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:

```
Qodo Gen: Options | Test this function
async function importData() {
   try {
     // Fetch data from external API
     const response = await axios.get('https://hackathon-apis.vercel.app/api/products');
     const products = response.data;
      //console.log(products)
      let counter=1;
     for (const product of products) {
       let imageRef = null;
       let catRef=null;
        // Upload image and get asset reference if it exists
       if (product.image) {
          //imageRef = await uploadImageToSanity(product.imageUrl);
          imageRef = await uploadImageToSanity(product.image);
        if(product.category.name){
          catRef = await createCategory(product.category,counter)
```

2. Frontend Integration

 Implemented useEffect and useState hooks to fetch and render data dynamically.

```
// Fetch product data from Sanity
useEffect(() => {
 const getData = async () => {
    if (!params.slug) return; // Handle null slug case
    const query = `*[_type == "product" && slug.current != '${params.slug}'][0]{
      "currentSlug": slug.current,
      name,
      price,
      description,
      dimensions,
      image {
       asset->{
          _id,
          url
      features
    const product = await client.fetch(query);
    setData(product);
 getData();
                                                                        Activate Windows
}, [params.slug]);
```

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({
     title: "Title",
      type: "string"
   }),
   defineField({
       name: "slug",
     title: "Slug",
     type: "slug"
   }),
   defineField({
      name: "image",
      type: "image",
```

```
title: "Product Image"
}),
defineField({
   name: "price",
   type: "number",
   title: "Price",
}),
defineField({
   name: "quantity",
   title: "Quantity",
  type: "number",
 }),
defineField({
   name: 'description',
   title: 'Description',
    type: 'text',
   description: 'Detailed description of the product',
  }),
  defineField({
   title: 'Features',
   type: 'array',
   of: [{ type: 'string' }],
```

```
description: 'List of key features of the product',
}),
defineField({
 name: 'dimensions',
 title: 'Dimensions',
 type: 'object',
 fields: [
    { name: 'height', title: 'Height', type: 'string' },
    { name: 'width', title: 'Width', type: 'string' },
    { name: 'depth', title: 'Depth', type: 'string' },
 ],
 description: 'Dimensions of the product',
}),
```

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({
       title: "Name",
      type: "string",
   }),
   defineField({
       name: "slug",
       title: "Slug",
       type: "slug",
       options: {
```

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.

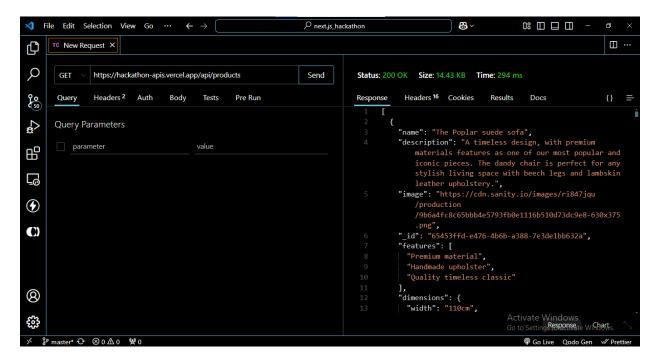
2. Tools Used

- **CLI**: For importing/exporting data.
- ThunderClient: To verify and test API endpoints.
- Next.js: For seamless frontend integration.

3. Migration Script Example

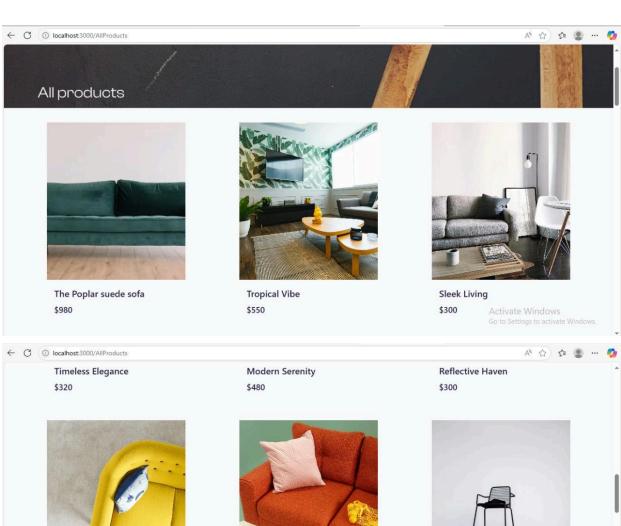
sanity dataset import exported-data.json production

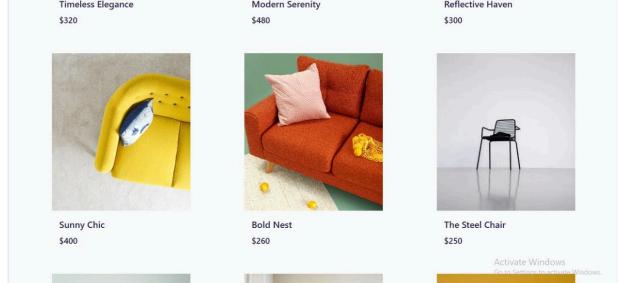
1. API Calls



2. Data Displayed on Frontend

Product Listing



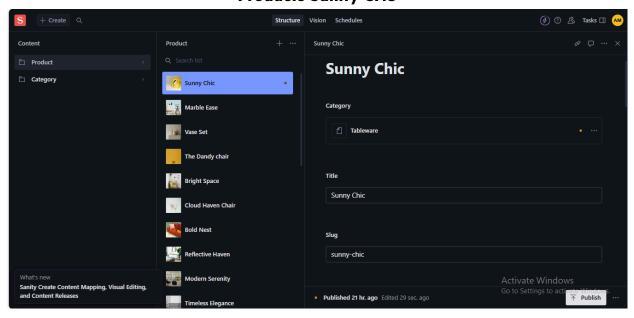


Product Details

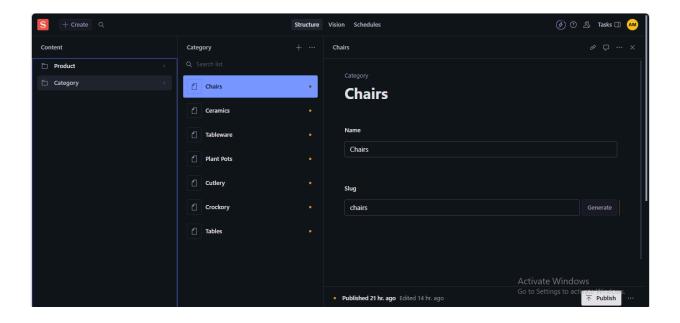


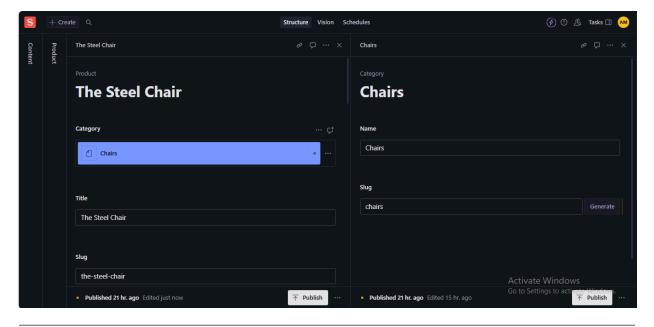
3. Populated Sanity CMS Fields

Products Sanity CMS



Category Sanity CMS





Day 3 Checklist:

Task	Status
API Understanding	✓

Schema Validation	v
Data Migration	V
API Integration In Next.js	V
Submission Preparation	V