

## DAY 3 → API INTEGRATION AND DATA MIGRATION

Integrate APIs with Sanity for smooth data migration.

### Day 3 -API Integration Report - Shop.Co

#### *API Integration Process:*

#### *Step 1- API EndPoint StepUP*

- **API EndPoint** : <https://template1-neon-nu.vercel.app/api/products>

- **Structure:** The API Provides →

```
{
  "name": "Casual Green Bomber Jacket",
  "description": "This stylish green bomber jacket offers a sleek and modern twist on a classic design. Made from soft and comfortable fabric, it features snap buttons and ribbed cuffs, giving it a sporty yet refined look. The minimalist style makes it perfect for layering over casual t-shirts or hoodies. Whether you're out with friends or just lounging, this jacket provides a laid-back yet fashionable vibe. Its muted green color adds a subtle, earthy tone that pairs well with a variety of outfits, making it a versatile addition to your casual wardrobe.",
  "price": 300,
  "isNew": true,
  "colors": [
    "Blue",
    "Red",
    "Black",
    "Yellow"
  ],
  "sizes": [
    "S",
    "XXL",
    "XL",
    "L"
  ],
  "_id": "0dc7c847-8599-45d0-b02c-34429f7a639e",
  "imageUrl": "https://cdn.sanity.io/images/7xt4qcah/production/4e2ed6a9eaa6e1413843e53f3113ccfd2104c301-278x296.png",
  "category": "hoodie",
  "discountPercent": 20
},
```

- **Library** : **Axios** is a promise-based JavaScript library that simplifies making HTTP requests, enabling efficient data fetching and sending to APIs.

## Step 2- Fetch Data API:

```
async function importProducts() {
  try {
    const response = await fetch('https://template1-neon-
nu.vercel.app/api/products');

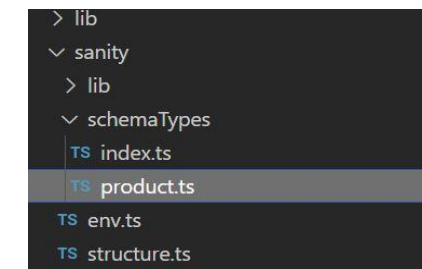
    if (!response.ok) {
      throw new Error(`HTTP error! Status:
${response.status}`);
    }

    const products = await response.json();

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

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

## Step 2- Make Schema:



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

export default defineType({
  name: "products",
  title: "Products",
  type: "document",
  fields: [
    {
      name: "name",
      title: "Name",
      type: "string",
    },
    {
      name: "price",
      title: "Price",
      type: "number",
    },
    {
      name: "description",
      title: "Description",
      type: "text",
    },
    {
      name: "image",
      title: "Image",
      type: "image",
    },
    {
      name: "category",
      title: "Category",
      type: "string",
      options: {
        list: [
          { title: "T-Shirt", value: "tshirt" },
          { title: "Short", value: "short" },
          { title: "Jeans", value: "jeans" },
          { title: "Hoddie", value: "hoodie" },
          { title: "Shirt", value: "shirt" },
        ],
      },
    },
    {
      name: "discountPercent",
      title: "Discount Percent",
      type: "number",
    },
    {
      name: "new",
      type: "boolean",
      title: "New",
    },
    {
      name: "colors",
      title: "Colors",
      type: "array",
      of: [{ type: "string" }],
    },
    {
      name: "sizes",
      title: "Sizes",
      type: "array",
      of: [{ type: "string" }],
    },
  ],
});
```

## Step 3-Migration Steps and Tool Used

### 1.Environment Setup:

- Installed required dependencies: `@sanity/client`, `axios`, `dotenv`.
- Create 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.
- Uploading images to sanity asset Manger using the Sanity Client.

```
async function uploadImageToSanity(imageUrl) {
  try {
    console.log(`Uploading image: ${imageUrl}`);

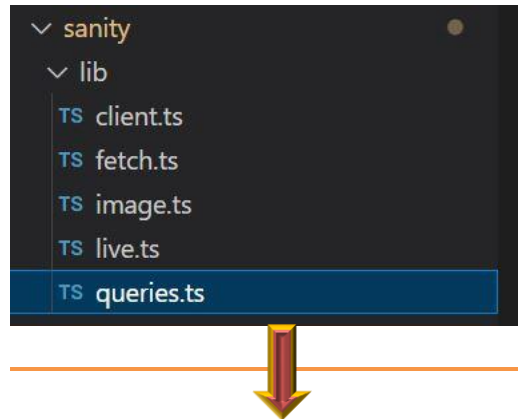
    const response = await fetch(imageUrl);
    if (!response.ok) {
      throw new Error(`Failed to fetch image: ${imageUrl}`);
    }

    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;
  }
}
```

## Step 4-We Fetch the API Through Sanity:



```
import { defineQuery } from "next-sanity";

export const allproducts = defineQuery(`
  *[_type == "products"]{
    _id,
    name,
    price,
    description,
    category,
    discountPercent,
    new,
    colors,
    sizes,
    "imageUrl": image.asset->url
  }
`)
```

### RESULT

```
{
  {
    _id: 'E3wKvIAWm1jkttyWGSa13t',
    new: null,
    sizes: [ 'L', 'XL', 'S', 'XXL' ],
    discountPercent: 0,
    colors: [ 'Green', 'Blue', 'Yellow', 'Red' ],
    imageUrl: 'https://cdn.sanity.io/images/cl7x1dq0/production/701cf9bdf7e58564aae72eb5b76896f02a1d4115-295x298.png',
    name: 'Gradient Graphic T-shirt',
    price: 145,
    description: 'Add a bold and artistic touch to your wardrobe with this unique graphic t-shirt. Featuring an eye-catching abstract swirl design in vibrant colors, it exudes energy and individuality. The "Just Walk Forward" slogan adds a motivational element, making this tee perfect for those who love to express themselves.\n' +
      '\n' +
      'Key Features:\n' +
      '\n' +
      'High-quality fabric for ultimate comfort and durability\n' +
      'Modern, unisex design suitable for casual outings or statement looks\n' +
      'Relaxed fit with a classic crew neckline\n' +
      'Unique printed details for a one-of-a-kind style\n' +
      'Pair it with jeans, joggers, or shorts to create a standout look!',
    category: 'tshirt'
  },
  {
    description: 'These classic black jeans offer a versatile and timeless addition to any wardrobe. Featuring a straight-leg cut, they provide a comfortable, flattering fit for various body types. Crafted from durable denim, these jeans are both stylish and practical, perfect for both casual outings and semi-formal occasions. The clean, dark black color adds a sleek and sophisticated touch, making them easy to pair with any top, from t-shirts to shirts or hoodies. With their classic design and premium fit, these black jeans are a must-have staple for any wardrobe.',
    category: 'jeans',
    discountPercent: 16,
    new: null,
    sizes: [ 'XXL', 'XL', 'L', 'S' ],
    _id: 'E3wKvIAWm1jkttyWGSa1S9',
    name: 'Classic Black Straight-Leg Jeans',
    price: 170,
    imageUrl: 'https://cdn.sanity.io/images/cl7x1dq0/production/b2264d466c3c96f8ae3f1192a2f73ac313221576-183x275.jpg',
    colors: [ 'Green', 'Blue', 'Yellow', 'Red' ]
  }
}
```

## Step 5-Display on Front-end:

```
<Link href={` /product/${item._id}`}>
  <div className="bg-gray-30 flex items-center justify-
center rounded-[20px] h-[300px] w-full overflow-hidden card">
    <Image
      src={item.imageUrl}
      alt={item.name}
      height={400}
      width={400}
      className="rounded-[20px] w-[300px] h-auto hover-
zoom"
    />
  </div>
</Link>
```

```
<h1 className="font-bold text-[20px] ">{item.name}</h1>
```

```
<h1 className="text-2xl font-bold">${item.price}</h1>
```



Gradient Graphic T-shirt

★★★★★ 4.5/ 5

\$145



Classic Black Straight-Leg  
Jeans

★★★★★ 4.5/ 5

\$170 ~~\$202~~ -16%



Classic Black Pullover Hoodie

★★★★★ 4.5/ 5

\$128



Skinny Fit Jeans

★★★★★ 4.5/ 5

\$240

# NOW IN SANITY:

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Shop.Co

Shop ▾ On Sale New Arrival Brands

Search for products...

Shopping Cart

Default + Create

Structure Vision Schedules

Tasks

Content

Products

Products

Search list

Classic Polo Shirt

Black Athletic Jogger Pants with S...

Skinny Fit Jeans

Beige Slim-Fit Jogger Pants

Black Striped T-Shirt

Checkered Shirt

Classic Polo Shirt

Products

Classic Polo Shirt

Name

Classic Polo Shirt

Price

180