Day 3 - API Integration Report – Nike

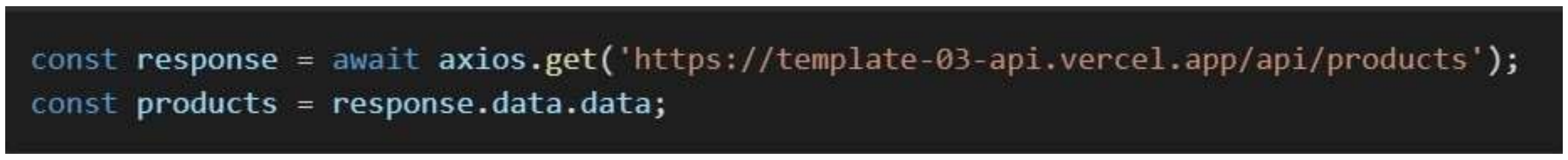
API Integration Process

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.

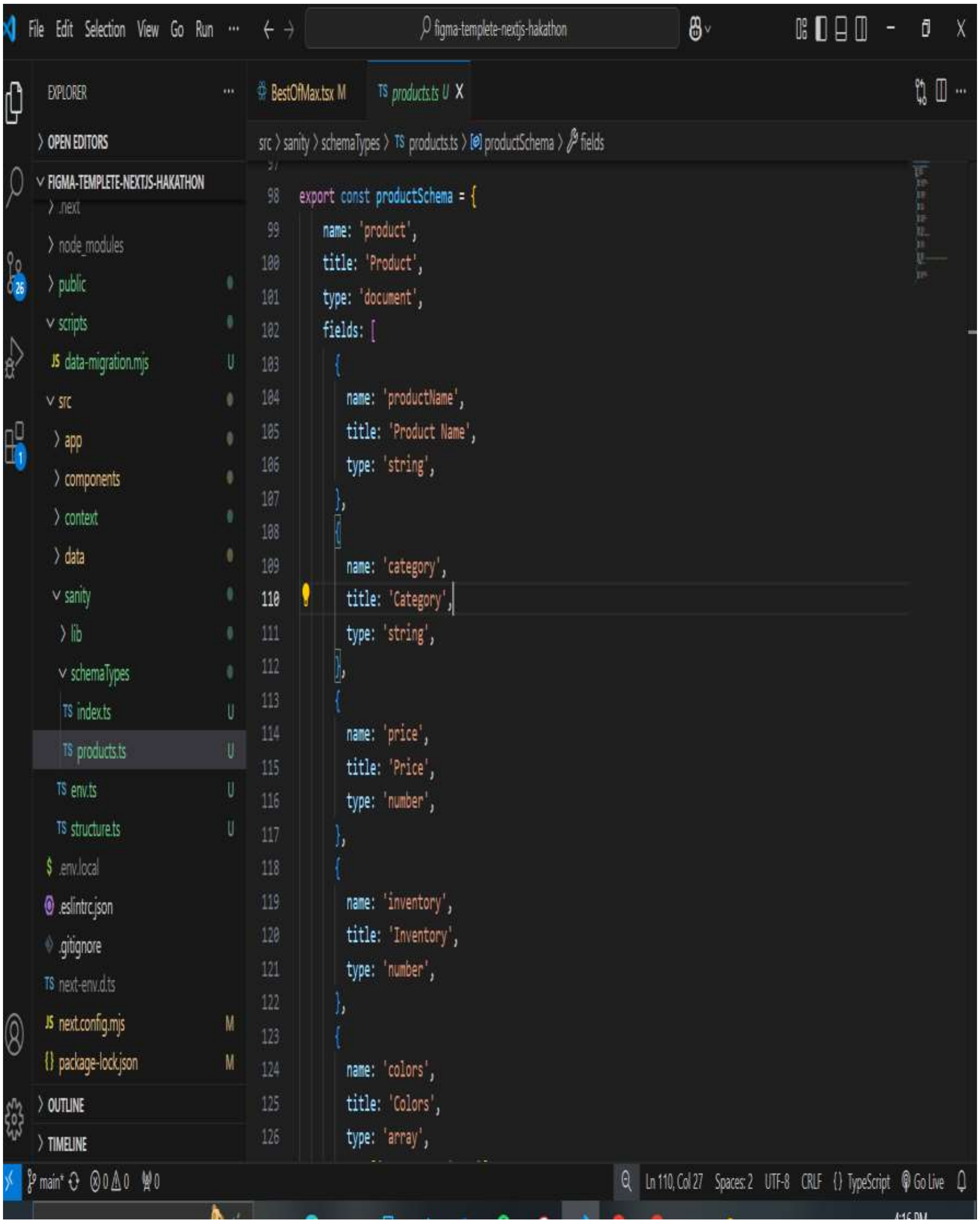
Adjustments Made to Schemas

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: 'category',
      title: 'Category',
      type: 'string',
    },
    {
      name: 'price',
      title: 'Price',
      type: 'number',
    },
    {
      name: 'inventory',
      title: 'Inventory',
      type: 'number',
    },
    {
      name: 'colors',
      title: 'Colors',
      type: 'array',
```

Migration Steps and Tools Used

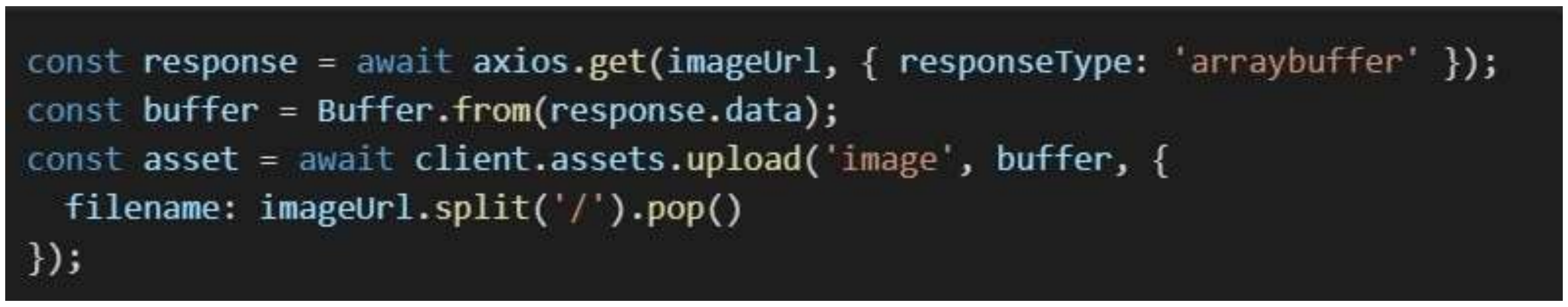
Migration Steps

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.

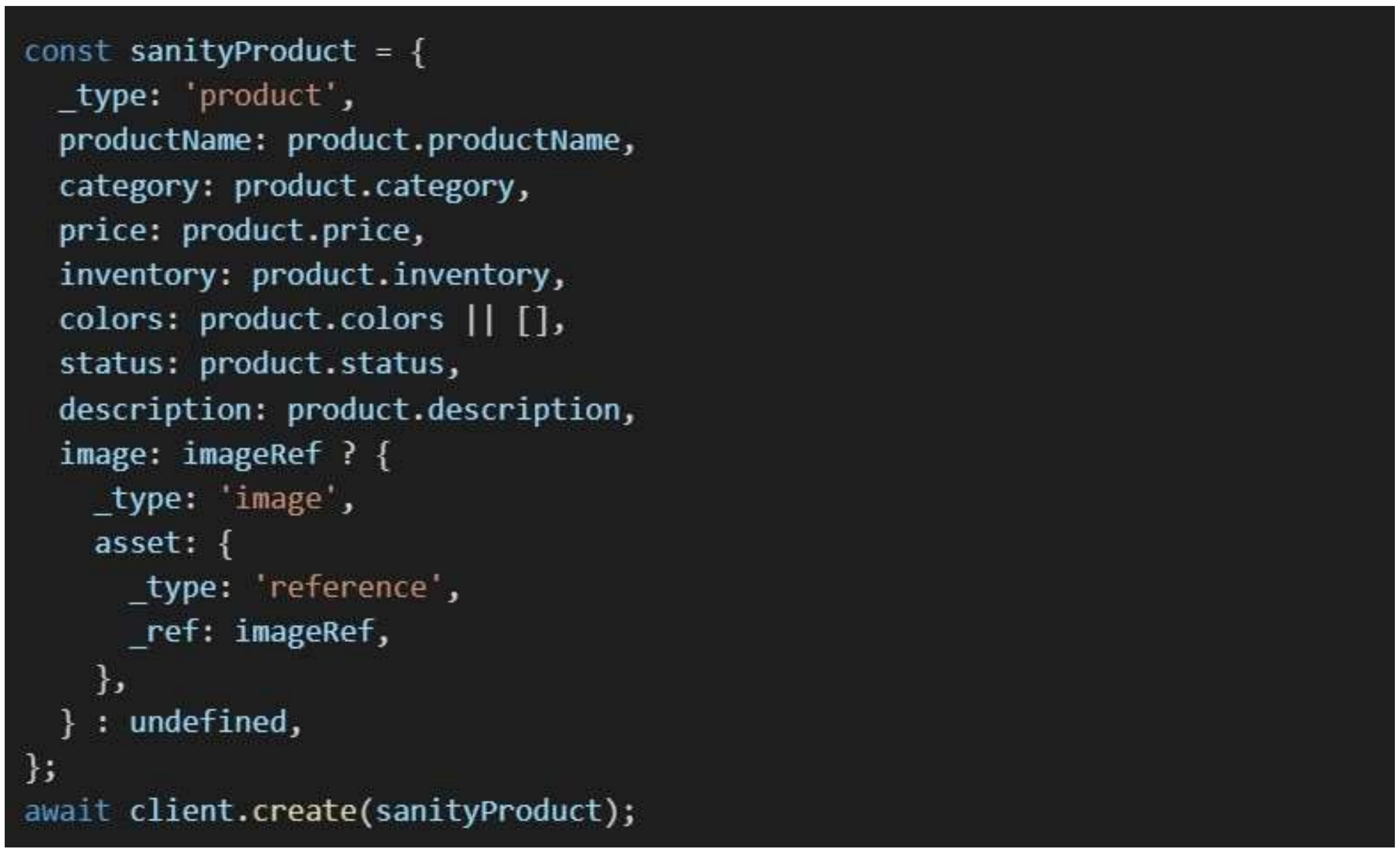
3. **Image Upload:**
   - Downloaded images from the API's `image` field using Axios.
   - Uploaded images to Sanity's Asset Manager using the Sanity client.
   - Code to upload images:



```
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()
});
```

4. **Document Creation:**
   - Created Sanity documents for each product by combining API data and uploaded image references.

- Code snippet:



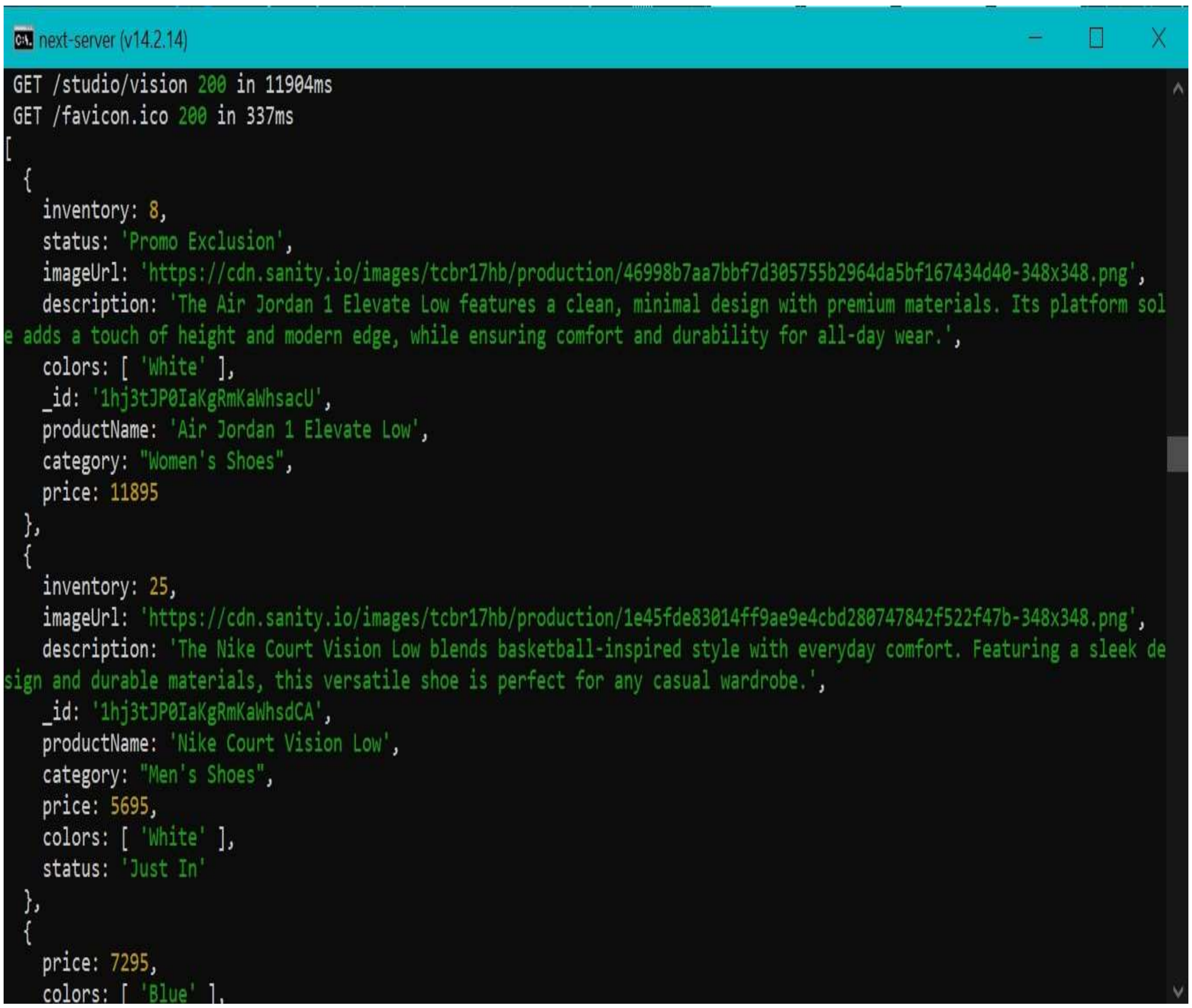
```
const sanityProduct = {
  _type: 'product',
  productName: product.productName,
  category: product.category,
  price: product.price,
  inventory: product.inventory,
  colors: product.colors || [],
  status: product.status,
  description: product.description,
  image: imageRef ? {
    _type: 'image',
    asset: {
      _type: 'reference',
      _ref: imageRef,
    },
  } : undefined,
};
await client.create(sanityProduct);
```

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

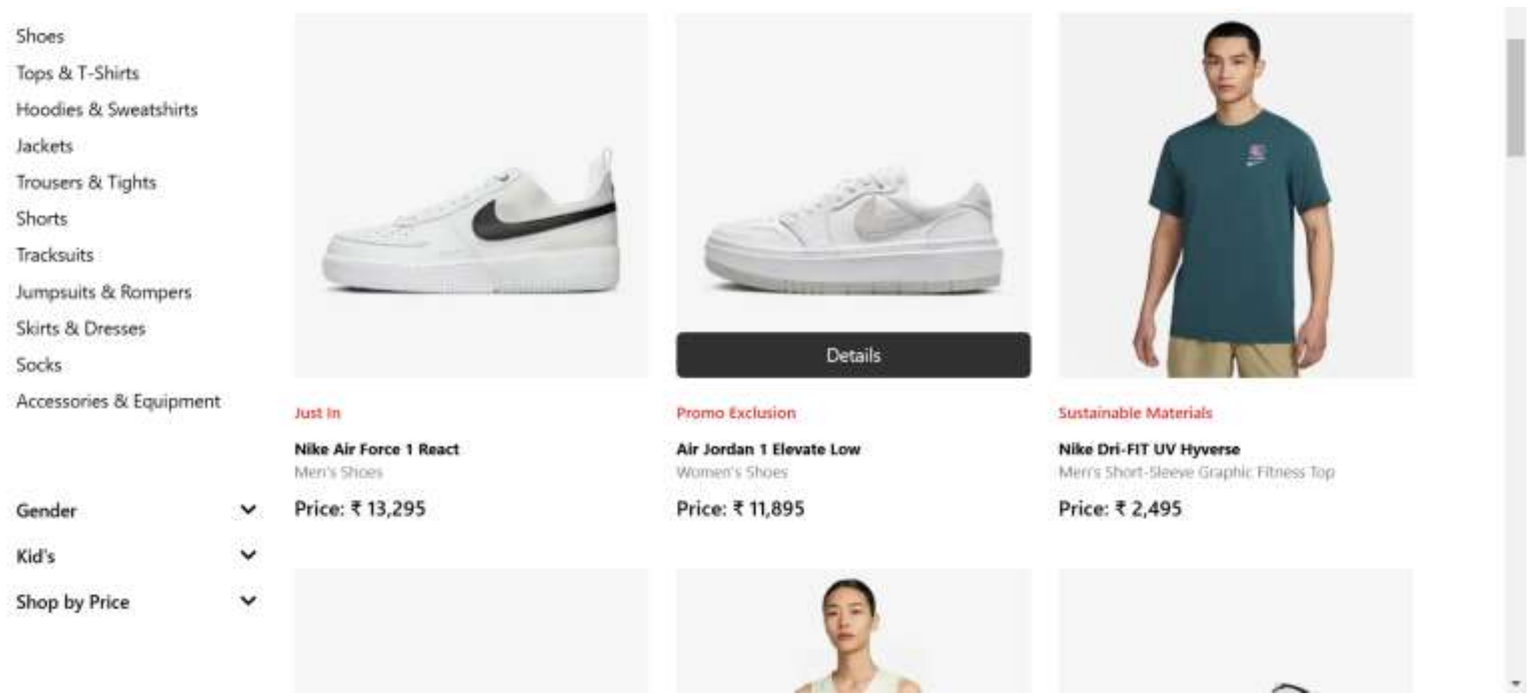


next-server (v14.2.14)

```
GET /studio/vision 200 in 11904ms
GET /favicon.ico 200 in 337ms
[
  {
    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 sol
e 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 de
sign 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'
  },
  {
    price: 7295,
    colors: [ 'Blue' ],
```

2. Frontend Display

3. Populated Sanity CMS Fields


Shoes
Tops & T-Shirts
Hoodies & Sweatshirts
Jackets
Trousers & Tights
Shorts
Tracksuits
Jumpsuits & Rompers
Skirts & Dresses
Socks
Accessories & Equipment

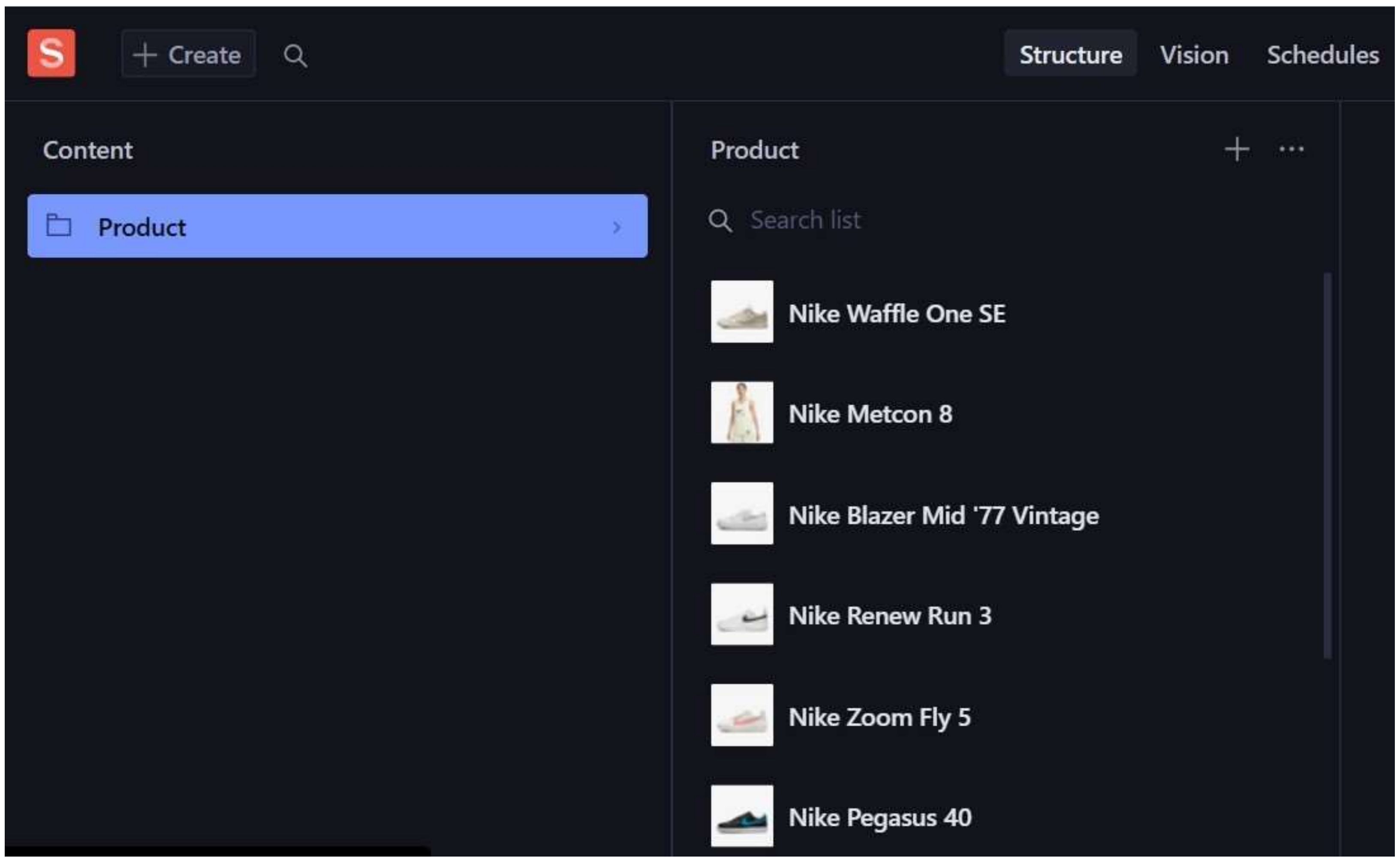
Gender
Kid's
Shop by Price

Details

Just In
Nike Air Force 1 React
Men's Shoes
Price: ₹ 13,295

Promo Exclusion
Air Jordan 1 Elevate Low
Women's Shoes
Price: ₹ 11,895

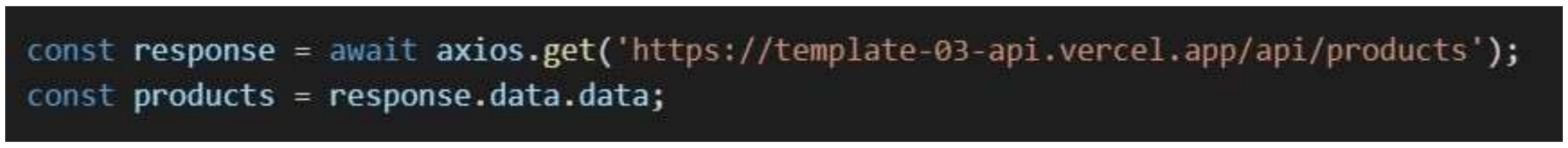
Sustainable Materials
Nike Dri-FIT UV Hyverse
Men's Short-Sleeve Graphic Fitness Top
Price: ₹ 2,495



Nike Waffle One SE
Nike Metcon 8
Nike Blazer Mid '77 Vintage
Nike Renew Run 3
Nike Zoom Fly 5
Nike Pegasus 40

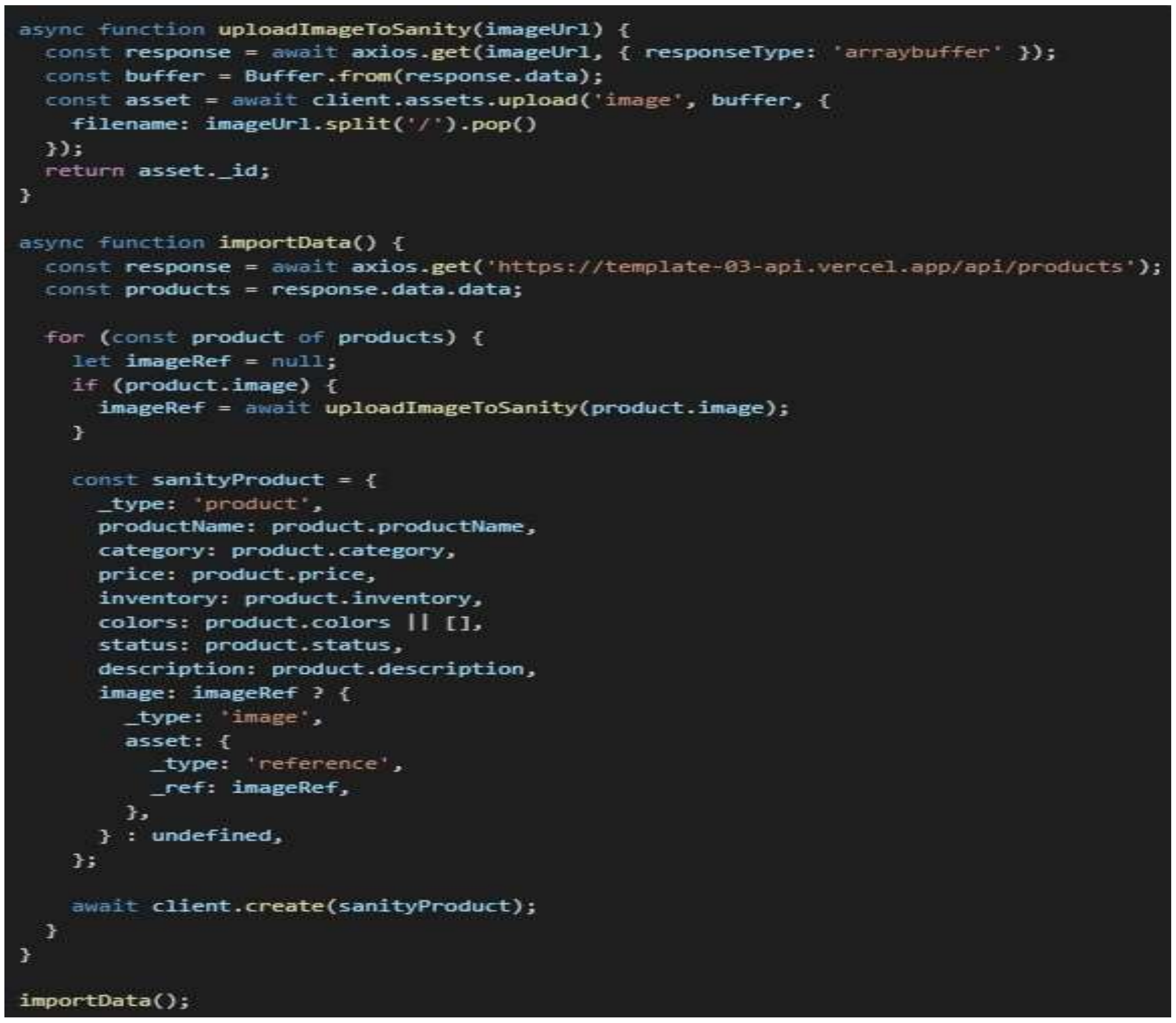
Code Snippets

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) {
  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()
  });
  return asset._id;
}

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

  for (const product of products) {
    let imageRef = null;
    if (product.image) {
      imageRef = await uploadImageToSanity(product.image);
    }

    const sanityProduct = {
      _type: 'product',
      productName: product.productName,
      category: product.category,
      price: product.price,
      inventory: product.inventory,
      colors: product.colors || [],
      status: product.status,
      description: product.description,
      image: imageRef ? {
        _type: 'image',
        asset: {
          _type: 'reference',
          _ref: imageRef,
        },
      } : undefined,
    };

    await client.create(sanityProduct);
  }
}

importData();
```

Final Check List

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