## 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:

- 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/2219cafc285ec13a2ed3f88aa36cbea852a11735-305x375.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



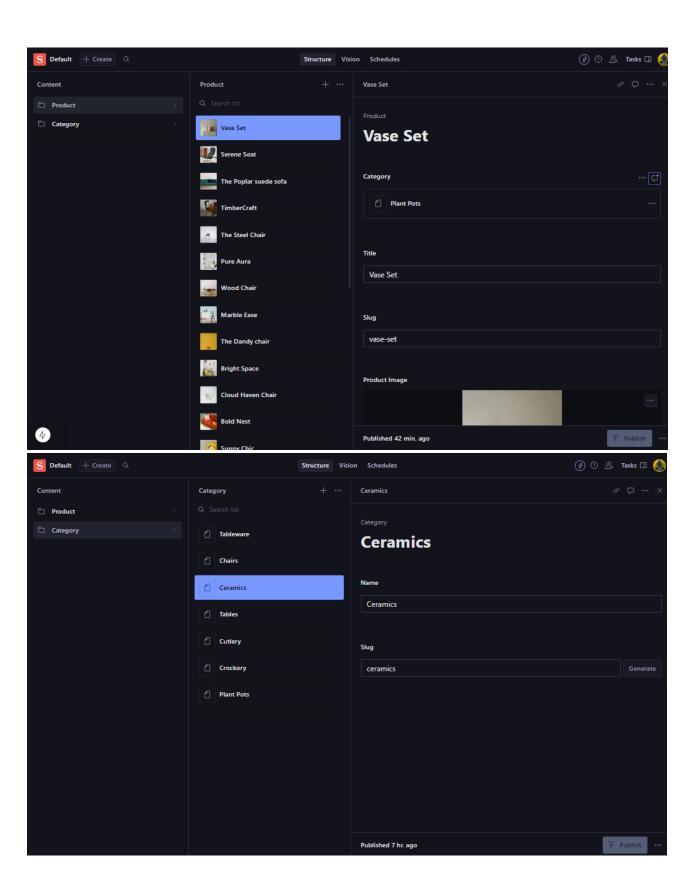
Vase Set £150



Wood Chair £100

View collection

### 3. Populated Fields in Sanity CMS:



# **Code Snippets**

### **API Integration Example:**

```
const [productData, setProductData] = useStatecproduct[] | []>([])
useEffect(() => {
    async function dataFetch() {
        const data = await client.fetch(`*[_type == "product" &&
        ("popular products" in tags || "new ceramics" in tags)]{
                        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.