

API integration process

Prepared by: Alishba Moin

Roll No: 00453212

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;
    // Iterate over the products
    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();
}, [params.slug]);
```

Activate Windows
Go to Settings to activate

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: "name",  
  
        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({

        name: 'features',

        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({

    name: "name",

    title: "Name",

    type: "string",

  }),

  defineField({

    name: "slug",

    title: "Slug",

    type: "slug",

    options: {

      source: "name",

    }

  })

]

}))
```

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.

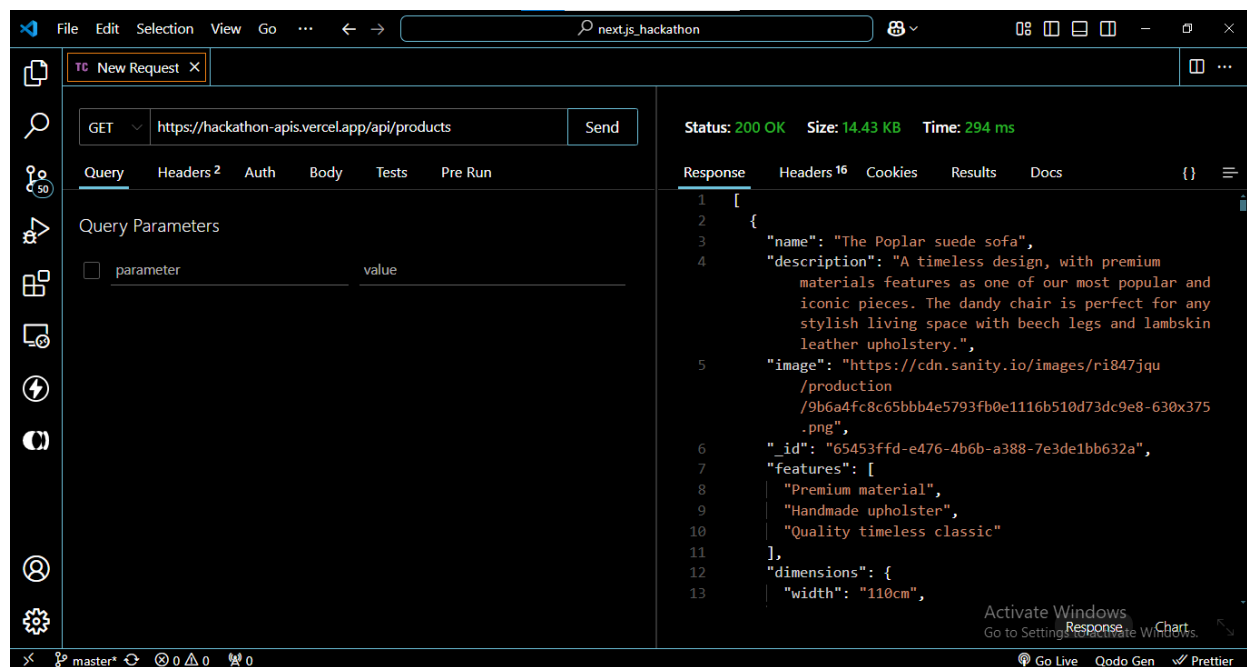
2. Tools Used

- **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

← ↻ localhost:3000/AllProducts 🔊 ☆ ⚙️ 👤 ⋮


All products



The Poplar suede sofa
\$980



Tropical Vibe
\$550




Sleek Living
\$300

Activate Windows
Go to Settings to activate Windows.


← ↻ localhost:3000/AllProducts 🔊 ☆ ⚙️ 👤 ⋮

Timeless Elegance
\$320



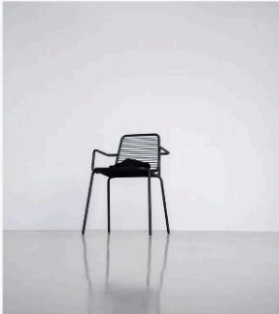
Sunny Chic
\$400

Modern Serenity
\$480



Bold Nest
\$260


Reflective Haven
\$300



The Steel Chair
\$250

Activate Windows
Go to Settings to activate Windows.

Product Details



Nordic Elegance
\$280

Description

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.

Features

- Premium material
- Handmade upholstery
- Quality timeless classic

Amount

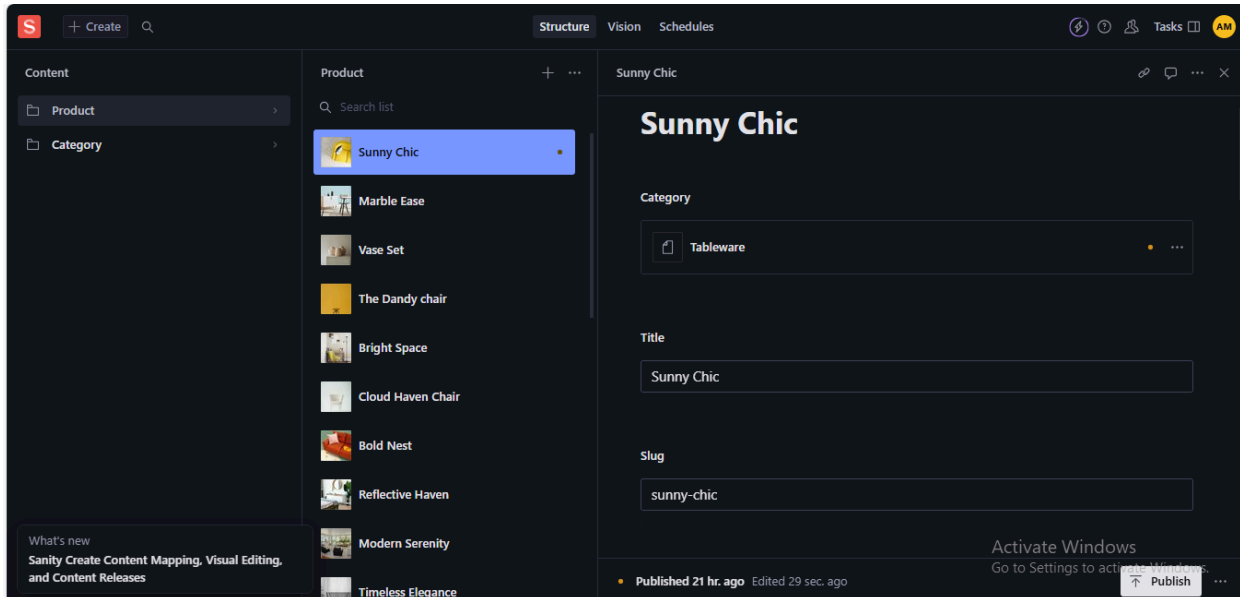
- 1 +

Add to Cart

Activate Windows
Go to Settings to activate Windows.

3. Populated Sanity CMS Fields

Products Sanity CMS



The screenshot shows the Sanity CMS interface for a product named 'Sunny Chic'. The left sidebar contains a 'Content' section with 'Product' and 'Category' filters. The main content area displays the product details for 'Sunny Chic', including its category 'Tableware', title 'Sunny Chic', and slug 'sunny-chic'. The product is published 21 hours ago and edited 29 seconds ago. The interface also includes a 'Structure' tab and a 'Schedules' tab.

Product

Sunny Chic

Marble Ease

Vase Set

The Dandy chair

Bright Space

Cloud Haven Chair

Bold Nest

Reflective Haven

Modern Serenity

Timeless Elegance

Sunny Chic

Category

Tableware

Title

Sunny Chic

Slug

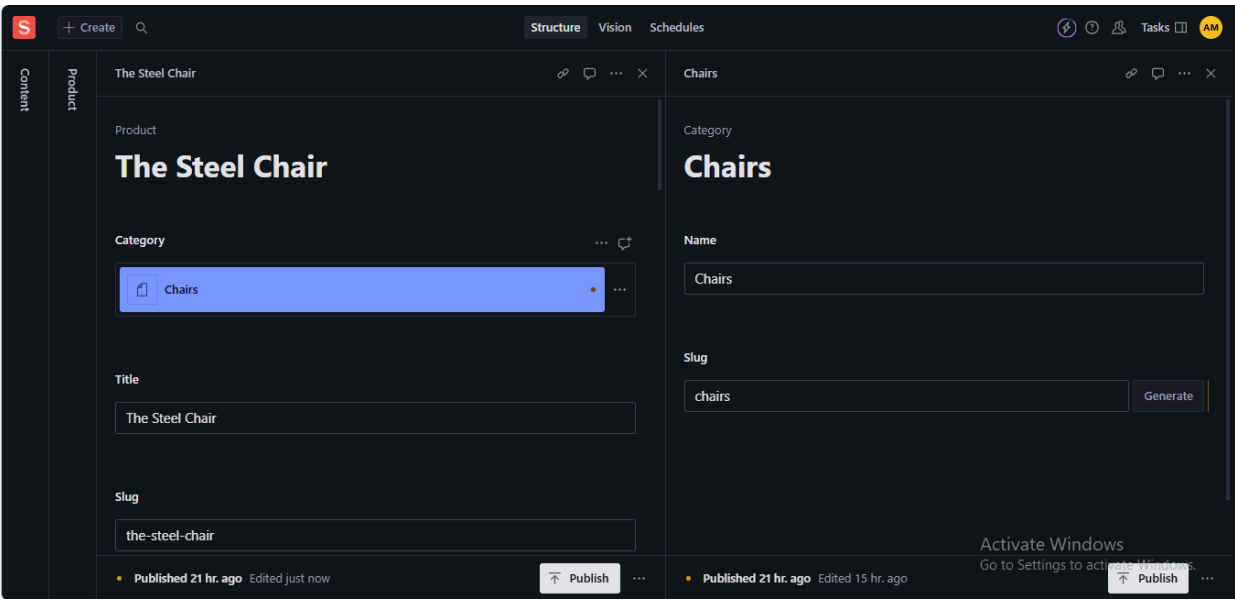
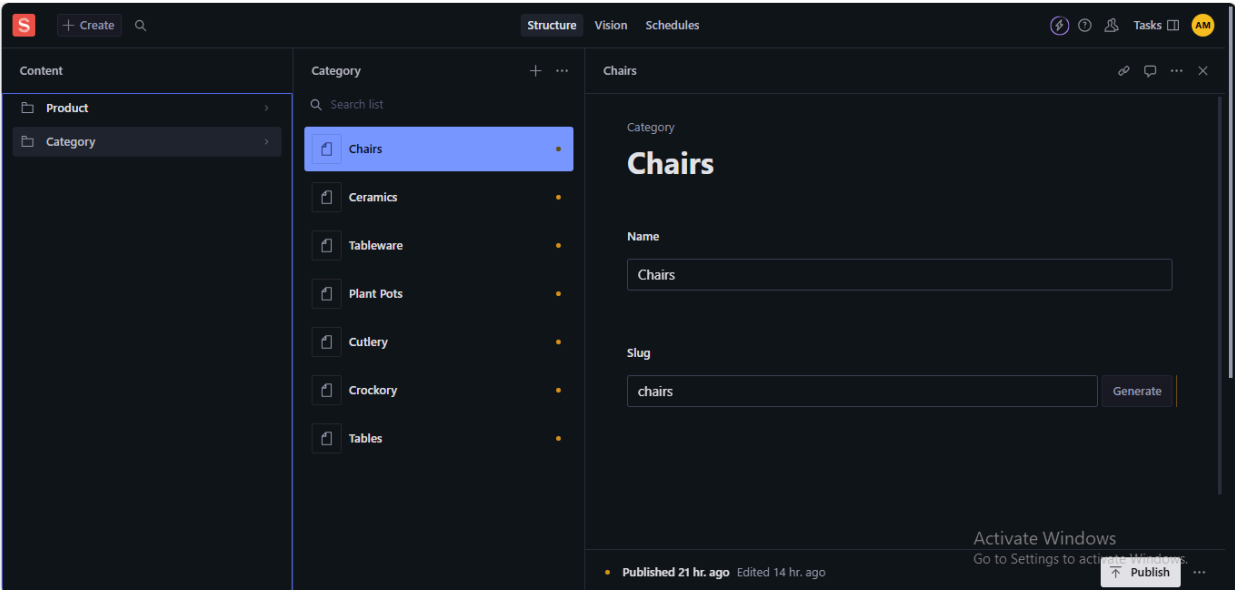
sunny-chic

Published 21 hr. ago Edited 29 sec. ago

Activate Windows
Go to Settings to activate Windows.

Publish

Category Sanity CMS



Day 3 Checklist:

Task	Status
API Understanding	✓

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