

DAY 3 - API INTEGRATION REPORT

“Furniture Marketplace”

This documentation provides an overview of the work completed during Day 3 of API Integration and Migration. The focus of the day was on:

- Fetched data from external APIs
- Validated schemas
- Configured Sanity
- Displayed dynamic data on the frontend

Key Accomplishments:

- Successfully integrated APIs into the marketplace application.
- Migrated and optimized data to improve performance and scalability.
- Handled edge cases to ensure efficient and smooth data flows.
- Enhanced application performance through improved asynchronous
- operations.

Sanity Schema for Product Below is the schema definition for the Product document in Sanity Studio:

```
1
2 import { ShoppingBagIcon } from "lucide-react";
3 import { defineType } from "sanity";
4
5 export const product = defineType({
6   name: "product",
7   title: "Product",
8   type: "document",
9   icon: ShoppingBagIcon,
10  fields: [
11    {
12      name: "title",
13      title: "Title",
14      validation: (rule) => rule.required(),
15      type: "string"
16    },
17    {
18      name: "description",
19      type: "text",
20      validation: (rule) => rule.required(),
21      title: "Description",
22    },
23    {
24      name: "productImage",
25      type: "image",
26      validation: (rule) => rule.required(),
27      title: "Product Image"
28    },
29    {
30      name: "price",
31      type: "number",
32      validation: (rule) => rule.required(),
33      title: "Price",
34    },
35    {
36      name: "tags",
37      type: "array",
38      title: "Tags",
39      of: [{ type: "string" }]
40    },
41    {
42      name: "discountPercentage",
43      type: "number",
44      title: "Discount Percentage",
45    },
46    {
47      name: "isNew",
48      type: "boolean",
49      title: "New Badge",
50    }
51  ]
52 });
```

Groq:

API Fetching Code Snippet This is the API fetching code to retrieve Product data from Sanity:

```
const res = await client.fetch(groq`*[_type=="product"]{
  _id,
  title,
  "imageUrl": productImage.asset->url,
  price,
  tags,
  discountPercentage,
  description,
  isNew
}`);
```

The screenshot displays the Sanity Studio interface. At the top, there are tabs for 'Default', '+ Create', and a search icon. Below these are tabs for 'Structure', 'Vision', and 'Schedules'. The main area is divided into several sections:

- Dataset:** 'production' (dropdown)
- API Version:** 'Other' (dropdown)
- Custom API Version:** 'v2025-01-18' (dropdown)
- Perspective:** 'raw' (dropdown)
- Query URL:** 'https://5yl6enqw.api.sanity.io/v2025-01-18/data/query/p' (copy icon)

The **QUERY** section contains the following Groq query:

```
1 *[_type=="product"]{
2   _id,
3   title,
4   "imageUrl": productImage.asset->url,
5   price,
6   tags,
7   discountPercentage,
8   description,
9   isNew
10 }
```

The **PARAMS** section shows an empty object:

```
1 {
2 }
3 }
```

The **RESULT** section displays the JSON response for the first item:

```
[..] 24 items
0: {..} 8 properties
  isNew: true
  _id: AJVJV0bFUPWewZSbi5aV2i
  title: Bed
  imageUrl: https://cdn.sanity.io/images/5yl6enqw/production/b6551d6252d30e222875fbc5d91c6edca324a1d-3518x3238.jpg
  price: 250
  tags: [..] 5 items
    0: bed
    1: furniture
    2: sleep
    3: cozy
    4: modern
  discountPercentage: null
  description: Introducing the Bed-your sanctuary for rest and relaxation, designed with both comfort and style in mind. This timeless piece is crafted to transform your bedroom into a peaceful retreat, offering a perfect balance of support, elegance, and durability. Whether you're outfitting a master bedroom or a guest room, the Bed ensures that every night is filled with restful sleep and every morning starts with ease. Constructed from high-quality materials, the Bed provides both sturdy support and luxurious comfort. The frame features sleek lines and a minimalist design, making it an ideal choice for a variety of interior styles, from modern to traditional. The soft yet supportive surface ensures that you can unwind in ultimate
```

At the bottom, there are buttons for 'Fetch' and 'Listen', along with execution metrics: 'Execution: 18ms' and 'End-to-end: 340ms'. There are also buttons for 'Save result as' with options for 'JSON' and 'CSV'.

ImportData.mjs

Importing Data to Sanity Below is the code snippet to upload product images and data to Sanity:

```
import { createClient } from '@sanity/client';

const client = createClient({
  projectId: 'your-projectId',
  dataset: 'production',
  useCdn: true,
  apiVersion: '2025-01-13',
  token: '<your-token>'
});

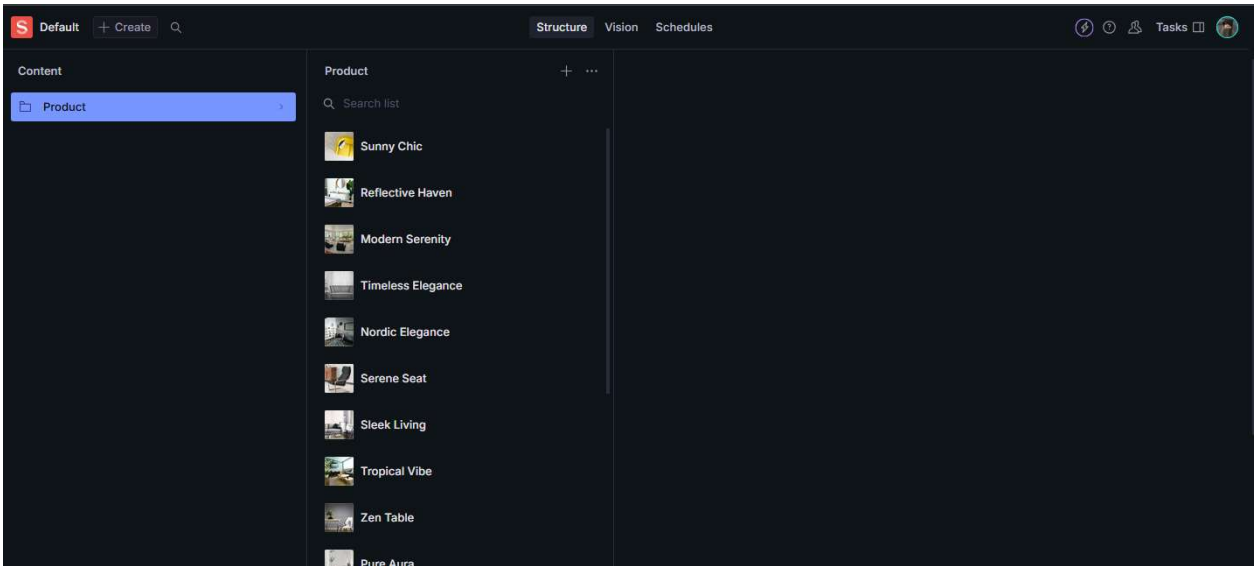
async function uploadImageToSanity(imageUrl) {
  try {
    console.log(`Uploading image: ${imageUrl}`);
    const response = await fetch(imageUrl);
    if (!response.ok) {
      throw new Error(`Failed to fetch image: ${imageUrl}`);
    }

    const buffer = await response.arrayBuffer();
    const bufferImage = Buffer.from(buffer);

    const asset = await client.assets.upload('image', bufferImage, {
      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;
  }
}
```

Final Results



Modren-Table
Luxury modren wooden table
\$1016.85



Cafe-Chair
Stylish cafe chair
\$4500



2-Seater-Sofa
Compact 2 Seater Sofa
\$17000



Single Seater
Single Seater Luxury sofa
\$10000 ~~\$20000~~

