

# Day – 3 : API Integration Report

## Api Integration Process

### Overview:

During Day 3, we focused on integrating APIs to establish seamless communication between the frontend, backend, and Sanity CMS. The integration ensured dynamic data retrieval and updates while maintaining performance and scalability.

### Steps:

1. Identified the required API endpoints for data handling (e.g., fetching products, orders, and user details).
2. Configured API routes in the Next.js application to interact with Sanity CMS.
3. Debugged and tested API calls to verify successful data flow between components.

## Schema Adjustments

### Adjustments Made:

1. Modified the "Product" schema to include additional fields like "tags" and "category" for better filtering.
2. Updated the "Order" schema to store additional information..
3. Ensured all fields had appropriate validation rules to maintain data consistency.

## Migration Steps and Tools Used

### Migration Steps:

1. Clone the given repository of migration script.
2. Create Sanity project in my Avion website project.
3. Generate token of Sanity project.
4. Replace Token and Project id with avion sanity project's token and projectId in migration script.
5. Compile ts file and run.

## 6. Migration Completed.

### Tools Used:

- Sanity CLI for schema updates.
- Migration script.

## Screenshots

### 1. API Calls:

```
tags: [ 'new ceramics', 'popular products' ],
image: 'https://cdn.sanity.io/images/k4usnf8h/production/e2cc69a6c9f9d1ff1fcfbe839844240e16f5f758-305x375.png'
},
{
  image: 'https://cdn.sanity.io/images/k4usnf8h/production/8795ff7bdb3d810dbe0c3eb52cd22116c9115bce-305x375.png',
  _id: 'product-23',
  price: 150,
  name: 'Vase Set',
  tags: [ 'new ceramics', 'popular products' ]
},
{
  _id: 'product-3',
  price: 210,
  name: 'Rustic Vase Set',
  tags: [ 'new ceramics' ],
  image: 'https://cdn.sanity.io/images/k4usnf8h/production/2219caf3c285ec13a2ed3f88aa36cbea852a11735-305x375.png'
},
{
  price: 100,
  name: 'Wood Chair',
  tags: [ 'popular products' ],
  image: 'https://cdn.sanity.io/images/k4usnf8h/production/638c3039e0746f217acbacd325a2847939d92b08-2831x3534.jpg',
  _id: 'product-5'
},
{
  price: 200,
  name: 'The Lucky Lamp',
  tags: [ 'new ceramics' ],
  image: 'https://cdn.sanity.io/images/k4usnf8h/production/c10750f3c15f8807251977fe5e042b0a6cee55ab-305x375.png',
  id: 'product-7'
```

### 2. Data Displayed on Frontend:

## New ceramics



The Dandy chair  
£150



Vase Set  
£150



Rustic Vase Set  
£210



The Lucky Lamp  
£200

[View collection](#)

## Our popular products



TimberCraft  
£320



The Dandy chair  
£150



Vase Set  
£150



Wood Chair  
£100

[View collection](#)

### 3. Populated Fields in Sanity CMS:

S

Default

+ Create

Q

StructureVisionSchedules

Content

Product

Category

Product

Search list

Vase Set

Serene Seat

The Poplar suede sofa

TimberCraft

The Steel Chair

Pure Aura

Wood Chair

Marble Ease

The Dandy chair

Bright Space

Cloud Haven Chair

Bold Nest

Sunny Chic

Vase Set

Product

Vase Set

Category

Plant Pots

Title

Vase Set

Slug

vase-set

Product Image

Published 42 min. ago

Publish

S

Default

+ Create

Q

StructureVisionSchedules

Content

Product

Category

Category

Search list

Tableware

Chairs

Ceramics

Tables

Cutlery

Crockory

Plant Pots

Ceramics

Category

Ceramics

Name

Ceramics

Slug

ceramics

Generate

Published 7 hr. ago

Publish

## Code Snippets

### API Integration Example:

```
const [productData, setProductData] = useState<product[] | []>([])
useEffect(() => {
  async function dataFetch() {
    const data = await client.fetch(`*_type == "product" &&
      ("popular products" in tags || "new ceramics" in tags){
        _id,
        price,
        name,
        tags,
        "image" : image.asset->url
      }`)
    setProductData(data)
  }
  dataFetch()
}, [])
const popularProducts = productData.filter(item => item.tags.includes(
  "popular products"));
const newCeramics = productData.filter(item => item.tags.includes(
  "new ceramics"));
```

### Conclusion:

Day 3 was pivotal in ensuring seamless API integration and data migration. With the foundation now laid.