"Day 3 - API Integration Report - [Avion E-commerce]"

o A report documenting:

☐ API integration process.

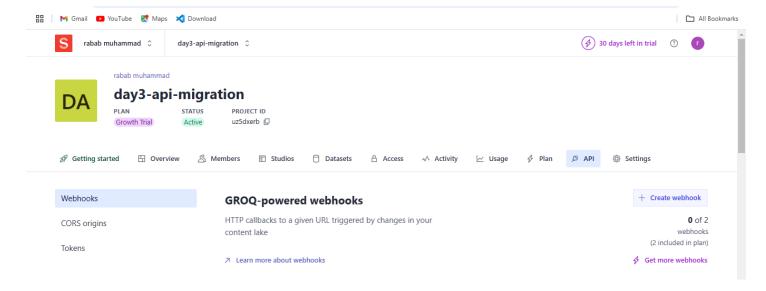
Project Setup:

Sanity installation:

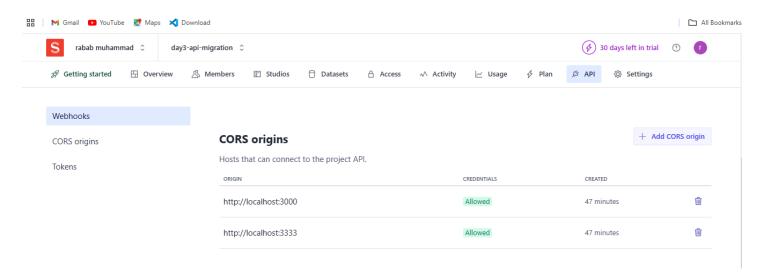
```
C:\Windows\System32\cmd.exe
Need to install the following packages:
create-sanity@3.72.1
Ok to proceed? (y) y
 e-commerce-hackathon-template-2@0.1.0 npx
 create-sanity
 You are logged in as rababmuhammadhussain@gmail.com using Google
 Fetching existing projects
 Create a new project or select an existing one Create new project
 Your project name: day3-api-migration
Your content will be stored in a dataset that can be public or private, depending on
whether you want to query your content with or without authentication.
The default dataset configuration has a public dataset named "production".
 Use the default dataset configuration? Yes
 Creating dataset
 Would you like to add configuration files for a Sanity project in this Next.js folder? Yes
 Do you want to use TypeScript? Yes
 Would you like an embedded Sanity Studio? Yes
 What route do you want to use for the Studio? /studio
 Select project template to use Clean project with no predefined schema types
 Would you like to add the project ID and dataset to your .env.local file? Yes
Added http://localhost:3000 to CORS origins
```

Success! Your Sanity configuration files has been added to this project

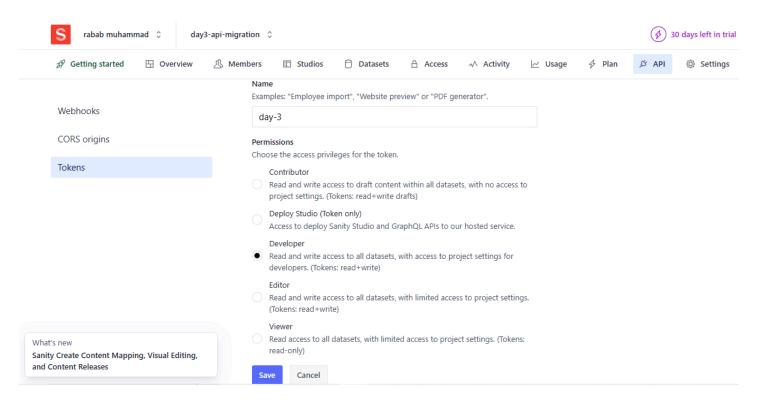
API:

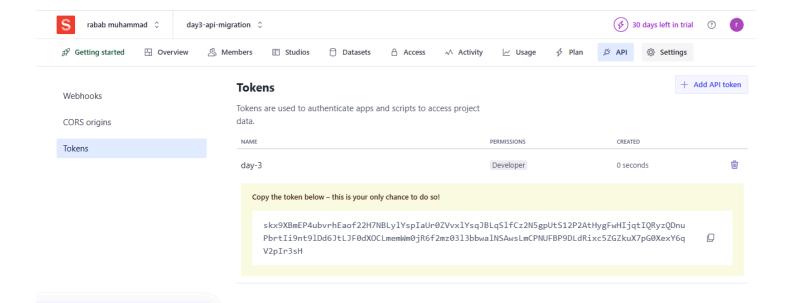


CORS origin:



Add API Token:





☐ Adjustments made to schemas.

Product Schema:

```
File
         Edit Selection
                         View
                               Go
                                    Run
                                                                                        ф
        EXPLORER
                                            $ .env.local
                                                             TS product.ts U X
                                                                                 TS category.ts U
                                                                                                     TS index.ts U
      V HACKATHON-3-TEMPLA... 🖺 📴 🖔 🗿
                                            src > sanity > schemaTypes > TS product.ts > [●] product
                                                    import { defineType, defineField } from "sanity"
        > node_modules
        > public
                                                    export const product = defineType({

✓ src

                                                        name: "product",
         > app
                                                        title: "Product"
         > components
                                                        type: "document",
         > lib
                                                        fields: [
                                                             defineField({
         sanity
                                                                 name: "category",
          > lib
                                                                 title:"Category
          schemaTypes
                                                                 type: "reference",
          TS category.ts
                                                                 to:[{
          TS index.ts
                                                                      type: "category"
          TS product.ts
                                      U
                                                                 }]
         TS env.ts
                                                             ),
         TS structure.ts
                                                             defineField({
       $ .env.local
                                                                 name: "name",
       eslintrc.json
                                                                 title: "Title",
       gitignore
                                                                 validation: (rule) => rule.required(),
       {} components.json
                                                                 type: "string"
       JS next.config.mjs
                                                             }),
                                                             defineField({
       {} package-lock.json
                                      М
                                                                 name: "slug",
       {} package.json
                                      М
                                                                 title: "Slug",
       JS postcss.config.mjs
                                                                 validation: (rule) => rule.required(),

    README.md

                                                                 type: "slug"
       TS sanity.cli.ts
       TS sanity.config.ts
                                                             defineField({
      > OUTLINE
                                                                 name: "image",
                                                                 type: "image",
       TIMELINE
                                                                 validation: (rule) => rule.required(),
       IDENTIFY
```

```
File
         Edit Selection View Go
                                                                                        Run
        EXPLORER
                                            $ .env.local
                                                             TS product.ts U X
                                                                                TS category.ts U
                                                                                                    TS index.ts U
ф
      V HACKATHON-3-TEMPLA... [♣ 🛱 ひ 🗗
                                            src > sanity > schemaTypes > TS product.ts > [●] product
                                                    export const product = defineType({
Q
        > node_modules
                                                        fields: [
        > public
                                                             defineField({

✓ src

                                                                 name: "image",
type: "image",
         > app
         > components
                                                                 validation: (rule) => rule.required(),
         > lib
                                                                 title: "Product Image"
        sanity
                                                             }),
留
          > lib
                                                             defineField({
                                                                 name: "price",
          schemaTypes
                                                                 type: "number",
          TS category.ts
                                                                 validation: (rule) => rule.required(),
          TS index.ts
                                                                 title: "Price",
          TS product.ts
                                      U
                                                             }),
         TS env.ts
                                                             defineField({
                                                                 name: "quantity",
         TS structure.ts
                                                                 title: "Quantity",
        $ .env.local
                                                                 type: "number",
       eslintrc.json
                                                                 validation: (rule) => rule.min(0),
       gitignore
       {} components.json
                                                             defineField({
       JS next.config.mjs
                                                                 name: "tags",
                                                                 type: "array",
       {} package-lock.json
                                      М
                                                                 title: "Tags",
       {} package.json
                                      М
                                                                 of:[{
       JS postcss.config.mjs
                                                                      type: "string"

 README.md

                                                                 }]
       TS sanity.cli.ts
       TS sanity.config.ts
                                                             defineField({
      > OUTLINE
                                                                 name: 'description',
                                                                 title: 'Description',
      > TIMELINE
                                                                 type: 'text',
      > IDENTIFY
```

Updated Product Schema:

```
X File Edit Selection View Go
                                        Run
Ď
                                                 TS product.ts U X TS category.ts U
                                                                                                                JS importSanityData.mjs U
         EXPLORER
                                                                                             TS index.ts U

✓ HACKATHON-3-TEMPLATE-2

                                                  src > sanity > schemaTypes > TS product.ts > [❷] product > 🎉 fields
Q
                                                          export const product = defineType({

✓ src

                                                             fields: [
          ∨ app
                                                                 title: "Dimensions",
                                                                 type: "object",
           > fonts
                                                                 fields: [
           > productdetails
                                                                    { name: "height", title: "Height", type: "string" }, 
{ name: "width", title: "Width", type: "string" }, 
{ name: "depth", title: "Depth", type: "string" },

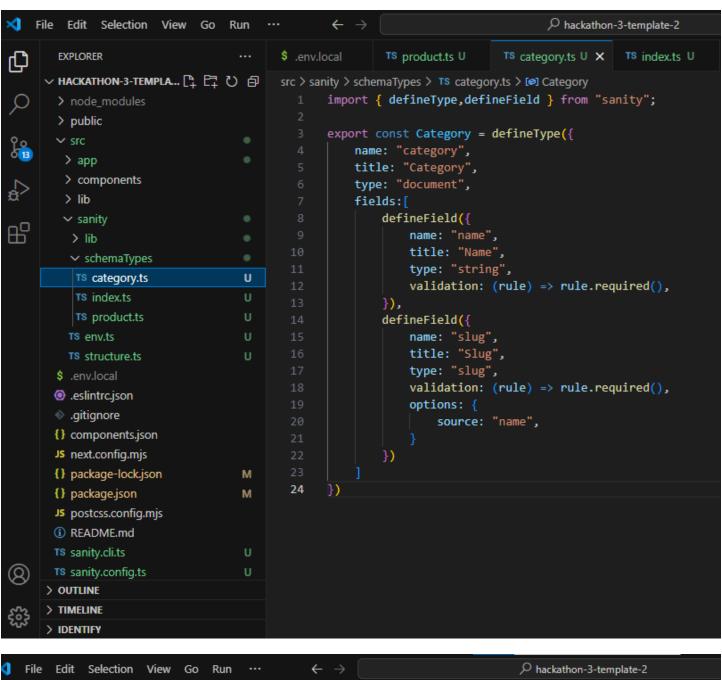
✓ products

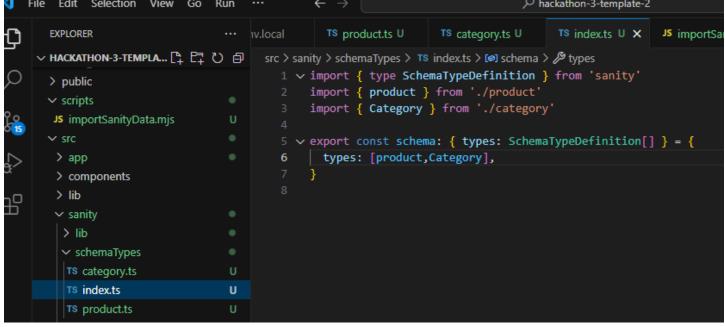
            page.tsx
RP
           > studio
           * favicon.ico
                                                                 description: "Dimensions of the product",
           # globals.css
                                                               defineField({
           layout.tsx
                                                                 name: "type",
type: "string",
title: "Type",
          page.tsx
          > components
          > lib
                                                                 options: {

✓ sanity

           > lib
                                                                    { title: "Furniture", value: "furniture" },
                                                                    { title: "Decor", value: "decor" },
           schemaTypes
           TS category.ts
            TS index.ts
           TS env.ts
           TS structure.ts
         $ .env.local
```

Category Schema:





☐ Migration steps and tools used.

- Used a migration script to update existing product documents.
- Tools Used: Sanity CLI, Sanity Client, Node.js

Migration Script:

```
🔀 File Edit Selection View Go Run …
                                                  TS product.ts U
                                                                                       TS index.ts U
                                                                    TS category.ts U
                                                                                                        JS importSanityData.mjs U X {} package
Ф

∨ HACKATHON-3-TEMPLA... [ ☐ ☐ Scripts > JS importSanityData.mjs > ...

                                              import { createClient } from '@sanity/client';
Q
       > .next
                                                import dotenv from 'dotenv';
       > public
                                               import { fileURLToPath } from 'url';

✓ scripts

                                                import path from 'path';
        JS importSanityData.mjs
                                               import slugify from 'slugify';
       ∨ src
                                                const __filename = fileURLToPath(import.meta.url);
留
                                               const __dirname = path.dirname(__filename);
        > components
                                                dotenv.config({ path: path.resolve(__dirname, '../.env.local') });
        > lib
        sanity
                                                const client = createClient({
                                                  projectId: process.env.NEXT_PUBLIC_SANITY_PROJECT_ID,

✓ schemaTypes

                                                    dataset: process.env.NEXT_PUBLIC_SANITY_DATASET,
         TS category.ts
                                                    useCdn: false,
                                                    token: process.env.SANITY_API_TOKEN,
         TS index.ts
                                                    apiVersion: '2021-08-31'
         TS product.ts
         TS env.ts
         TS structure.ts
                                                async function uploadImageToSanity(imageUrl) {
       $ .env.local
      eslintrc.ison
                                                        console.log(`Uploading image: ${imageUrl}`);
                                                        const response = await axios.get(imageUrl, { responseType: 'arraybuffer' });
       gitignore
                                                        const buffer = Buffer.from(response.data);
      {} components.json
                                                        const asset = await client.assets.upload('image', buffer, {
                                                            filename: imageUrl.split('/').pop()
       JS next.config.mjs
                                   М
      {} package-lock.json
                                   М
                                                        console.log(`Image uploaded successfully: ${asset._id}`);
      {} package.json
                                   М
                                                       return asset._id;
      > OUTLINE
     > TIMELINE
                                                        console.error('Failed to upload image:', imageUrl, error);
```

Requirement in Package.json:

```
File
        Edit
             Selection View
                                                                                  hackathon-3-template-2
                            Go
                                 Run
                                                   TS product.ts U
                                                                     TS category.ts U
                                                                                        TS index.ts U
Ф
       EXPLORER
     {} package.json > {} scripts > ™ import-data
       > public
                                                  "name": "e-commerce-hackathon-template-2",
      scripts
                                                   "version": "0.1.0",
       JS importSanityData.mjs
                                                  "private": true,

✓ src

                                                  "type": "module",
                                            5
                                                   Debug
        > app
                                                   "scripts": {
        > components
                                                    "dev": "next dev",
        > lib
品
                                                    "build": "next build",
       sanity
                                                    "start": "next start",
         > lib
                                                    "lint": "next lint",
         schemaTypes
                                                    "import-data": "node scripts/importSanityData.mjs"
                                          11
         TS category.ts
```

☐ API calls

Fetching Data from API to Sanity:

```
Fetching products from API...
Processing product: The Poplar suede sofa
Uploading image: https://cdn.sanity.io/images/ri847jqu/production/9b6a4fc8c65bbb4e5793fb0e1116b510d73dc9e8-630x375.png
Image uploaded successfully: image-9b6a4fc8c65bbb4e5793fb0e1116b510d73dc9e8-630x375-png
Category created successfully {
 _createdAt: '2025-02-01T15:09:03Z',
 _id: 'tableware-1',
  _rev: 'vHv8Ju1iKPqBAbonebJD7w',
  _type: 'category',
  updatedAt: '2025-02-01T15:09:03Z',
 name: 'Tableware',
 slug: { _type: 'slug', current: 'tableware' }
Imported product: The Poplar suede sofa
Processing product: The Steel Chair
Uploading image: https://cdn.sanity.io/images/ri847jqu/production/b3bbbd269d31ce9b57b7a867bf0b7f6fdc5b3208-721x759.png
Image uploaded successfully: image-b3bbbd269d31ce9b57b7a867bf0b7f6fdc5b3208-721x759-png
Category created successfully {
  createdAt: '2025-02-01T15:09:14Z',
  id: 'chairs-2',
  rev: 'vHv8Ju1iKPqBAbonebJDMS',
 type: 'category',
 _updatedAt: '2025-02-01T15:09:14Z',
 name: 'Chairs',
 slug: { _type: 'slug', current: 'chairs' }
Imported product: The Steel Chair
Processing product: Rustic Vase Set
Uploading image: https://cdn.sanity.io/images/ri847jqu/production/2219cafc285ec13a2ed3f88aa36cbea852a11735-305x375.png
Image uploaded successfully: image-2219cafc285ec13a2ed3f88aa36cbea852a11735-305x375-png
Category created successfully {
  _createdAt: '2025-02-01T15:09:22Z',
 _id: 'plant-pots-3',
_rev: 'vHv8Ju1iKPqBAbonebJDdO',
 _type: 'category',
  _updatedAt: '2025-02-01T15:09:22Z',
```

```
Imported product: Rustic Vase Set
Processing product: Bed
Uploading image: https://cdn.sanity.io/images/ri847jqu/production/b6551d6252d30e222875fbcd5d91c6edca324a1d-3518x3238.jpg
Image uploaded successfully: image-b6551d6252d30e222875fbcd5d91c6edca324a1d-3518x3238-jpg
Imported product: Bed
Processing product: Wood Chair
Uploading image: https://cdn.sanity.io/images/ri847jqu/production/2c7c233904e6c98e27a2156dce5f008b1554d25d-2831x3534.jpg
Image uploaded successfully: image-638c3039e0746f217acbacd325a2847939d92b08-2831x3534-jpg
Imported product: Wood Chair
Processing product: Retro Vibe
Uploading image: https://cdn.sanity.io/images/ri847jqu/production/6e986db673401a7d253e8bdee86aceb4b71b4895-4144x4144.jpg
Image uploaded successfully: image-326af1f82195f9f3a6a9e8c882691aa81f2d0617-4144x4144-jpg
Imported product: Retro Vibe
Processing product: The Lucky Lamp
Uploading image: https://cdn.sanity.io/images/ri847jqu/production/c10750f3c15f8807251977fe5e042b0a6cee55ab-305x375.png
Image uploaded successfully: image-c10750f3c15f8807251977fe5e042b0a6cee55ab-305x375-png
Category created successfully {
 _createdAt: '2025-02-01T15:10:46Z',
 _id: 'ceramics-7',
 _rev: 'vHv8Ju1iKPqBAbonebJcWw',
 _type: 'category',
  _updatedAt: '2025-02-01T15:10:46Z',
 name: 'Ceramics',
 slug: { _type: 'slug', current: 'ceramics' }
✓ Imported product: The Lucky Lamp
Processing product: Pure Aura
Uploading image: https://cdn.sanity.io/images/ri847jqu/production/db6d068faf67dab6145cadcd8e572944c6b9e935-3648x5472.jpg
Image uploaded successfully: image-db6d068faf67dab6145cadcd8e572944c6b9e935-3648x5472-jpg
  Imported product: Pure Aura
Processing product: Zen Table
Uploading image: https://cdn.sanity.io/images/ri847jqu/production/73e36a9afc074b751d9f2693d2b251ba12b36276-3433x3064.jpg
Image uploaded successfully: image-2e9468c5de6d27c850d6cba74ee16bcbf200d77a-3433x3064-jpg
Category created successfully {
 _createdAt: '2025-02-01T15:11:35Z',
 id: 'tables-9',
  _rev: 'vHv8Ju1iKPqBAbonebJggC',
```

```
✓ Imported product: Zen Table
Processing product: Tropical Vibe
Uploading image: https://cdn.sanity.io/images/ri847jqu/production/9dd7acc17365cd290757246a27b64a3d817cbe13-5501x3095.jpg
Image uploaded successfully: image-f575d30bda78fa7680a74e131a9b25add2247210-5501x3095-jpg
✓ Imported product: Tropical Vibe
Processing product: Sleek Living
Uploading image: https://cdn.sanity.io/images/ri847jqu/production/b7565060672485ede215bbbbb4d6b063b1a83b49-3024x4032.jpg
Image uploaded successfully: image-b7565060672485ede215bbbbb4d6b063b1a83b49-3024x4032-jpg
Imported product: Sleek Living
Processing product: Serene Seat
Uploading image: https://cdn.sanity.io/images/ri847jqu/production/19920122d503e8a40aa994d43f5f090547b48e9d-3777x5990.jpg
Image uploaded successfully: image-19920122d503e8a40aa994d43f5f090547b48e9d-3777x5990-jpg
Category created successfully {
 _createdAt: '2025-02-01T15:13:48Z',
 _id: 'cutlery-12',
_rev: 'EIzlWiwLlFJokSDqejrV8B',
  type: 'category',
  updatedAt: '2025-02-01T15:13:48Z',
 name: 'Cutlery',
slug: { _type: 'slug', current: 'cutlery' }
✓ Imported product: Serene Seat
Processing product: Nordic Elegance
Uploading image: https://cdn.sanity.io/images/ri847jqu/production/c371d0a7592905e368cf906ccc918d41033e7a85-4140x5520.jpg
Image uploaded successfully: image-e1cf4b8cb7c99ed0f181d33a70296dfe2819cf46-4140x5520-jpg
✓ Imported product: Nordic Elegance
Processing product: TimberCraft
Uploading image: https://cdn.sanity.io/images/ri847jqu/production/35a8072e40a8b80142ff8e96e0f3af21811f5b9f-3264x4928.jpg
Image uploaded successfully: image-0ede9a4310fc373fcadf2707a5d4f145cf7a8806-3264x4928-jpg
Imported product: TimberCraft
Processing product: Timeless Elegance
Uploading image: https://cdn.sanity.io/images/ri847jqu/production/09ddef74e0be13da2648ecead6504e317ce47847-6000x4000.jpg
Image uploaded successfully: image-3571cf713dde874e2c96085f8538af6bf8af8845-6000x4000-jpg
✓ Imported product: Timeless Elegance
```

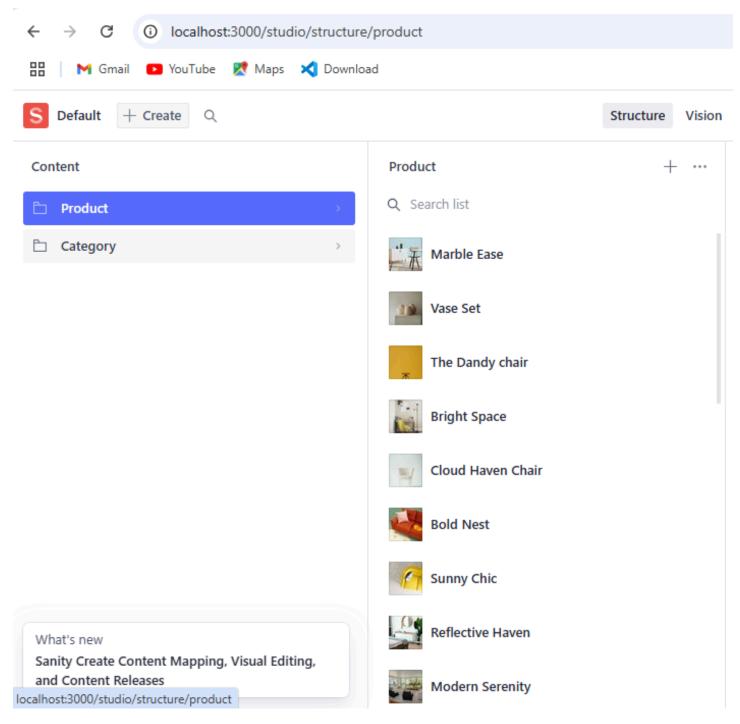
Uploading image: https://cdn.sanity.io/images/ri847jqu/production/9074eb33bece6914927f6e78eb520d7b0695f77c-3715x2362.jpg

Processing product: Modern Serenity

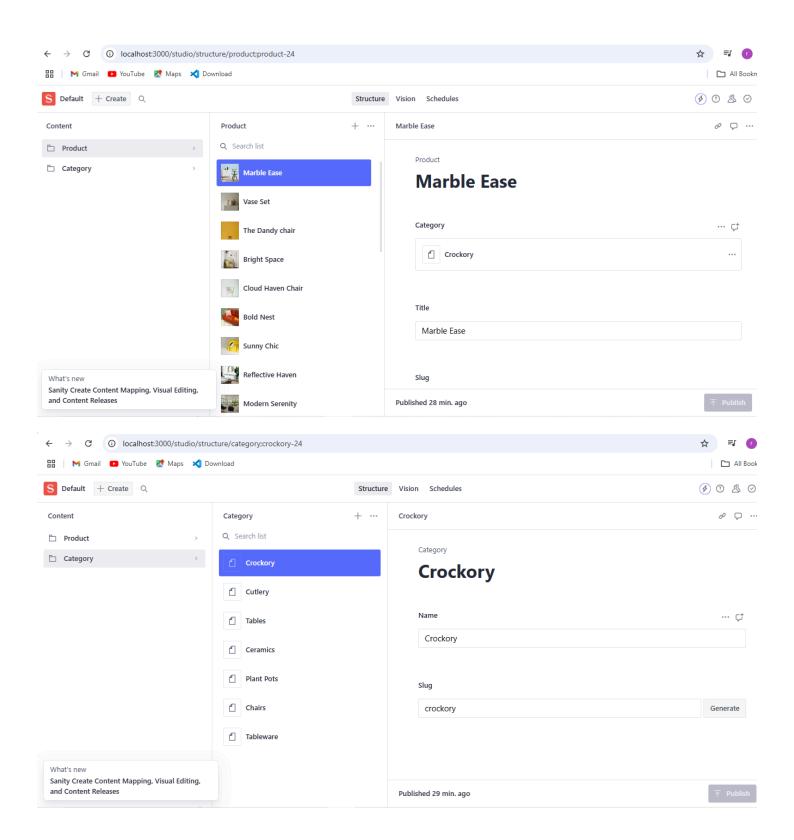
```
Image uploaded successfully: image-29e3993cfc3f28149ef0615a5cf933a8100e243b-4000x3907-jpg
Imported product: Sunny Chic
Processing product: Bold Nest
Uploading image: https://cdn.sanity.io/images/ri847jqu/production/75ef174ddda5862f2b2e869b169d8c0fbc7ce15b-4160x4160.jpg
Image uploaded successfully: image-4d749d58f7cf906766229e32feb894a85ac88756-4160x4160-jpg

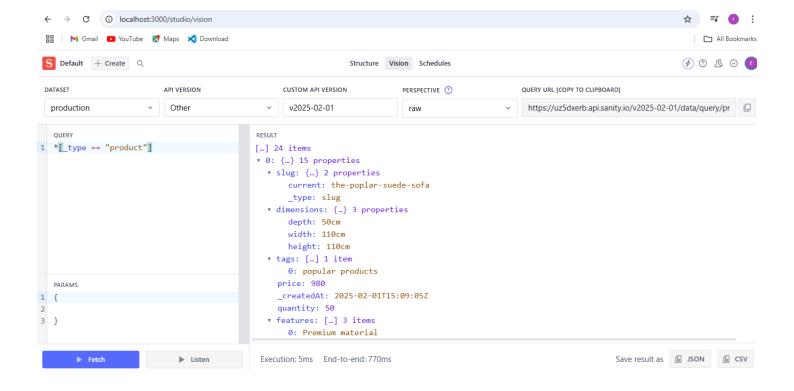
✓ Imported product: Bold Nest
Processing product: Cloud Haven Chair
Uploading image: https://cdn.sanity.io/images/ri847jqu/production/78683aab6c58d367f91e411fbe2aea5f06a9a9b7-3264x4902.jpg
Image uploaded successfully: image-a309259aad5aa63a3b438ed9c42339a1c8375a3a-3264x4902-jpg
Imported product: Cloud Haven Chair
Processing product: Bright Space
Uploading image: https://cdn.sanity.io/images/ri847jqu/production/d32066d0882c1632e027b053564115ed460e09eb-3393x5090.jpg
Image uploaded successfully: image-d32066d0882c1632e027b053564115ed460e09eb-3393x5090-jpg
✓ Imported product: Bright Space
Processing product: The Dandy chair
Uploading image: https://cdn.sanity.io/images/ri847jqu/production/e2cc69a6c9f9d1ff1fcfbe839844240e16f5f758-305x375.png
Image uploaded successfully: image-e2cc69a6c9f9d1ff1fcfbe839844240e16f5f758-305x375-png
Imported product: The Dandy chair
Processing product: Vase Set
Uploading image: https://cdn.sanity.io/images/ri847jqu/production/8795ff7bdb3d810dbe0c3eb52cd22116c9115bce-305x375.png
Image uploaded successfully: image-8795ff7bdb3d810dbe0c3eb52cd22116c9115bce-305x375-png
Imported product: Vase Set
Processing product: Marble Ease
Uploading image: https://cdn.sanity.io/images/ri847jqu/production/7f6146b6625bf94030f2aa896e9b0c847e5f4919-8000x8000.jpg
Image uploaded successfully: image-7f6146b6625bf94030f2aa896e9b0c847e5f4919-8000x8000-jpg
Category created successfully {
  _createdAt: '2025-02-01T15:27:50Z',
  _id: 'crockory-24',
  _rev: 'vHv8Ju1iKPqBAbonebL51Q',
_type: 'category',
  updatedAt: '2025-02-01T15:27:50Z',
  name: 'Crockory',
  slug: { _type: 'slug', current: 'crockory' }
  Imported product: Marble Ease
Data import completed!
```

☐ Data successfully displayed in the studio



☐ Populated Sanity CMS fields.



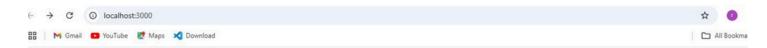


Fetching Data from Sanity

```
const Ceremics = () => {
  const [products, setProducts] = useState<Product[]>([]);
  const [visibleCount, setVisibleCount] = useState(4); // Controls how many products are visible
  const productsPerPage = 4; // Number of products to load each time
  useEffect(() => {
    const fetchProducts = async () => {
      const query = `*[_type == "product" && category->name in ["Ceramics","Plant Pots"]]{
        id,
        name,
        price,
        "imageUrl": image.asset->url
      try {
       const result: Product[] = await client.fetch(query);
        setProducts(result);
      } catch (error) {
        console.error("Error fetching products:", error);
    };
    fetchProducts();
  }, []);
```

```
const Ceremics = () => {
 return (
   <div id="ceramics" className="w-full md:px-20 p-10 □text-[#2A254B]">
    New Ceramics
     <div className="□ text-[#2A254B] grid grid-cols-1 sm:grid-cols-2 lg:grid-cols-4 gap-8">
      {products.slice(0, visibleCount).map((prod) => (
        <div className="space-y-4" key={prod._id}>
          <Link href={\^/product/${prod._id}\^}>
           <Image
             src={prod.imageUrl}
             alt={prod.name}
             height={375}
             width={305}
             className="object-cover h-72 rounded-md shadow-sm hover:shadow-xl transition-all mb-2"
           {prod.name}
          </Link>
          f{prod.price}
     <div className="flex justify-center items-center mt-16">
      {products.length > productsPerPage && [(
        <Button
          variant={"mybutton"}
          className="w-[170px] h-[56px]"
          onClick={handleViewToggle}
          {visibleCount >= products.length ? "View Less" : "View Collection"}
```

☐ Data successfully displayed in the Frontend:



New Ceramics



Modern Serenity

£480

Reflective Haven

£300



Cloud Haven Chair

£230



Bright Space

£180















The Poplar suede sofa \$980





Sleek Living \$300





Nordic Elegance \$280



TimberCraft \$320



Timeless Elegance \$320



Modern Serenity \$480





Sunny Chic \$400



Bold Nest \$260



The Steel Chair \$250