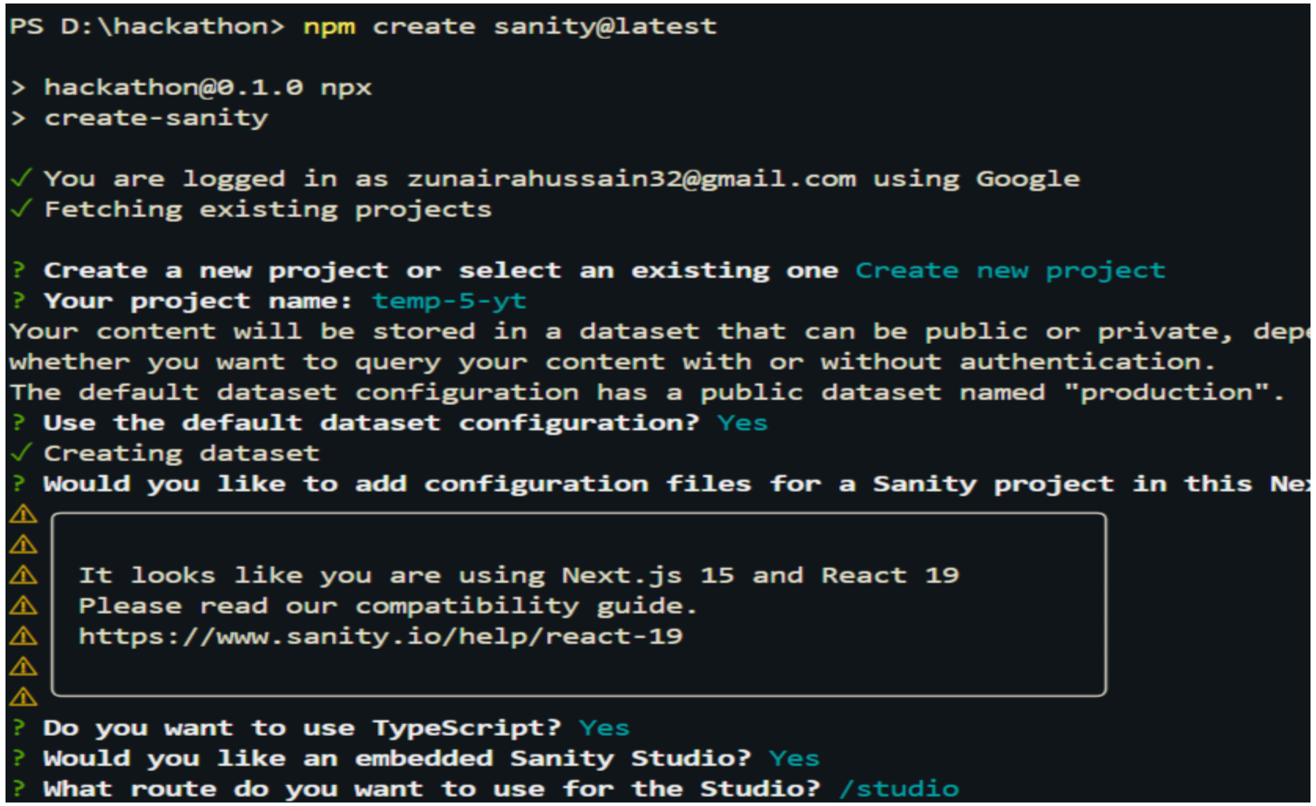
Day 3 - API Integration Report - [CLOTHING AND BAG]

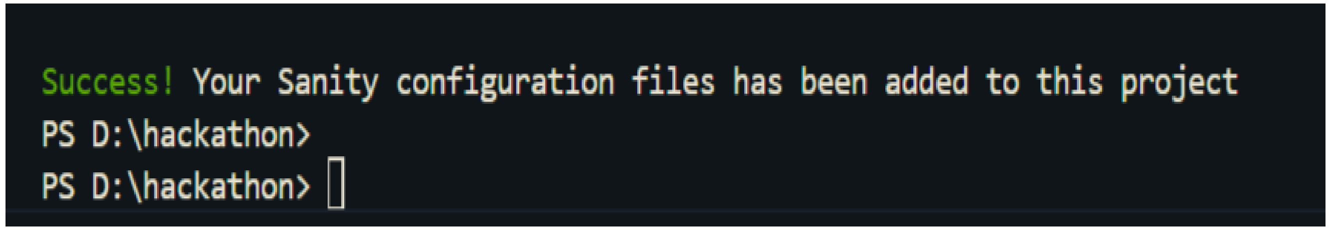
MADE BY ZUNAIRA HUSSAIN

1.API integration process

To begin API integration, we first set up Sanity CMS. Sanity allows us to create structured content using customizable schemas. It provides a flexible and scalable backend for managing content, enabling seamless integration with APIs for dynamic applications."

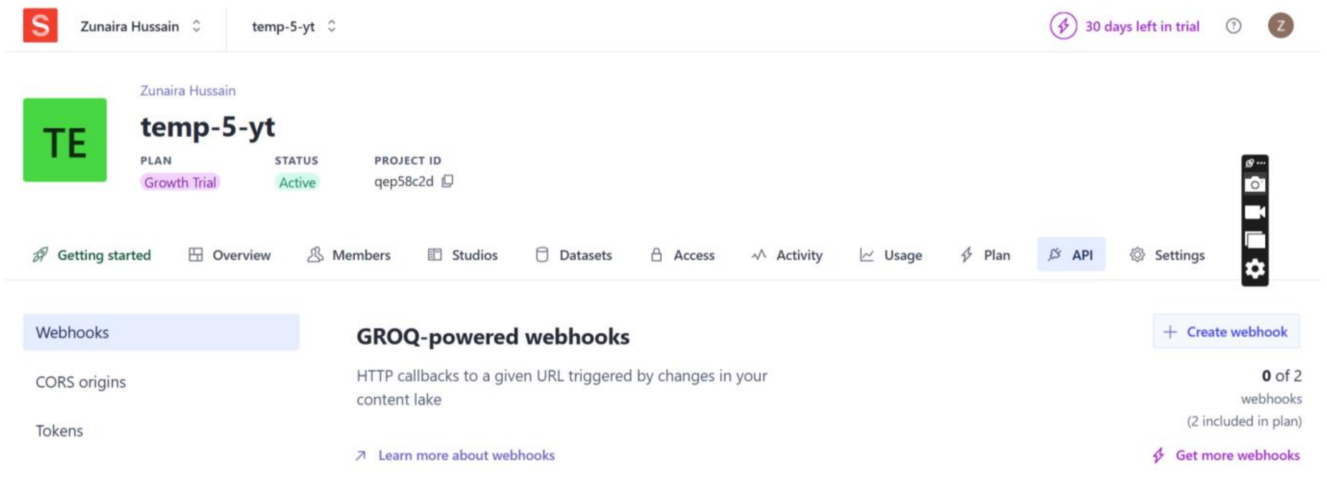


```
PS D:\hackathon> npm create sanity@latest

> hackathon@0.1.0 npx
> create-sanity

✓ You are logged in as zunairahussain32@gmail.com using Google
✓ Fetching existing projects

? Create a new project or select an existing one Create new project
? Your project name: temp-5-yt
Your content will be stored in a dataset that can be public or private, depe
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 Ne
⚠
⚠
⚠   It looks like you are using Next.js 15 and React 19
⚠   Please read our compatibility guide.
⚠   https://www.sanity.io/help/react-19
⚠
⚠
? 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
```



```
Success! Your Sanity configuration files has been added to this project
PS D:\hackathon>
PS D:\hackathon>
```

After configuring Sanity CMS, we generate a **secure API token** to authenticate and enable seamless content integration. The images below illustrate the setup and token generation process for efficient API connectivity.



Zunaira Hussain

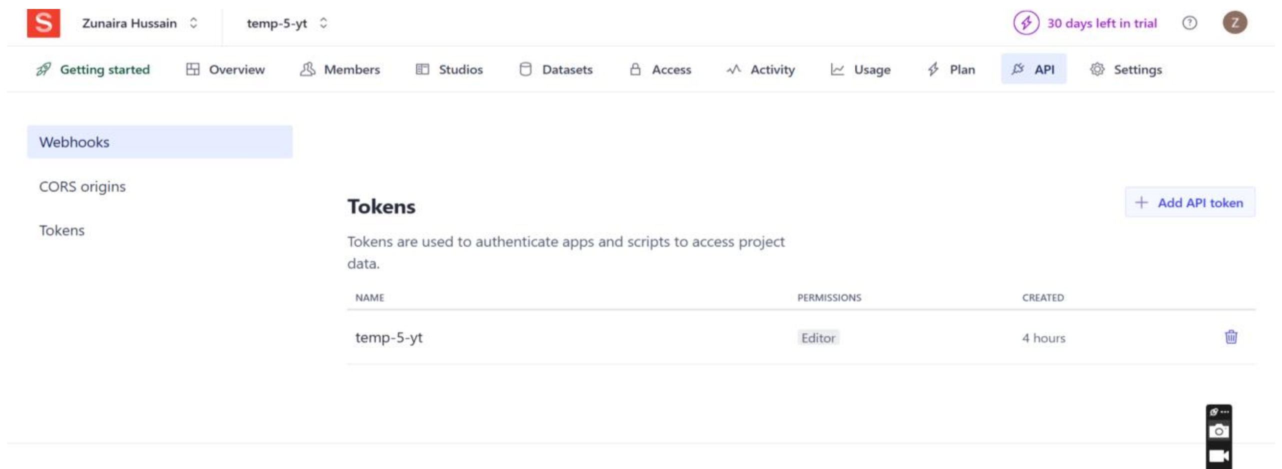
temp-5-yt

PLAN	STATUS	PROJECT ID
Growth Trial	Active	qep58c2d

GROQ-powered webhooks

HTTP callbacks to a given URL triggered by changes in your content lake

0 of 2 webhooks (2 included in plan)



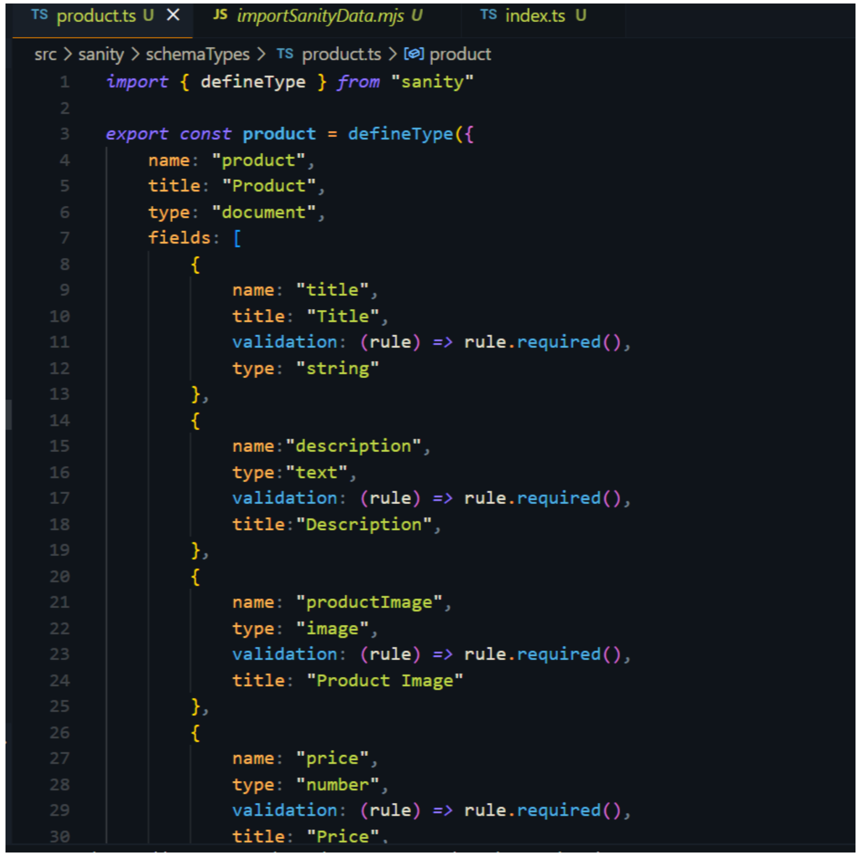
Tokens

Tokens are used to authenticate apps and scripts to access project data.

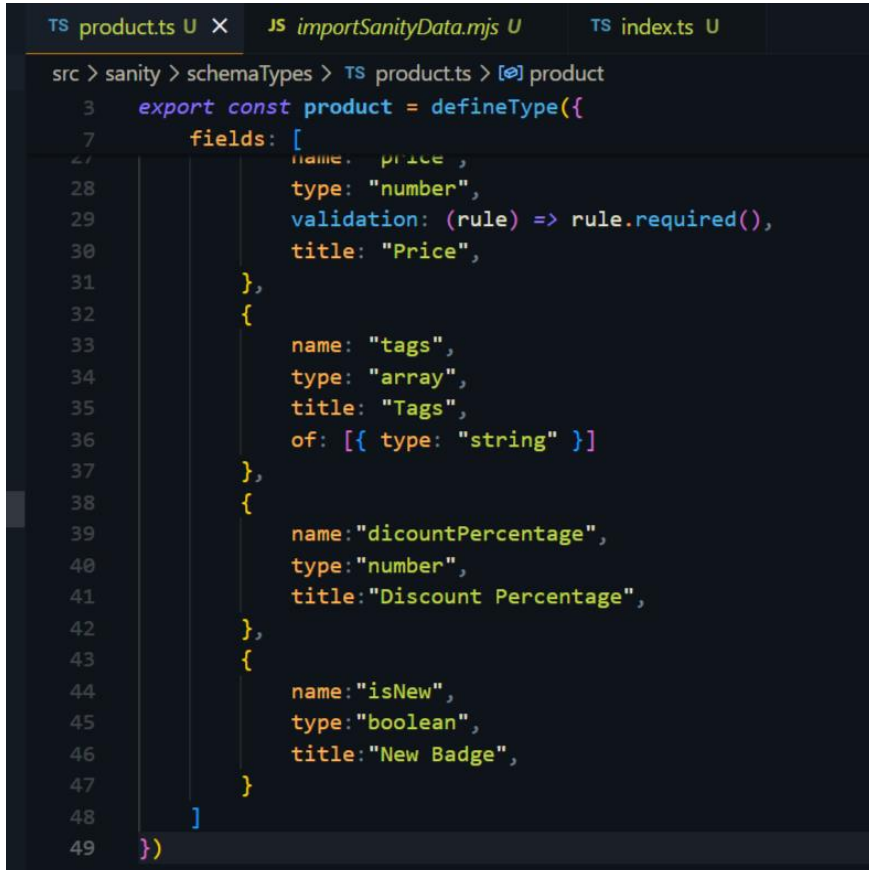
NAME	PERMISSIONS	CREATED
temp-5-yt	Editor	4 hours

Adjustment made to Schemas

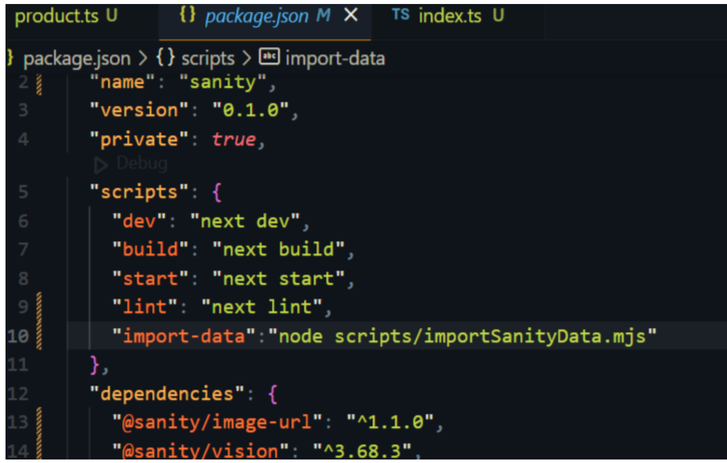
Adjustments were made to the Sanity schemas
to define the structure for products, ensuring they align with the application's requirements
. The **product.js schema** was created, followed by importing **JSON data files** to populate the database efficiently.
This setup ensures a robust and well-organized content structure for seamless API integration."



```
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",
```



```
export const product = defineType({
    fields: [
            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",
        }
    ]
})
```

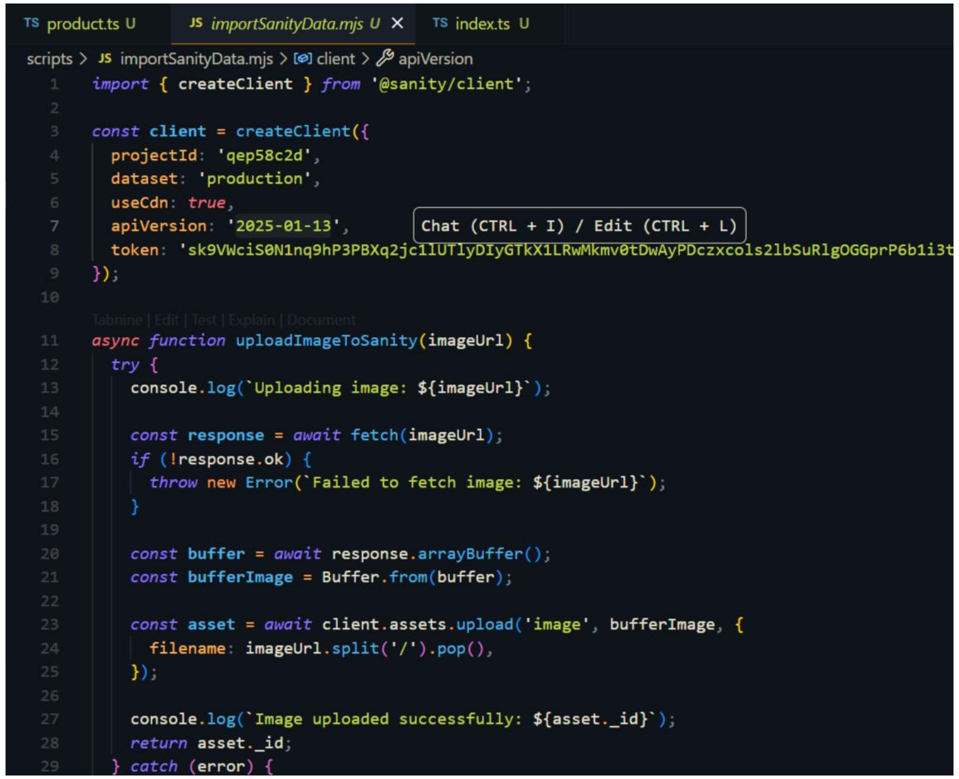


```
  "name": "sanity",
  "version": "0.1.0",
  "private": true,
  "scripts": {
    "dev": "next dev",
    "build": "next build",
    "start": "next start",
    "lint": "next lint",
    "import-data":"node scripts/importSanityData.mjs"
  },
  "dependencies": {
    "@sanity/image-url": "^1.1.0",
    "@sanity/vision": "^3.68.3",
```

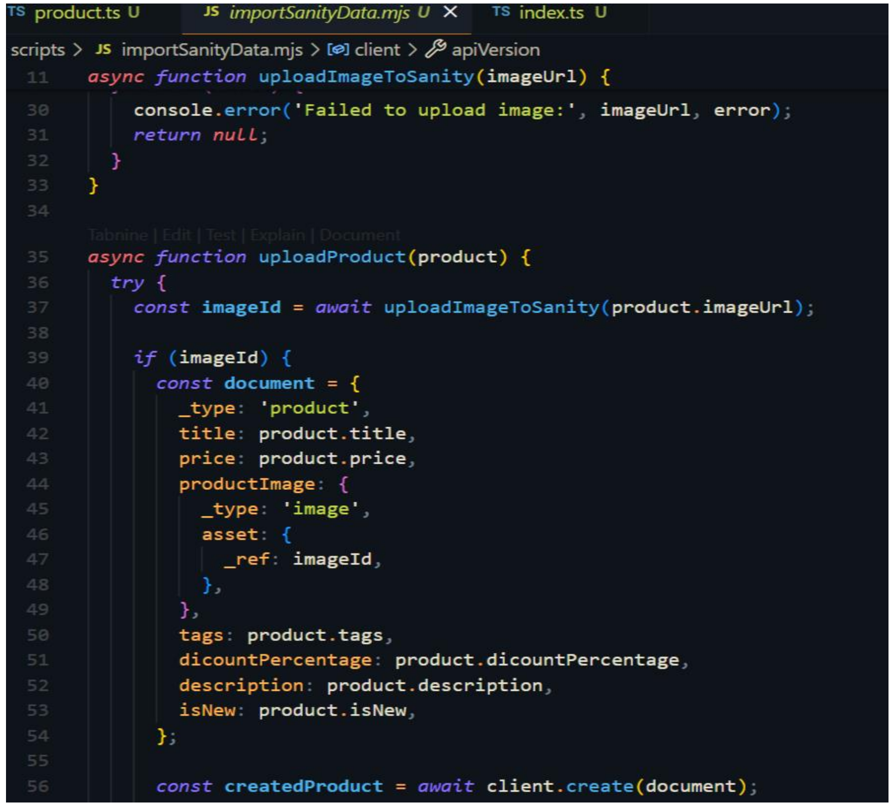
Migration steps and tools used

For the migration process, we utilize scripts to automate data import into Sanity CMS.

The scripts/importSanityData tool facilitates seamless integration by reading data files and populating the Sanity dataset . This ensures a smooth and efficient transition of content into the CMS while maintaining data integrity."


TS product.ts U
JS importSanityData.mjs U ×
TS index.ts U
scripts > JS importSanityData.mjs > client > apiVersion
Chat (CTRL + I) / Edit (CTRL + L)
Tabnine | Edit | Test | Explain | Document

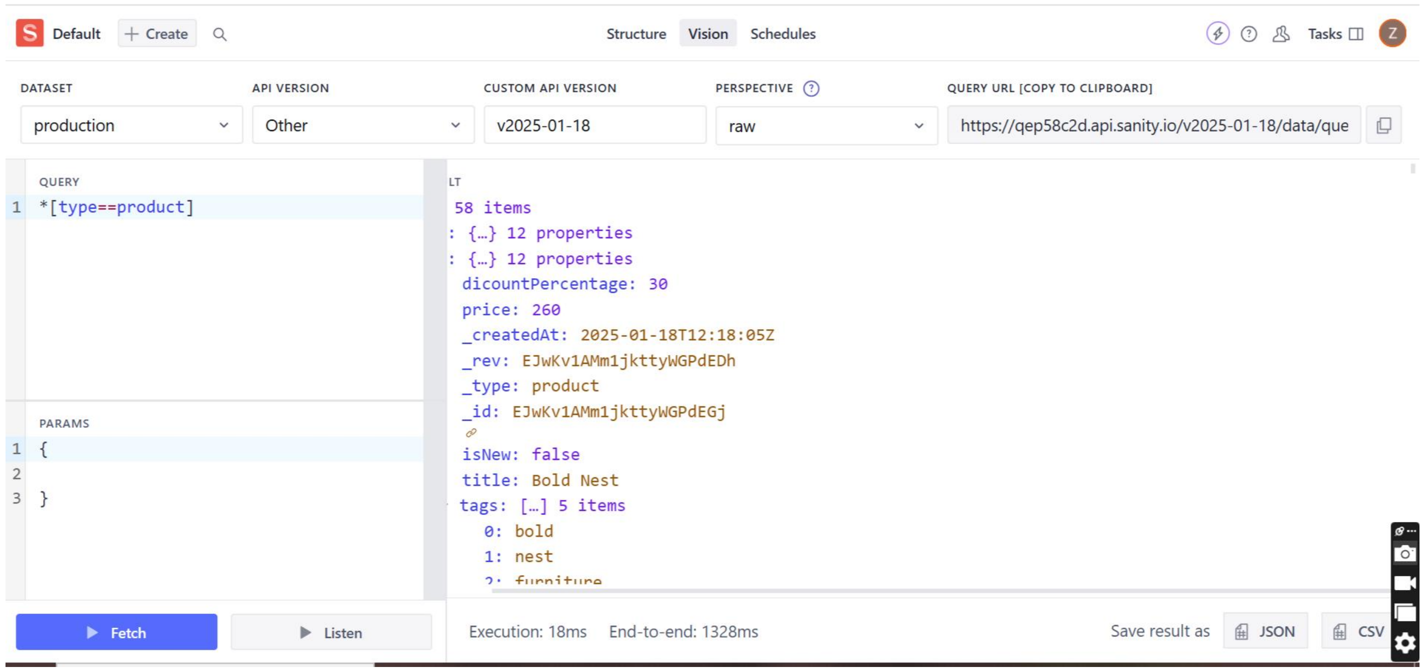
```javascript
import { createClient } from '@sanity/client';

const client = createClient({
  projectId: 'qep58c2d',
  dataset: 'production',
  useCdn: true,
  apiVersion: '2025-01-13',
  token: 'sk9VWciS0N1nq9hP3PBXq2jc1lUTlyDIyGTkX1LRwMkmv0tDwAyPDczxcols2lbSuRlgOGGprP6b1i3t
});

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) {
```


TS product.ts U
JS importSanityData.mjs U ×
TS index.ts U
scripts > JS importSanityData.mjs > client > apiVersion
Tabnine | Edit | Test | Explain | Document

```javascript
async function uploadImageToSanity(imageUrl) {
      console.error('Failed to upload image:', imageUrl, error);
      return null;
    }
}

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

    if (imageId) {
      const document = {
        _type: 'product',
        title: product.title,
        price: product.price,
        productImage: {
          _type: 'image',
          asset: {
            _ref: imageId,
          },
        },
        tags: product.tags,
        dicountPercentage: product.dicountPercentage,
        description: product.description,
        isNew: product.isNew,
      };

      const createdProduct = await client.create(document);
```

API CALL

An API call is made to Sanity CMS using
sanity.fetch() to retrieve product data based on the defined schema
. This call fetches structured content in JSON format, including details like title, price, and images,
which are then integrated into the application for dynamic content display



DATASET: production
API VERSION: Other
CUSTOM API VERSION: v2025-01-18
PERSPECTIVE: raw
QUERY URL [COPY TO CLIPBOARD]: https://qep58c2d.api.sanity.io/v2025-01-18/data/que

QUERY
```
*[type==product]
```

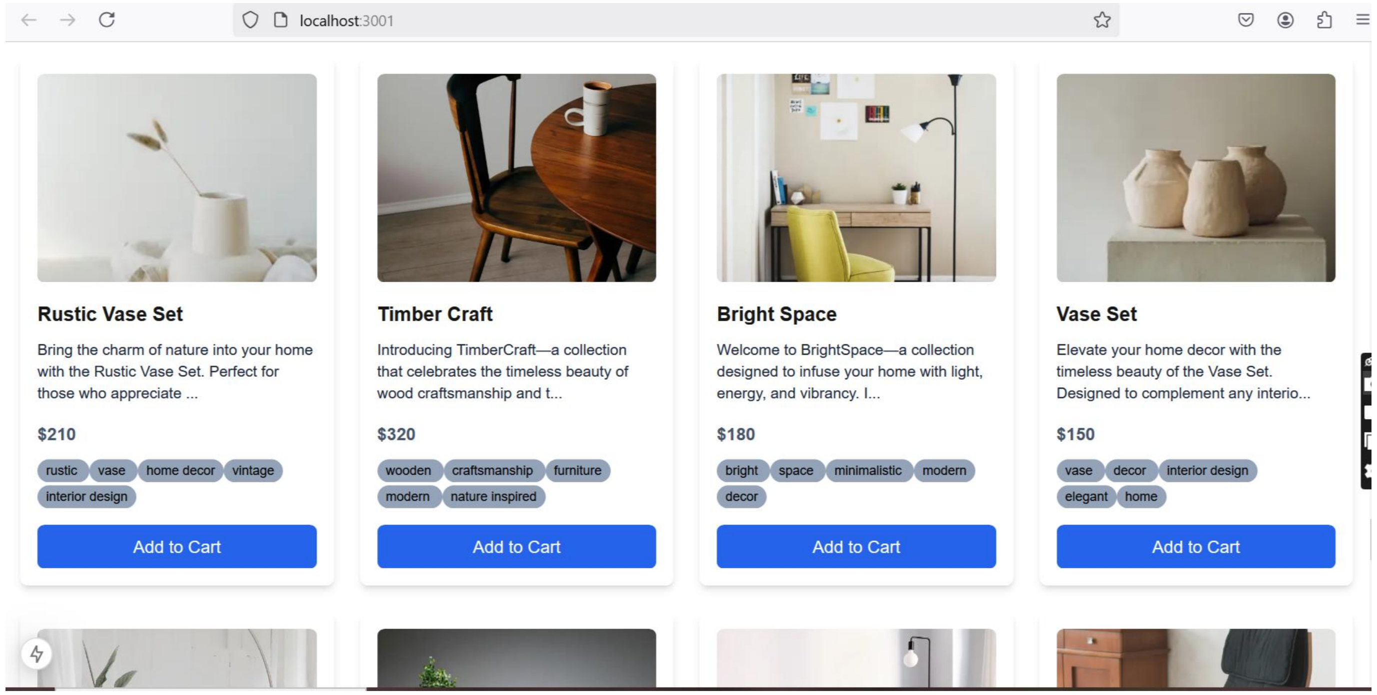
PARAMS
```
{

}
```

```
LT
 58 items
: {…} 12 properties
: {…} 12 properties
  dicountPercentage: 30
  price: 260
  _createdAt: 2025-01-18T12:18:05Z
  _rev: EJwKv1AMm1jkttyWGPdEDh
  _type: product
  _id: EJwKv1AMm1jkttyWGPdEGj
  isNew: false
  title: Bold Nest
  tags: […] 5 items
    0: bold
    1: nest
    2: furniture
```

Execution: 18ms   End-to-end: 1328ms

Data successfully displayed in the frontend

The product data is successfully retrieved and dynamically rendered on the frontend. Key details such as title, price, description, and images are seamlessly integrated into the user interface, ensuring an optimized and responsive user experience with real-time content updates



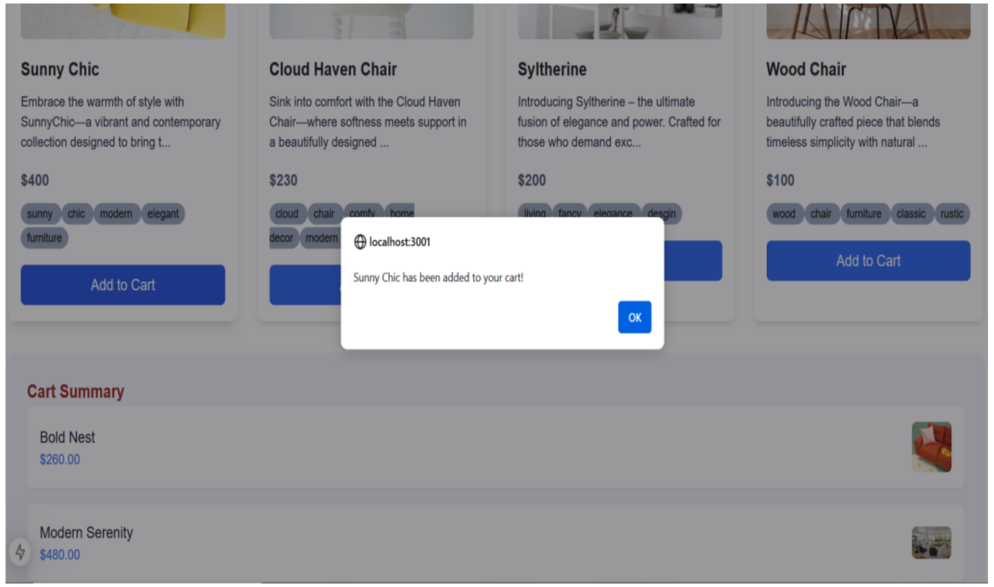
localhost:3001

Rustic Vase Set
Bring the charm of nature into your home with the Rustic Vase Set. Perfect for those who appreciate ...
$210
rustic vase home decor vintage interior design
Add to Cart

Timber Craft
Introducing TimberCraft—a collection that celebrates the timeless beauty of wood craftsmanship and t...
$320
wooden craftsmanship furniture modern nature inspired
Add to Cart

Bright Space
Welcome to BrightSpace—a collection designed to infuse your home with light, energy, and vibrancy. I...
$180
bright space minimalistic modern decor
Add to Cart

Vase Set
Elevate your home decor with the timeless beauty of the Vase Set. Designed to complement any interio...
$150
vase decor interior design elegant home
Add to Cart



Sunny Chic
Embrace the warmth of style with SunnyChic—a vibrant and contemporary collection designed to bring t...
$400
sunny chic modern elegant furniture
Add to Cart

Cloud Haven Chair
Sink into comfort with the Cloud Haven Chair—where softness meets support in a beautifully designed ...
$230
cloud chair comfy home decor modern

Syltherine
Introducing Syltherine – the ultimate fusion of elegance and power. Crafted for those who demand exc...
$200
living fancy elegance desgin

Wood Chair
Introducing the Wood Chair—a beautifully crafted piece that blends timeless simplicity with natural ...
$100
wood chair furniture classic rustic
Add to Cart

localhost:3001
Sunny Chic has been added to your cart!
OK

Cart Summary
Bold Nest
$260.00
Modern Serenity
$480.00