API Integration Report - Bandage

Brand Name: Bandage
Theme: A focus on modern, vibrant, and lightweight fashion, emphasizing summer comfort and style.

Day 3 Hackathon Tasks:

API Integration:

Step1: API Endpoint Setup

- ➢ API Endpoint: ` https://template6-six.vercel.app/api/products `
- ➢ Data Structure: The API provides product data, including fields like name, description, Product Image, price, Discount Percentage
- ➢ Library Used: Axios was used to fetch data from the API.

Step2: Fetch Data from API

```javascript
async function importProducts() {
  try {
    const response = await fetch('https://template6-six.vercel.app/api/products');

    if (!response.ok) {
      throw new Error(`HTTP error! Status: ${response.status}`);
    }

    const products = await response.json();

    for (const product of products) {
      await uploadProduct(product);
    }
  } catch (error) {
    console.error('Error fetching products:', error);
  }
}
```

Adjustment Made to Schemas:

Product Schema

```javascript
import { defineType } from "sanity"

export const product = defineType({
    name: "product",
    title: "Product",
    type: "document",
    fields: [
        {
            name: "title",
            title: "Title",
            validation: (rule) => rule.required(),
            type: "string"
        },
        {
            name:"description",
            type:"text",
            validation: (rule) => rule.required(),
            title:"Description",
        },
        {
            name: "productImage",
            type: "image",
            validation: (rule) => rule.required(),
            title: "Product Image"
        },
        {
            name: "price",
            type: "number",
            validation: (rule) => rule.required(),
            title: "Price",
        },
        {
            name: "tags",
            type: "array",
            title: "Tags",
            of: [{ type: "string" }]
        },
        {
            name:"dicountPercentage",
            type:"number",
            title:"Discount Percentage",
        },
        {
            name:"isNew",
            type:"boolean",
```

```
            title:"New Badge",
        }
    ]
})
```

Migration Steps and Tool Used:

Migration Steps:

1. Environment Setup:

- Installed required dependencies: `@sanity/client`, `axios`, `dotenv`.
- Created a `.env.local` file to securely store environment variables.

2. Data Fetching:

- Retrieved product data from the API endpoint using Axios.
- Parsed and logged the data to confirm its structure and integrity.

3. Image Upload:

- Downloaded images from the API's `image` field using **Axios**.
- Uploaded the downloaded images to **Sanity's Asset Manager** using the **Sanity client**.

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

    const asset = await client.assets.upload('image', bufferImage, {
      filename: imageUrl.split('/').pop(),
    });
```

4. Document Creation:

- Created Sanity documents for each product by combining API data and uploaded image references.

Tool Used:

Sanity Client: For interacting with the Sanity CMS.

Screenshots

1. API Call Output:

```json
[
  {
    "id": "100001",
    "name": "Oak Wooden Chair",
    "description": "Durable and comfortable oak wood chair for home or office use.",
    "price": 45.99,
    "tags": [
      "furniture",
      "wood",
      "home"
    ],
    "sizes": [
      "Medium"
    ],
    "image": "https://m.media-amazon.com/images/I/71I3nSnHV3L.jpg",
    "rating": 4.7,
    "discountPercentage": 15,
    "category": "chair",
    "isFeaturedProduct": true,
    "stockLevel": 23
  },
  {
    "id": "100002",
    "name": "Mahogany Coffee Table",
    "description": "Elegant mahogany wood coffee table with intricate design.",
    "price": 99.99,
    "tags": [
      "furniture",
      "wood",
      "living room"
    ],
    "sizes": [
      "Large"
    ],
```

2. Frontend Display:

Rustic Vase Set
$210

Bring the charm of nature into your home with the Rustic Vase Set. Perfect for those who appreciate ...

rustic · vase · home decor
vintage · interior design

Add to Cart

Timber Craft
$320

Introducing TimberCraft — a collection that celebrates the timeless beauty of wood craftsmanship and t...

wooden · craftsmanship
furniture · modern

Add to Cart

Syltherine
$200

Introducing Syltherine — the ultimate fusion of elegance and power. Crafted for those who demand exc...

living · fancy · elegance
design

Add to Cart

Wood Chair
$100

Introducing the Wood Chair — a beautifully crafted piece that blends timeless simplicity with natural ...

wood · chair · furniture
classic · rustic

Add to Cart

Retro Vibe
$340

Introducing RetroVibe — a perfect blend of vintage charm and modern style, designed for those who appr...

retro · vintage · furniture
modern · decor

Add to Cart

The Lucky Lamp
$200

Introducing The Lucky Lamp — a unique blend of charm, elegance, and positive energy designed to illumi...

lamp · lucky · decor
lighting · vintage

Add to Cart

Pure Aura
$280

Experience the essence of tranquility and purity with PureAura — a collection designed to bring peace,...

pure · modern · elegance
interior design · furniture

Add to Cart

Timeless Elegance
$320

Introducing TimelessElegance — a collection that embodies the perfect fusion of classic beauty and mod...

timeless · elegance · furniture
classic · luxury

Add to Cart

3. Add to Cart Display:

Cart Summary

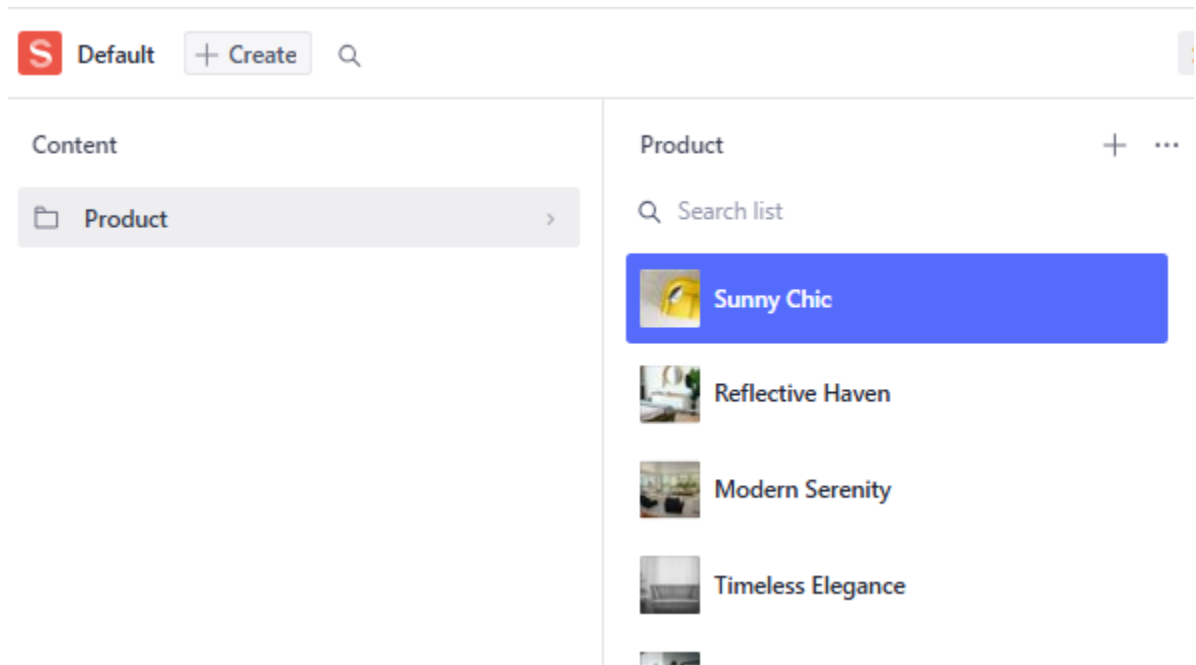| | Syltherine | $200.00 | − 1 + | Remove |
| | Marble Ease | $419.00 | − 1 + | Remove |

4. **Populated Sanity Field:**

Code Snippets:

API Integration

```
const response = await fetch('https://template6-six.vercel.app/api/products');
```

Migration Script

```javascript
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;
  }
}

async function uploadProduct(product) {
  try {
    const imageId = await uploadImageToSanity(product.imageUrl);
```

Final Check List:

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

Conclusion:

After successfully integrating the API and importing the data into Sanity, the process ensures seamless synchronization between external data sources and the Sanity CMS. The API integration allowed efficient data retrieval, while Sanity's robust infrastructure facilitated

structured data storage and management. This setup not only streamlines content updates but also enhances flexibility for future scalability and customization within the application.