DAY 3

API integration process

1. API Selection and Setup

● API was provided to import product and category data for the project.

● Integrated the API using the fetch method in Next.js to streamline the data flow.

● Configured dynamic routes for fetching data based on category or slug

parameters.

● Example API Endpoint:

```
async function importData() {
    try {
        console.log('Fetching products from API...');
        const response = await axios.get('https://hackathon-apis.vercel.app/api/products');
        const products = response.data;
        let counter = 1;

        for (const product of products) {
            console.log(`Processing product: ${product.name}`);
            let imageRef = null;
            let catRef = null;

            if (product.image) {
                imageRef = await uploadImageToSanity(product.image);
            }
            if (product.category?.name) {
                catRef = await createCategory(product.category, counter);
            }

            const sanityProduct = {
                _id: `product-${counter}`,
                _type: 'product',
                name: product.name,
                slug: {
                    _type: 'slug',
                    current: slugify(product.name, { lower: true, strict: true })
                },
```

2. Frontend Integration

● Implemented useEffect and useState hooks to fetch and render data

dynamically.

```
const query = `
  *[_type == "product" && slug.current == $slug][0] {
    _id,
    name,
    "category": category->title,
    "brand": brand->title,
    "slug": slug.current,
    "image": image.asset->url,
    price,
    quantity,
    tags,
    dimensions {
      height,
      width,
      depth
    },
    dateAdded
  }
`;
```

Adjustments Made to Schemas

1. Product Schema Adjustments

● Modified the schema to align with API structure, including fields for category, description, and slug.

● Final Product Schema:

```
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: "brand",
            title: "Brand",
            type: "reference",
            to: [{ type: "brand" }],
            validation: (rule) => rule.required(),
        }),
        defineField({
            name: "name",
            title: "Title",
            validation: (rule) => rule.required(),
            type: "string"
        }),
        defineField({
            name: "slug",
            title: "Slug",
            validation: (rule) => rule.required(),
            type: "slug"
        }),
```

2. Category Schema Adjustments

● Updated the schema to include slug generation for better routing and SEO.

● Final Category Schema:

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

export const Category = defineType({
    name: "category",
    title: "Category",
    type: "document",
    fields:[
        defineField({
            name: "name",
            title: "Name",
            type: "string",
            validation: (rule) => rule.required(),
        }),
        defineField({
            name: "slug",
            title: "Slug",
            type: "slug",
            validation: (rule) => rule.required(),
            options: {
                source: "name",
            }
        })
    ]
})
```

3. Create One More Schema For Brand

● Updated the schema to include slug generation for better routing and SEO.

● Final Brand Schema:

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

export const Brand = defineType({
  name: "brand",
  title: "Brand",
  type: "document",
  fields: [
    defineField({
      name: "name",
      title: "Name",
      type: "string",
      validation: (rule) => rule.required(),
    }),
    defineField({
      name: "slug",
      title: "Slug",
      type: "slug",
      options: { source: "name" },
      validation: (rule) => rule.required(),
    }),
  ],
});
```

Migration Steps and Tools Used

1. Data Migration Steps

1. Received data through the provided API.

2. Exported data from the API in JSON format.

3. Transformed the data to match the new schema structure.

4. Imported the formatted data into Sanity CMS using their CLI tool.

5. Create scripts folder and make a file with name ImportSanityData.mjs

6.Where I received my all data

```
import axios from 'axios';
import dotenv from 'dotenv';
import { fileURLToPath } from 'url';
import path from 'path';
import slugify from 'slugify';

const __filename = fileURLToPath(import.meta.url);
const __dirname = path.dirname(__filename);
dotenv.config({ path: path.resolve(__dirname, '../.env.local') });

const client = createClient({
    projectId: process.env.NEXT_PUBLIC_SANITY_PROJECT_ID,
    dataset: process.env.NEXT_PUBLIC_SANITY_DATASET,
    useCdn: false,
    token: process.env.SANITY_API_TOKEN,
    apiVersion: '2021-08-31'
});

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;
    }
```

2. Data Displayed on Frontend

Product Listing

Category Price Brands Sort by: Date Added

Pure Wood Round Center Table
Price: $320
View Details

Saint Tropez Tall Vase Plant Pot
Price: $280
View Details

Snacks Candy Serving Bowls With Wooden Tray
Price: $300
View Details

Snack Serving Tray
Price: $100
View Details

Infante Console Table
Price: $300
View Details

Egg Basket With Ceramics
Price: $180
View Details

3pcs Spice Jar Set
Price: $260
View Details

The Steel Chair
Price: $250
View Details

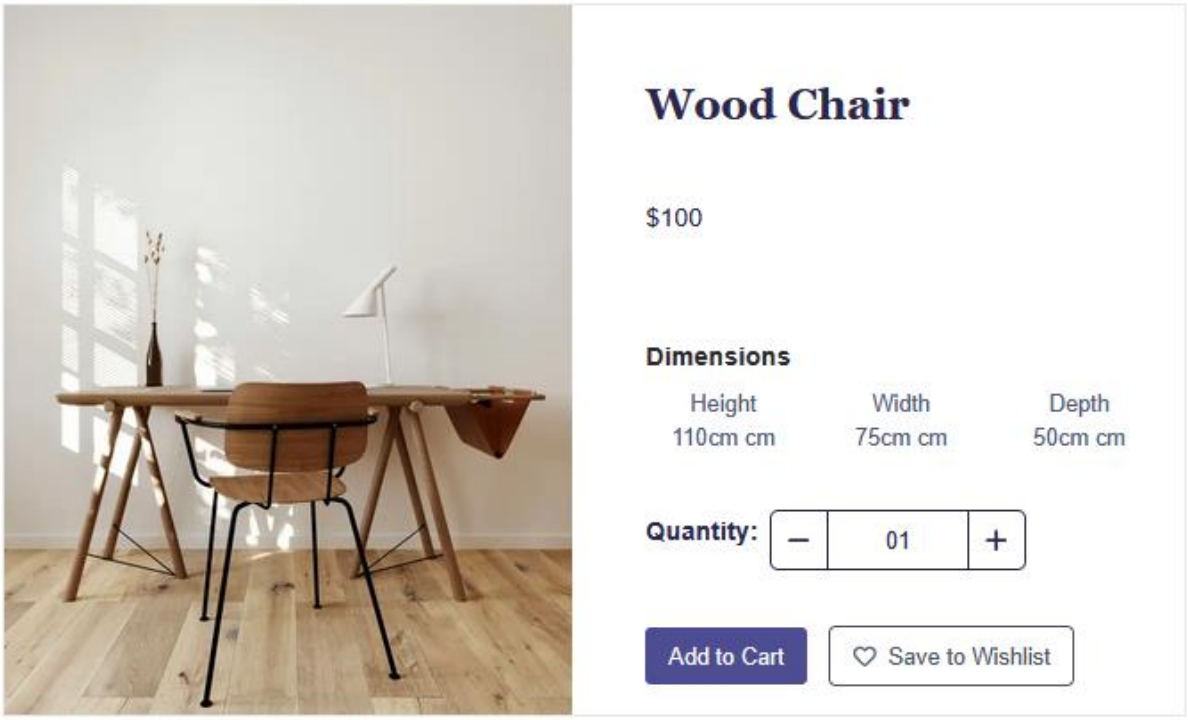
Wood Chair
Price: $100
View Details

Low Profile Planter Boxes
Price: $280
View Details

Hand Painted Table
Price: $550
View Details

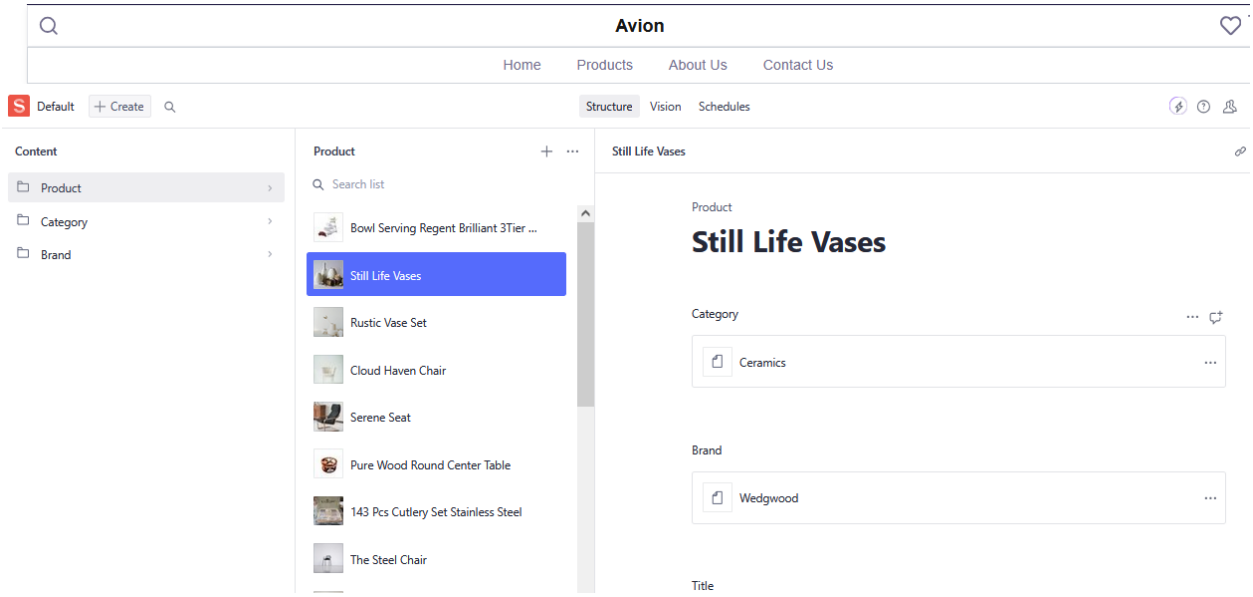
Water Set 7pcs Canba Royal Platinum
Price: $980
View Details

Product Details

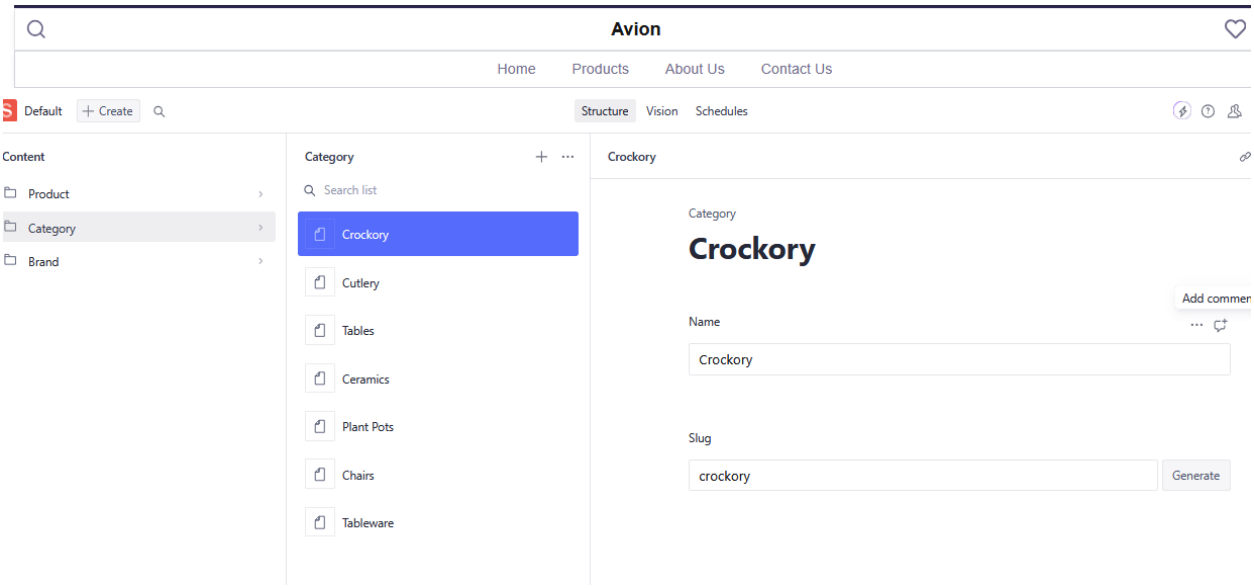


3. Populated Sanity CMS Fields

Products Sanity CMS



Category Sanity CMS



Brand Sanity CMS