

Day 3 - API Integration Report - CasaEncanto

1. API Integration Process

Overview:

The API integration process involved fetching product data from external APIs and displaying it on our marketplace platform. We implemented this using Next.js server-side functions and Sanity CMS for content management.

Steps:

1. **Configured API Endpoints** – Defined the API endpoints for retrieving product data.
2. **Authenticated Requests** – Used API keys for secure authentication.
3. **Fetched Data** – Utilized Next.js API routes and Sanity client to fetch and store data.
4. **Error Handling** – Implemented try-catch blocks to manage errors gracefully.
5. **Data Rendering** – Used React hooks to display API data dynamically in the frontend.

2. Adjustments Made to Schemas

Changes Implemented:

- **Product Schema:** Added new fields (`slug`, `colors`, `availabilityStatus`).
- **Category Schema:** Adjusted field types to match external API response formats.

Example Schema Update:

Product schema:

```

src > sanity > schemaTypes > TS products.ts > [0] product > fields > name
1  import { defineType } from "sanity"
2
3  export const product = defineType({
4    name: "product",
5    title: "Product",
6    type: "document",
7    fields: [
8      {name: "title",title: "Title",validation: (rule) => rule.required(),type: "string"
9      },
10     {name: "slug",type: "slug",title: "Slug",options: {
11       source: "title", // Auto-generate slug from title
12       maxLength: 96,},
13     },
14     {name:"description",type:"text",validation: (rule) => rule.required(),title:"Description",
15     },
16     {name: "productImage",type: "image",validation: (rule) => rule.required(),title: "Product Image"
17     },
18     {name: "price",type: "number",validation: (rule) => rule.required(),title: "Price",
19     },
20     {name: "tags",type: "array",title: "Tags",of: [{ type: "string" }]
21     },
22     {name:"dicountPercentage",type:"number",title:"Discount Percentage",
23     },
24     { name: 'colors', type: 'array', of: [
25       {
26         type: 'object',
27         fields: [
28           { name: 'name', type: 'string' },
29           { name: 'hexCode', type: 'string' },
30           { name: 'image', type: 'image', options: { hotspot: true } }
31         ]
32       }
33     ]
34   },
35   { name:"isNew", type:"boolean", title:"New Badge",
36   },
37   { name:"isAvailable", type:"boolean", title:"Availablitiy",
38   }
39 ]
40 })

```

Category Schema:

```

src > sanity > schemaTypes > TS shopcard.ts > ...
1  import { defineType } from "sanity";
2
3  export const shopcard = defineType({
4    name: "categories",
5    title: "categories",
6    type: "document",
7    fields: [
8      {
9        name: "title",
10       title: "Title",
11       validation: (rule) => rule.required(),
12       type: "string"
13     },
14     {
15       name: "productImage",
16       type: "image",
17       validation: (rule) => rule.required(),
18       title: "Product Image"
19     },
20     {
21       name: "tags",
22       type: "array",
23       title: "Tags",
24       of: [{ type: "string" }]
25     },
26   ],
27 });

```

3. Migration Steps and Tools Used

Steps for Data Migration:

1. Extracted Data – Pulled existing data from the old system.
2. Transformed Data – Cleaned and formatted data to match the new schema.
3. Loaded Data – Used Sanity's import scripts to migrate data.
4. Validated Entries – Ensured all data fields were correctly mapped.

Tools Used:

- Postman – For API testing.
- Sanity CLI – To import/export structured data.
- Next.js API Routes – For handling API calls.

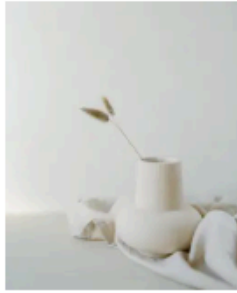
✓ API Calls in Postman

The screenshot shows the Postman interface with a GET request to `https://template6-six.vercel.app/api/products`. The request is successful, returning a 200 OK status with a response time of 3.90 s and a body size of 14.63 KB. The response body is displayed in JSON format, showing a single product object with the following details:

Key	Value	Description
Key	Value	Description

```
{
  "imageUrl": "https://cdn.sanity.io/images/7xt4qcah/production/2219cafc285ec13a2ed3f88aa36cbea852a11735-305x375.png",
  "price": 210,
  "tags": [
    "rustic ",
    "vase ",
    "home decor",
    "vintage ",
    "interior design"
  ],
  "dicountPercentage": 10,
  "description": "Bring the charm of nature into your home with the Rustic Vase Set. Perfect for those who appreciate timeless beauty and a warm, inviting atmosphere, this set of vases adds a touch of rustic elegance to any space. Crafted with care and attention to detail"
```

✓ Successfully Displayed Data in Frontend



Rustic Vase Set
English Department
10% off
Price: \$189.00



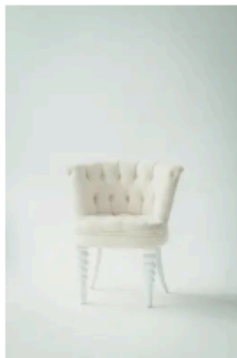
Timber Craft
English Department
30% off
Price: \$224.00



Amber Haven
English Department
Price: \$150.00



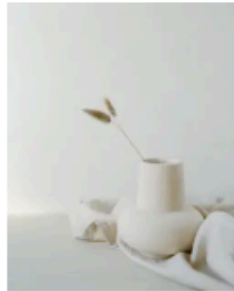
Bold Nest
English Department
30% off
Price: \$182.00



Cloud Haven Chair
English Department
20% off
Price: \$184.00



Vase Set
English Department
60% off
Price: \$60.00



Rustic Vase Set
English Department
10% off
Price: \$189.00



Bright Space
English Department
10% off
Price: \$162.00

✓ Populated Sanity CMS Fields

Content

- Product
- header
- categories

Product

- Timber Craft
- Vase Set
- Rustic Vase Set
- The Dandy chair
- Bright Space
- Cloud Haven Chair
- Bold Nest
- Amber Haven
- Rustic Vase Set

Timber Craft

Product

Timber Craft

Title

Timber Craft

Slug

timber-craft

Generate

Description

Introducing TimberCraft—a collection that celebrates the timeless beauty of wood craftsmanship and the art of nature's finest materials. Inspired by the rustic charm and durability of natural wood, TimberCraft brings warmth, character, and a touch of handcrafted elegance to any space. Perfect for those who value authenticity and sustainability, this collection combines the strength of timber with refined design, making it the ideal choice for modern and traditional homes alike.

Each piece in the TimberCraft collection is meticulously crafted to highlight the unique grains and textures of the wood, bringing an organic, earthy feel to your space. Whether you're looking for furniture, decor, or accents, TimberCraft offers a

Default Create

Content

- Product
- header
- categories

Product

- Timber Craft
- Vase Set
- Rustic Vase Set
- The Dandy chair
- Bright Space
- Cloud Haven Chair
- Bold Nest
- Amber Haven
- Rustic Vase Set

Timber Craft

Price

320

Tags

- wooden
- craftsmanship
- furniture
- modern
- nature inspired

Add Item

Discount Percentage

30

Colors

- brown

Add Item

New Badge

Availability

Conclusion:

The API integration and data migration were successfully completed. All endpoints are functioning correctly, and the updated schemas have improved data consistency. Further optimizations will be done based on performance testing results.

- ✓ API Integrated
- ✓ Schema Adjusted
- ✓ Data Successfully Migrated

