

# **Day 3 - API Integration Report – Nike**

## API Integration Process

### **Step 1: API Endpoint Setup**

- **API Endpoint** ``https://template-03-api.vercel.app/api/products``
- **Data Structure:** The API provides product data, including fields like ``productName``, ``category``, ``price``, ``inventory``, ``colors``, ``status``, ``description``, and ``image``.
- **Library Used:** Axios was used to fetch data from the API.

### **Step 2: Fetch Data from API**

- **\*\*Code Snippet:\*\***

```
const response = await axios.get('https://template-03-api.vercel.app/api/products');  
const products = response.data.data;
```

- The API call retrieves an array of product objects from the endpoint, ensuring proper data serialization.

## **Adjustments Made to Schemas**

### **Product Schema Modifications**

1. **\*\*Field Updates:\*\***
  - ``colors``: Added as an optional array of strings to accommodate multiple color options.
  - ``image``: Configured as a Sanity image field with hotspot enabled for better image cropping and scaling.

## 2. \*\*Final Schema:\*\*

```
export const productSchema = {
  name: 'product',
  title: 'Product',
  type: 'document',
  fields: [
    {
      name: 'productName',
      title: 'Product Name',
      type: 'string',
    },
    {
      name: "slug",
      type: "slug",
      title: "Slug",
      options : {
        source : "productName"
      }
    },
    {
      name: 'category',
      title: 'Category',
      type: 'string',
    },
    {
      name: 'price',
      title: 'Price',
      type: 'number',
    },
    {
      name: 'inventory',
      title: 'Inventory',
      type: 'number',
    },
  ],
}
```

```

    },
    {
      name: 'colors',
      title: 'Colors',
      type: 'array',
      of: [{ type: 'string' }],
    },
    {
      name: 'status',
      title: 'Status',
      type: 'string',
    },
    {
      name: 'image',
      title: 'Image',
      type: 'image', // Using Sanity's image type for image field
      options: {
        hotspot: true,
      },
    },
    {
      name: 'description',
      title: 'Description',
      type: 'text',
    },
  ],
}

```

## Migration Steps and Tools 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 images to Sanity's Asset Manager using the Sanity client.
- Code to upload images:

```
const response = await axios.get(imageUrl, { responseType: 'arraybuffer' });
const buffer = Buffer.from(response.data);
const asset = await client.assets.upload('image', buffer, {
  filename: imageUrl.split('/').pop()
});
```

## Tools Used

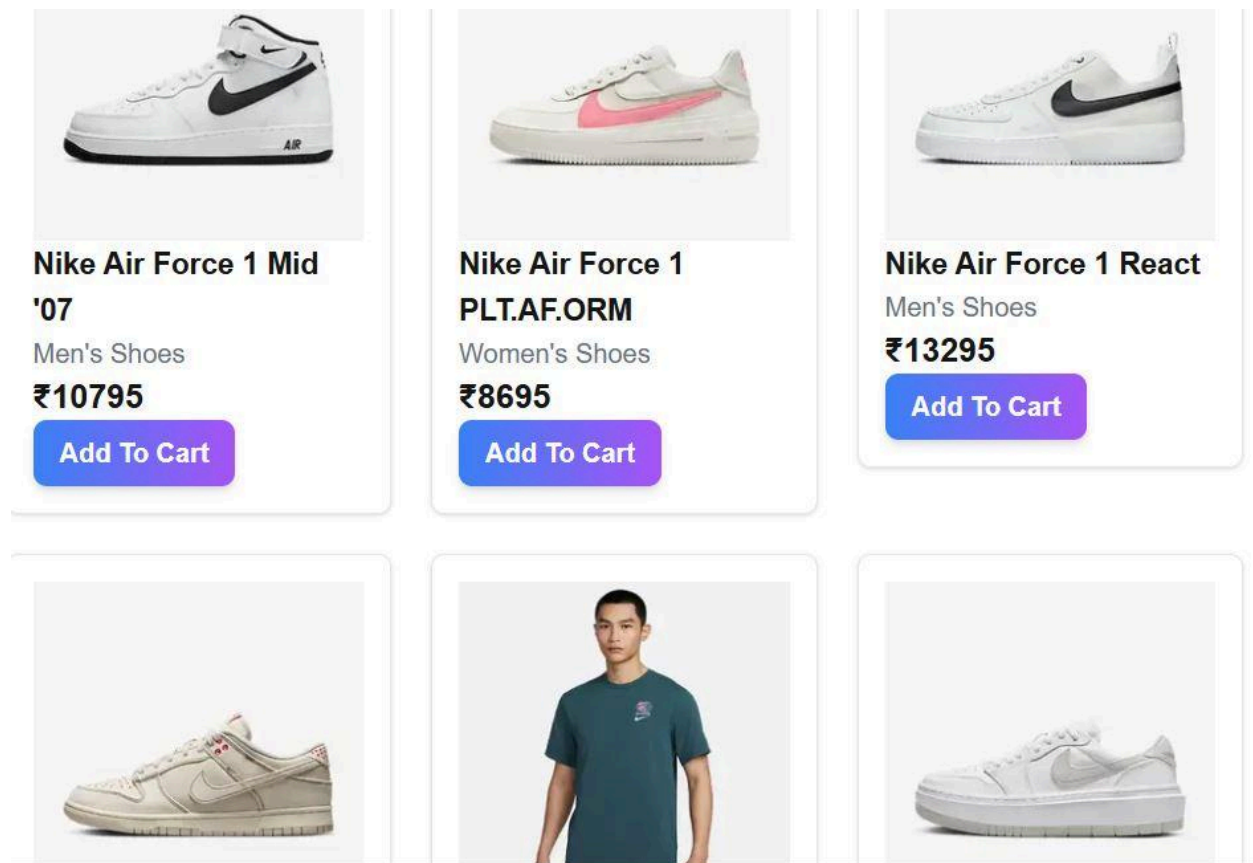
- \*\*Sanity Client:\*\* For interacting with the Sanity CMS.
- \*\*Axios:\*\* For making HTTP requests to fetch API data and images.
- \*\*Dotenv:\*\* To load environment variables from `.env.local`.

## Screenshots

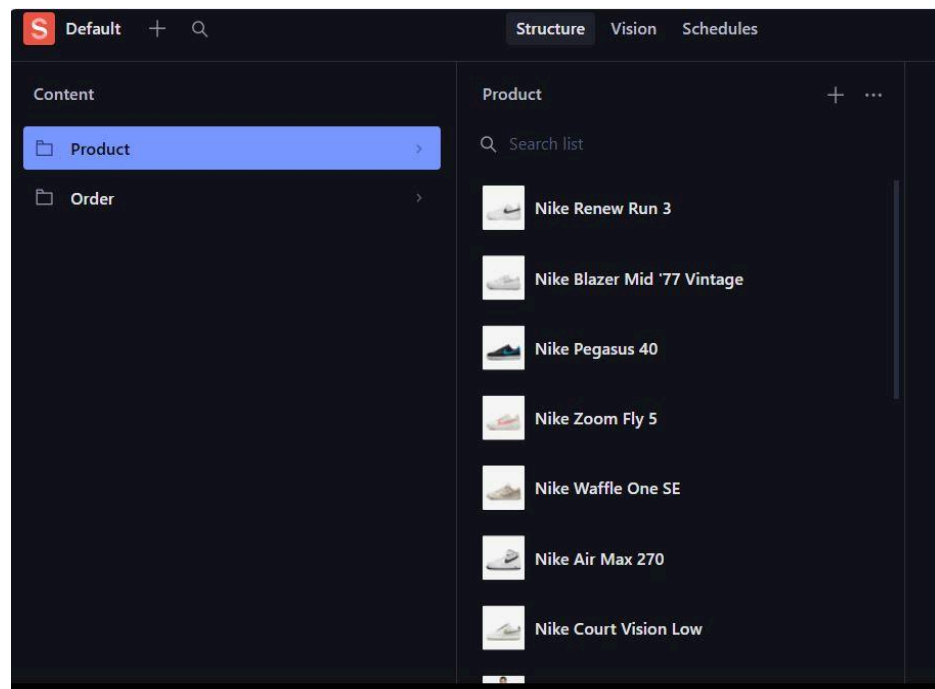
### 1. API Call Output

```
[
  {
    inventory: 8,
    status: 'Promo Exclusion',
    imageUrl: 'https://cdn.sanity.io/images/tcbr17hb/production/46998b7aa7bbf7d305755b2964da5bf167434d40-348x348.png',
    description: 'The Air Jordan 1 Elevate Low features a clean, minimal design with premium materials. Its platform sole adds a touch of height and modern edge, while ensuring comfort and durability for all-day wear.',
    colors: [ 'White' ],
    _id: '1hj3tJP0IaKgRmKawhsacU',
    productName: 'Air Jordan 1 Elevate Low',
    category: "Women's Shoes",
    price: 11895
  },
  {
    inventory: 25,
    imageUrl: 'https://cdn.sanity.io/images/tcbr17hb/production/1e45fde83014ff9ae9e4cbd280747842f522f47b-348x348.png',
    description: 'The Nike Court Vision Low blends basketball-inspired style with everyday comfort. Featuring a sleek design and durable materials, this versatile shoe is perfect for any casual wardrobe.',
    _id: '1hj3tJP0IaKgRmKawhsdCA',
    productName: 'Nike Court Vision Low',
    category: "Men's Shoes",
    price: 5695,
    colors: [ 'White' ],
    status: 'Just In'
  },
]
```

## 2. Frontend Display



## 3. Populated Sanity CMS Fields



## Code Snippets

### API Integration

```
const response = await axios.get('https://template-03-api.vercel.app/api/products');  
const products = response.data.data;
```

### Migration Script

```
async function uploadImageToSanity(imageUrl) {  
  try {  
    console.log(`Uploading image: ${imageUrl}`);  
    const response = await axios.get(imageUrl, { responseType: 'arraybuffer' });  
    const buffer = Buffer.from(response.data);  
    const asset = await client.assets.upload('image', buffer, {  
      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 importData() {  
  try {  
    console.log('migrating data please wait...');  
  
    // API endpoint containing car data  
    const response = await axios.get('https://template-03-api.vercel.app/api/products');  
    const products = response.data.data;  
    console.log("products ==>> ", products);  
  
    for (const product of products) {  
      let imageRef = null;  
      if (product.image) {  
        imageRef = await uploadImageToSanity(product.image);  
      }  
    }  
  }  
}
```

### Final Checklist

1. API Understanding : ☒
2. Schema Validation : ☒
3. Data Migration : ☒
4. API Integration in Next.js : ☒
5. Submission Preparation : ☒