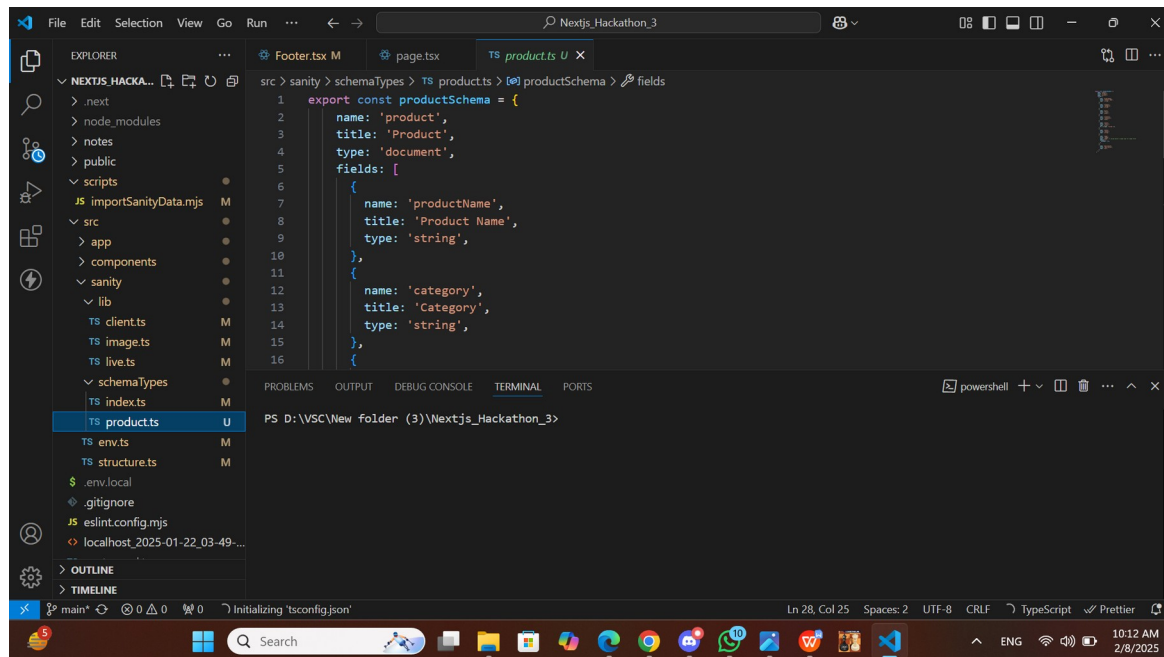# Day 3:

Api Integration and Migration For Avion Furniture Marketplace

This documentation outlines the work completed on Day 3 of the Avion Furniture Marketplace hackathon. It includes custom migration, data integration from Sanity, schema design, and rendering data using GROQ queries in a Next.js application. Each section is supplemented with detailed code explanations and image references.

Sanity Product Schema

Image Reference: product schema

The Sanity product schema defines the structure for storing furniture product data in the Sanity Content Management System (CMS). Here's a breakdown of its components:

Title Field:

- Type: String
- Purpose: Stores the name of the furniture item (e.g., "Harmony Modular Sectional").
- Validation: Ensures this field is not left empty, as it's a required field for identifying the product.

Slug Field:

- Type: Slug
- Purpose: Creates a unique URL-friendly identifier for each product. For example, the title "Harmony Modular Sectional" might generate a slug like harmony-modular-sectional. ◻ Validation: Includes validation to ensure uniqueness, preventing duplicate slugs in the database.

Image Field:

- Type: Image
- Purpose: Stores a single image of the product.
- Options:
    - o Supports the upload of high-resolution images. o Allows customization for alternative text for accessibility purposes.

Description Field:

- Type: Text
- Purpose: Provides a detailed description of the product, explaining its features, dimensions, and other details.
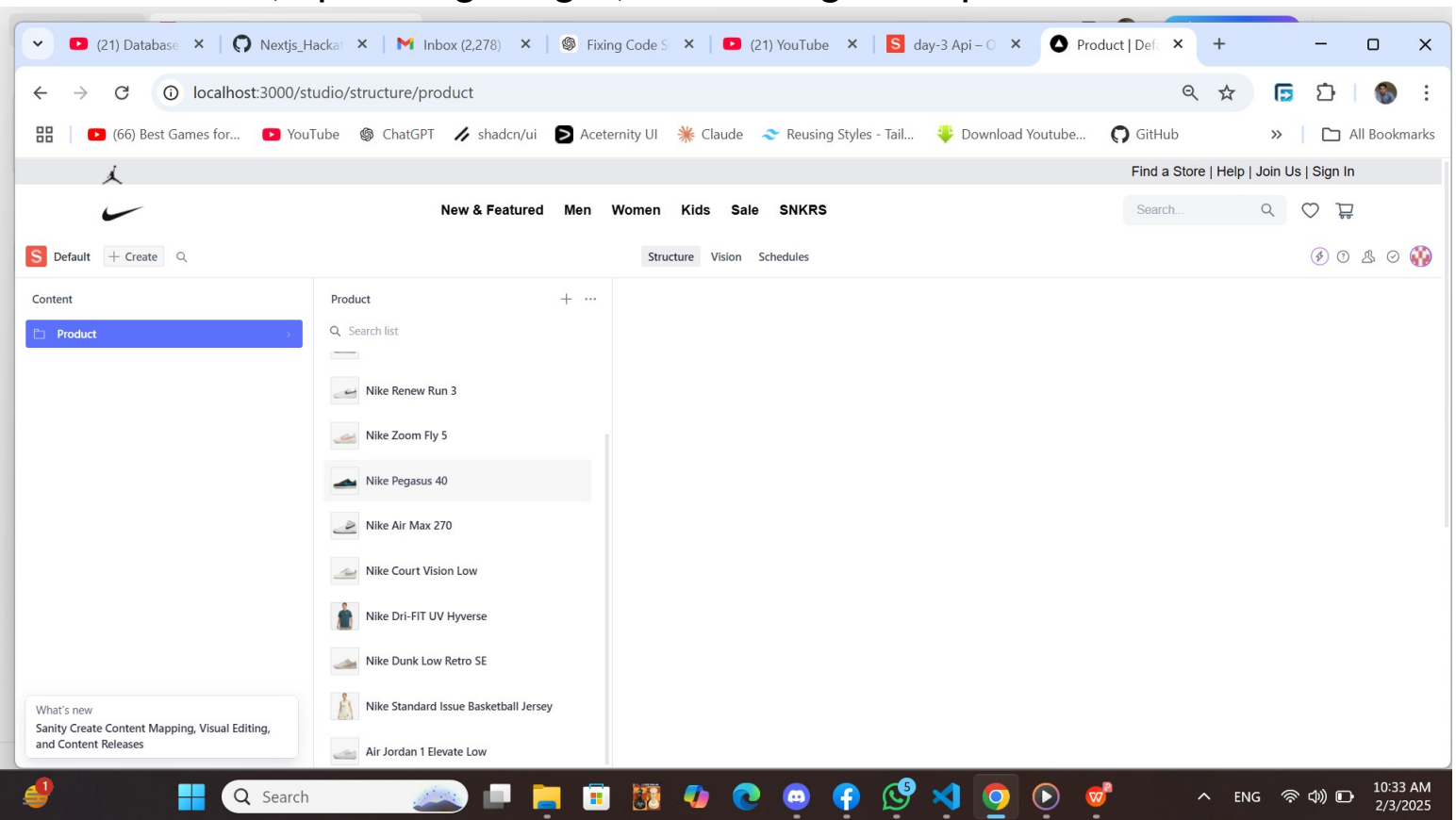
Price Field:

- Type: Number
- Purpose: Represents the cost of the product.
- Validation: Ensures the price is a positive value

- Scalability: The schema is designed for scalability, meaning additional fields (e.g., stock levels, dimensions, or materials) can easily be added without affecting the existing structure.

Sanity CMS Interface

The interface allows users to manage products, including editing titles, uploading images, and adding descriptions.

Frontend Integration:

Each field in the schema is accessible via GROQ queries, allowing developers to fetch the exact data they need. For example:

```
export default async function ProductsPage() {
  const query = `*[_type == "product"]{
    _id,
    name,
    price,
    slug,
    "imageUrl": image.asset->url,
    description
  }`;
  const products = await client.fetch(query);
```

Validation Benefits:
The validation rules enforce clean and consistent data entry, reducing errors during the migration and rendering processes.

Custom Migration Code
Handles transferring Sanity CMS data into the Avion Furniture database.
Includes mapping, validation, and insertion logic.
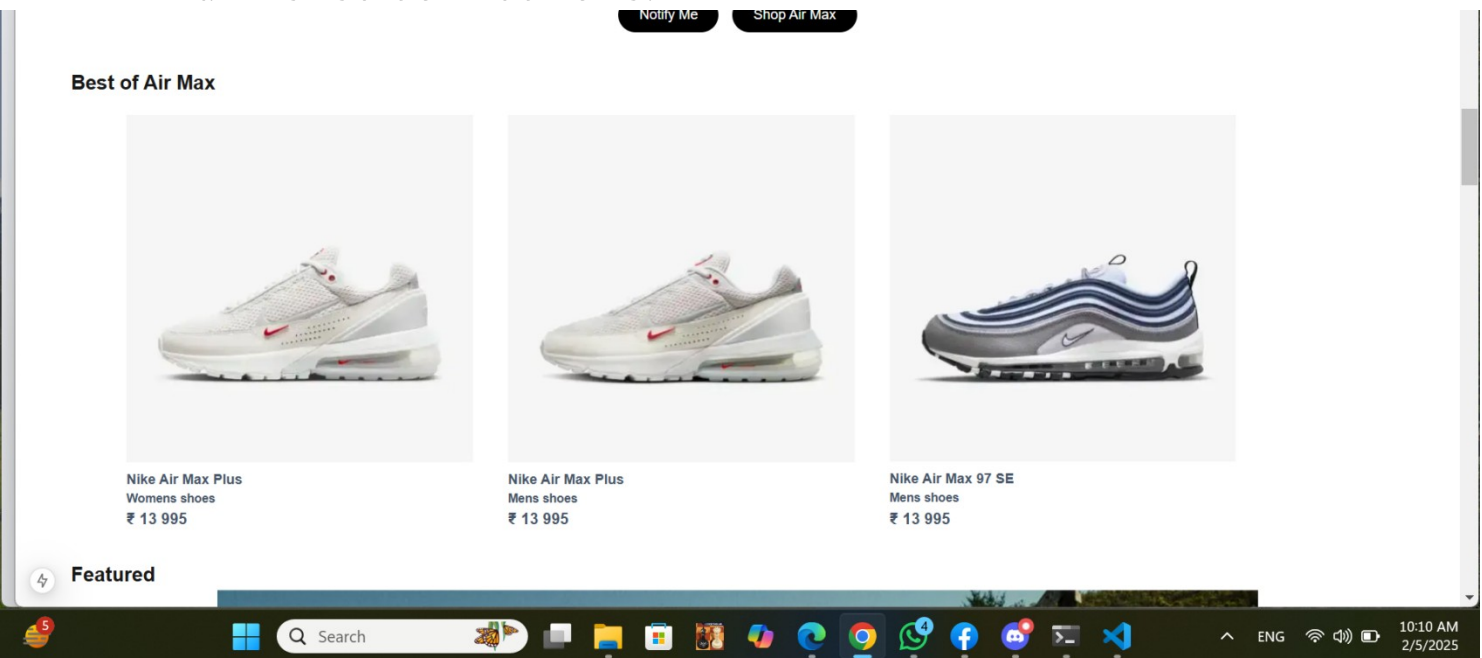
Schema Code
Defines the structure of the Avion Furniture database, aligning with Sanity schemas.
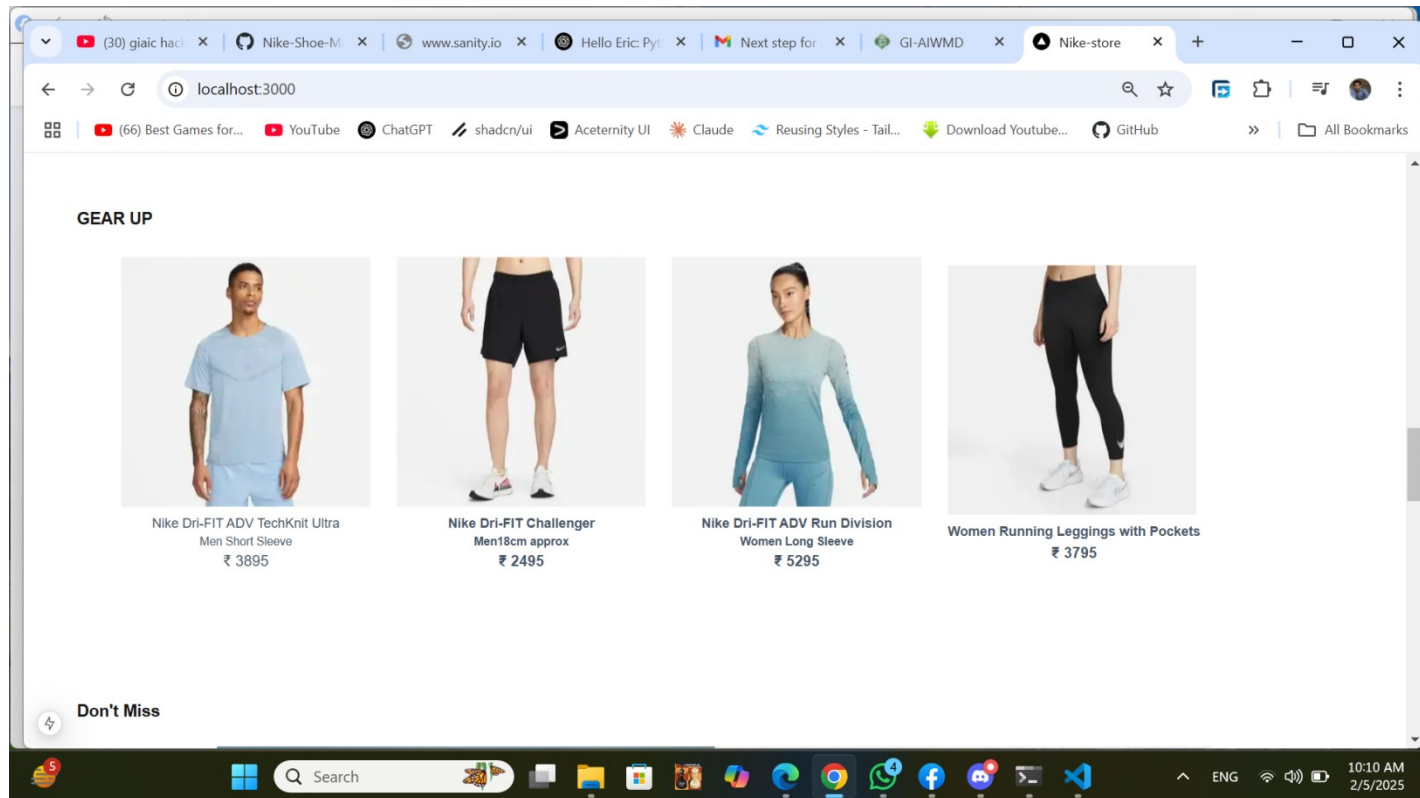
Item Card Code

A reusable component for rendering furniture product information, including images, descriptions, and prices.

Environment Variables

Securely store sensitive configurations for API access and database connections.

Conclusion

The Sanity product schema serves as the backbone of the Avion Furniture marketplace's content management. It ensures structured, validated, and scalable data storage while enabling seamless integration with Next.js using GROQ queries. By combining this schema with custom migration and rendering logic, the application provides a robust solution for managing and displaying e-commerce products.

Present by: Touqeer Ahmed