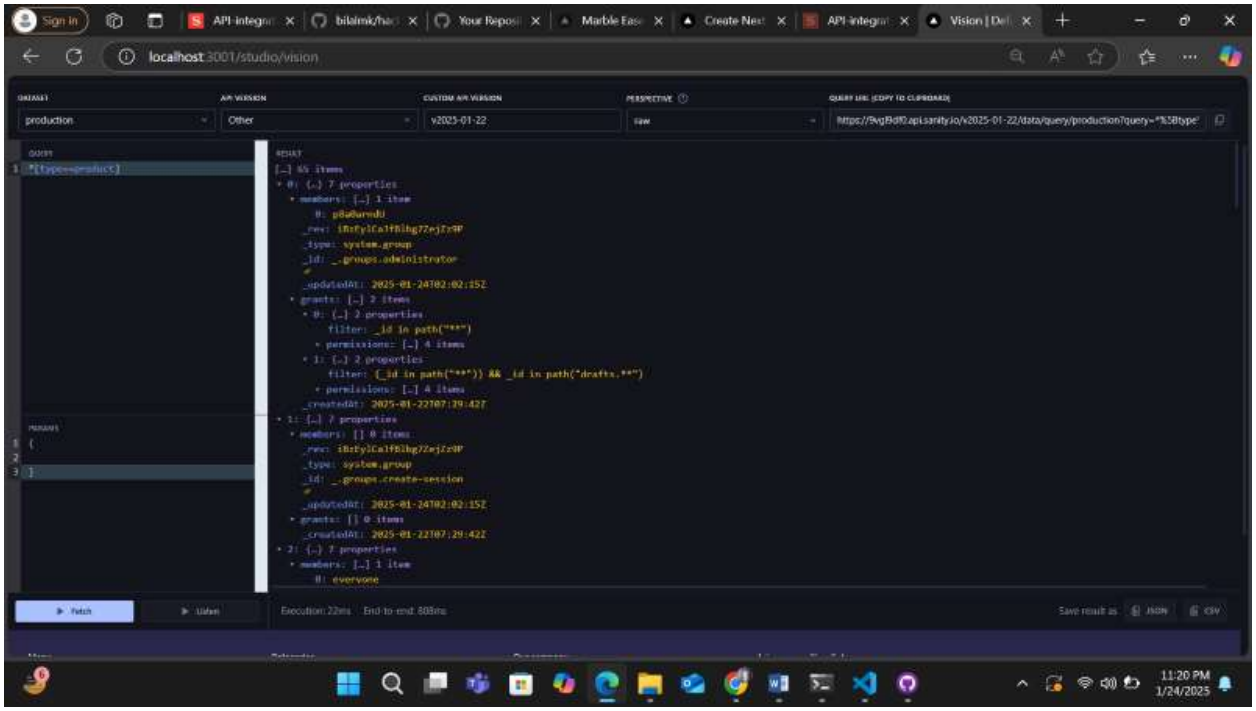
```
Run `npm audit` for details.

Success! Your Sanity configuration files has been added to this project

C:\Users\Hajiz.pk\Desktop\challenge\uiux>
```

2. Sanity API Integration

- Configuration: Connected to Sanity using project ID, dataset, and API token.
- Environment Variables: Used .env file for secure storage of sensitive information.

3. Data Fetching with GROQ

- Querying: Used GROQ queries to fetch structured data (e.g., menu categories, prices, descriptions, images).



localhost:3001/studio/vision

DATASET: production

API VERSION: Other

CUSTOM API VERSION: v2025-01-22

PERSPECTIVE: raw

QUERY URL (COPY TO CLIPBOARD): https://9vgB dl0.api.sanity.io/v2025-01-22/data/query/production?query=*%5Btype

QUERY

```
*[_type=="product"]
```

PARAMS

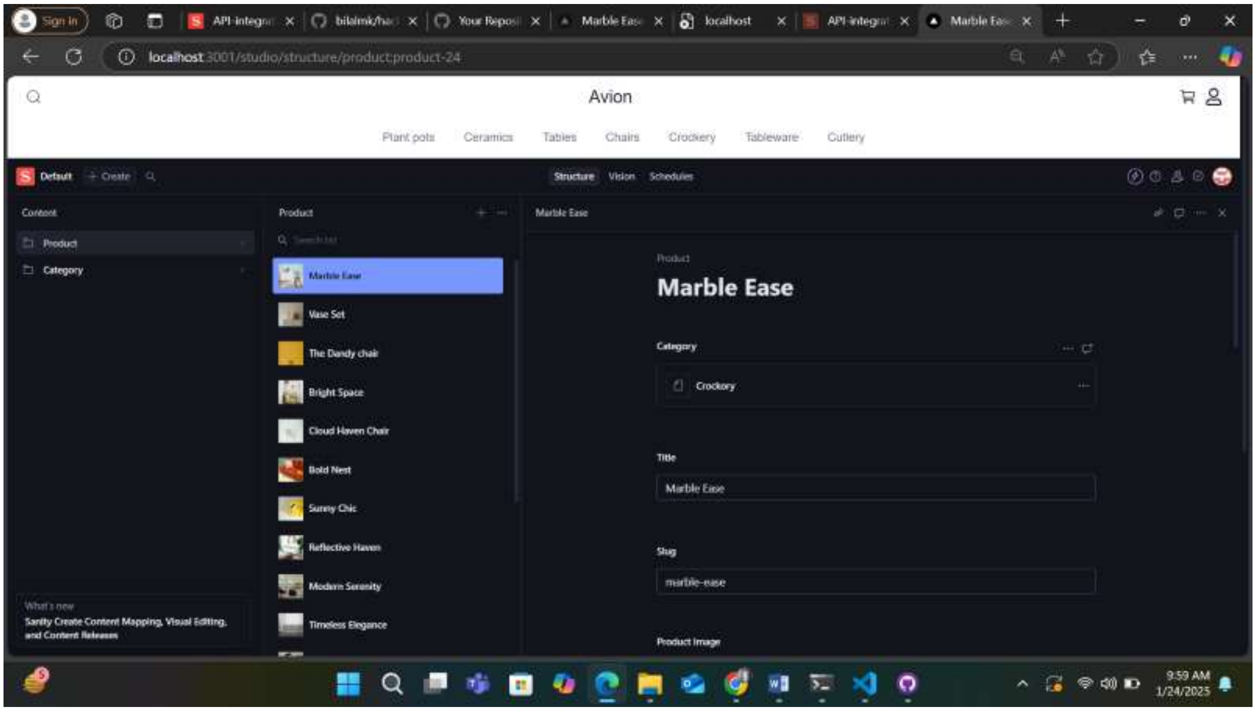
```
{

}
```

RESULT

```
[…] 65 items
▾ 0: {…} 7 properties
  ▾ members: […] 1 item
      0: p8a0urndU
    _rev: iBzfylCalfBlbg7ZejZz9P
    _type: system.group
    _id: _.groups.administrator
    ✎
    _updatedAt: 2025-01-24T02:02:15Z
  ▾ grants: […] 2 items
    ▾ 0: {…} 2 properties
        filter: _id in path("**")
      ▸ permissions: […] 4 items
    ▾ 1: {…} 2 properties
        filter: (_id in path("**")) && _id in path("drafts.**")
      ▸ permissions: […] 4 items
    _createdAt: 2025-01-22T07:29:42Z
▾ 1: {…} 7 properties
  ▸ members: [] 0 items
    _rev: iBzfylCalfBlbg7ZejZz9P
    _type: system.group
    _id: _.groups.create-session
    ✎
    _updatedAt: 2025-01-24T02:02:15Z
  ▸ grants: [] 0 items
    _createdAt: 2025-01-22T07:29:42Z
▾ 2: {…} 7 properties
  ▾ members: […] 1 item
      0: everyone
```

Execution: 22ms End-to-end: 808ms

- Dynamic Updates: Data is pulled live from Sanity, avoiding database insertion.



Category: Crockery

Title: Marble Ease

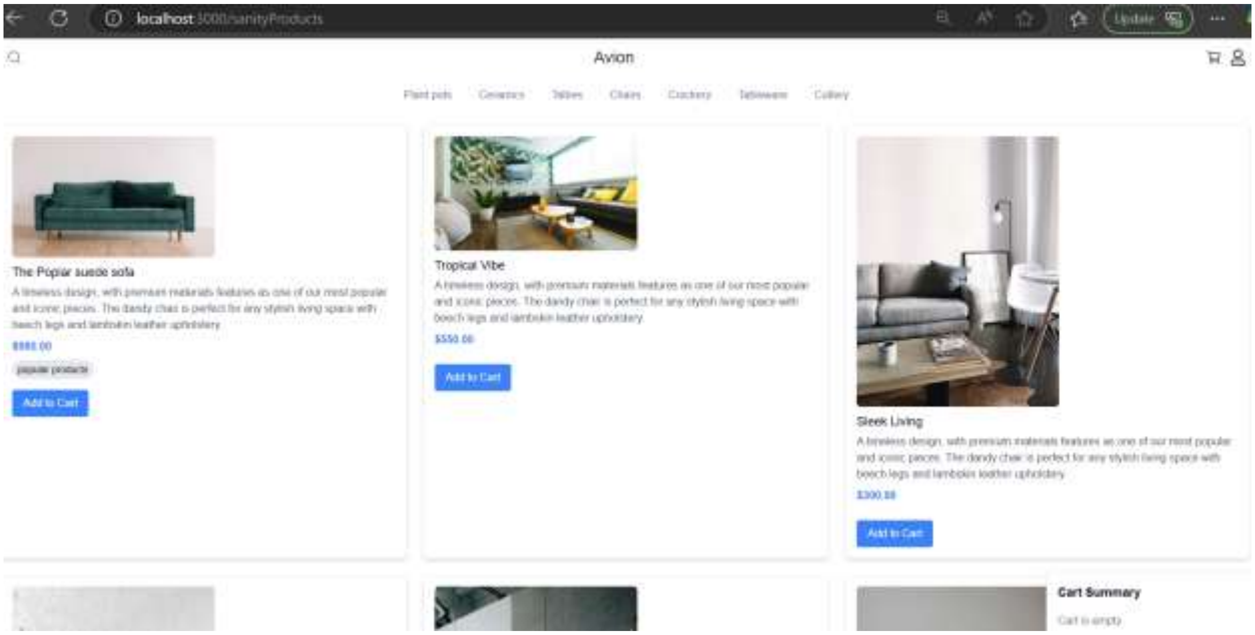
Slug: marble-ease

1. Frontend Rendering

- Server-Side Rendering (SSR): Fetched data in getServerSideProps for faster load times and improved SEO.
- Responsive Design: Rendered mobile-friendly menu layouts dynamically using React's .map() method.
- Dynamic Routing: Added links for individual product detail pages.

2. Product Card Component

- Reusable Design: A dynamic, styled component to display product details like title, price, description, and image.
- Interactivity: Includes buttons for actions like adding items to the cart.
- Optimized Features: Uses libraries like next/image for efficient image rendering.



The Poplar suede sofa

A timeless design, with premium materials features as one of our most popular and iconic pieces. The dandy chair is perfect for any stylish living space with beech legs and lambskin leather upholstery

$880.00

popular products

Add to Cart

Tropical Vibe

A timeless design, with premium materials features as one of our most popular and iconic pieces. The dandy chair is perfect for any stylish living space with beech legs and lambskin leather upholstery

$550.00

Add to Cart

Sleek Living

A timeless design, with premium materials features as one of our most popular and iconic pieces. The dandy chair is perfect for any stylish living space with beech legs and lambskin leather upholstery

$300.00

Add to Cart

Cart Summary

Cart is empty

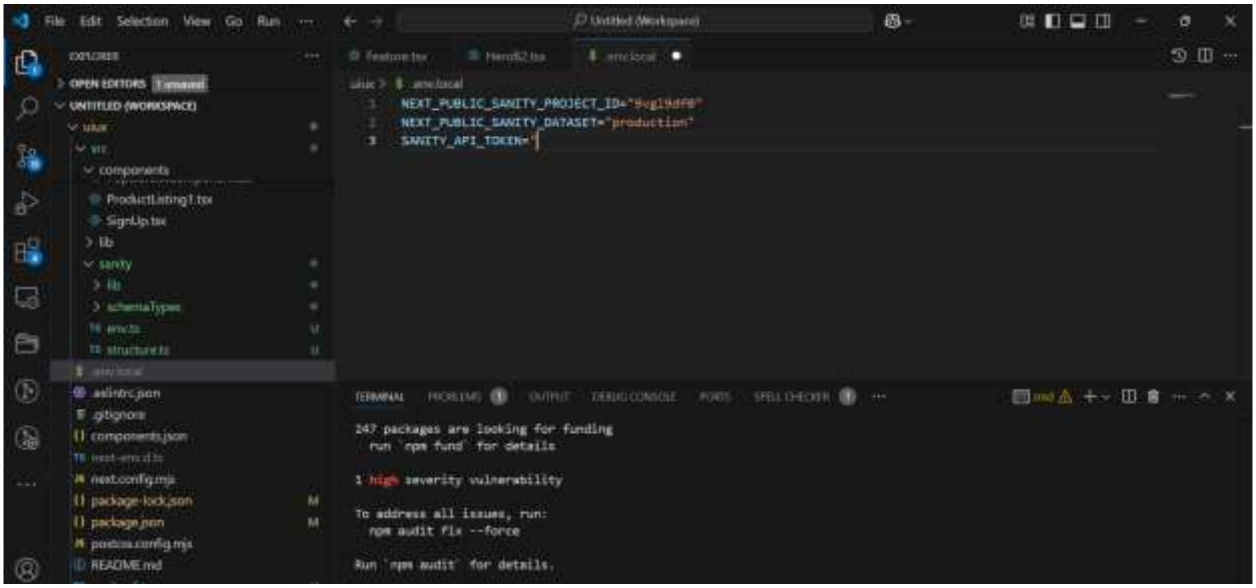
3. Environment and Security

- Environment Variables:

  SANITY_PROJECT_ID,

  SANITY_DATASET,

  SANITY_API_TOKEN securely stored in .env file.



```
NEXT_PUBLIC_SANITY_PROJECT_ID="9vgl9df0"
NEXT_PUBLIC_SANITY_DATASET="production"
SANITY_API_TOKEN="
```

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

1 high severity vulnerability

To address all issues, run:
  npm audit fix --force

Run `npm audit` for details.
```

- Security Measures: Ensured API tokens are not exposed on the frontend. Achievements
- Created a dynamic schema for product items in Sanity.
- Successfully integrated data fetching using GROQ queries.
- Built responsive and reusable frontend components.
- Secured sensitive configurations using environment variables

Conclusion

The setup on Day 3 established a robust backend integration and dynamic frontend rendering for the Moosa’s furnishers website. This foundation supports real-time updates, scalability, and future feature enhancements.