DAY:☺3
API INTEGRATION AND DATA MIGRATION REPORT-
Elite Food-Tuck

API integration means connecting one application with another to share data or use specific functionalities. we build a functional marketplace backend & learn how to utilize APIs for reference, migrate data into Sanity CMS, and ensure compatibility with their templates

Understand how to integrate APIs into your Next.js project.

Learn to migrate data from APIs into Sanity CMS.

Explore how to use existing data from Q-Commerce platforms like Food panda, WordPress, Salesforce, Custom Backend, Sanity.

Develop skills to handle and validate schema with data sources

Q-commerce API Overview

MY API reference from Template 9 Elite Food Tuck. We Are integrating API and migrating data into Sanity CMS to build a functional marketplace backend In Next.js Project. We Use these Provided APIs to populate their Sanity CMS .

Template 09:

https://github.com/mubashirimtiaz/sanity-nextjs

External Data Sources: We integrate data from popular Q-Commerce platform and custom back end using their headless API & data export features in sanity

Steps for Day 3:

Provide the API

We have identified the key endpoints:

- **Food Listings** (e.g., /food)
- **Chefs** (e.g., /categories)

Validate and Adjust Our Schema

our existing Sanity CMS schema Day 2 with the API data structure. Adjust field names, types & category (example) API Field: foods-names, Chefs-details

Our schema to match or map fields during migration

Data Migration

Using the Provided API Type [Food, Chef]:

We are manually Import Our sanity's built-in import tools to upload the data & Include validation check & migrate scripts to handle errors gracefully.

Map fields to your Sanity schema API

API Integration in Next.js:

Test API Integration in thunder client & postman

We Render Data in Components & Utility Functions

Output:

1. Sanity CMS populated with imported data from Provided API
2. Functional API integration in Next.js displaying Our Food Categories & Chefs Details.

Screenshots of:

♣ API calls.

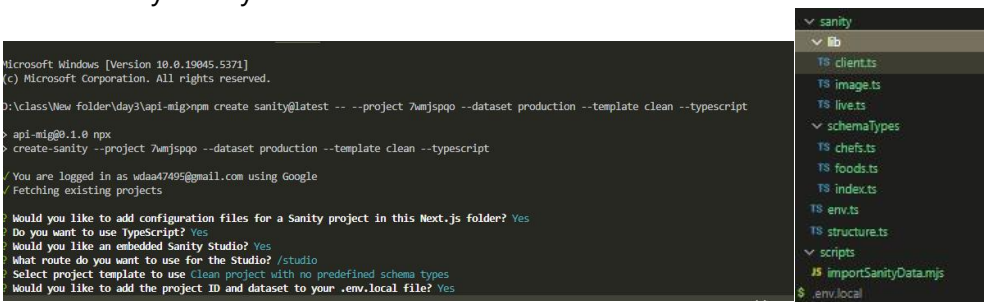
♣ Data successfully displayed in the frontend.

♣ Populated Sanity CMS fields.

API INTEGRATION & DATA MIGRATION (Backend)

- Create Sanity Project

- Install Sanity on my Terminal



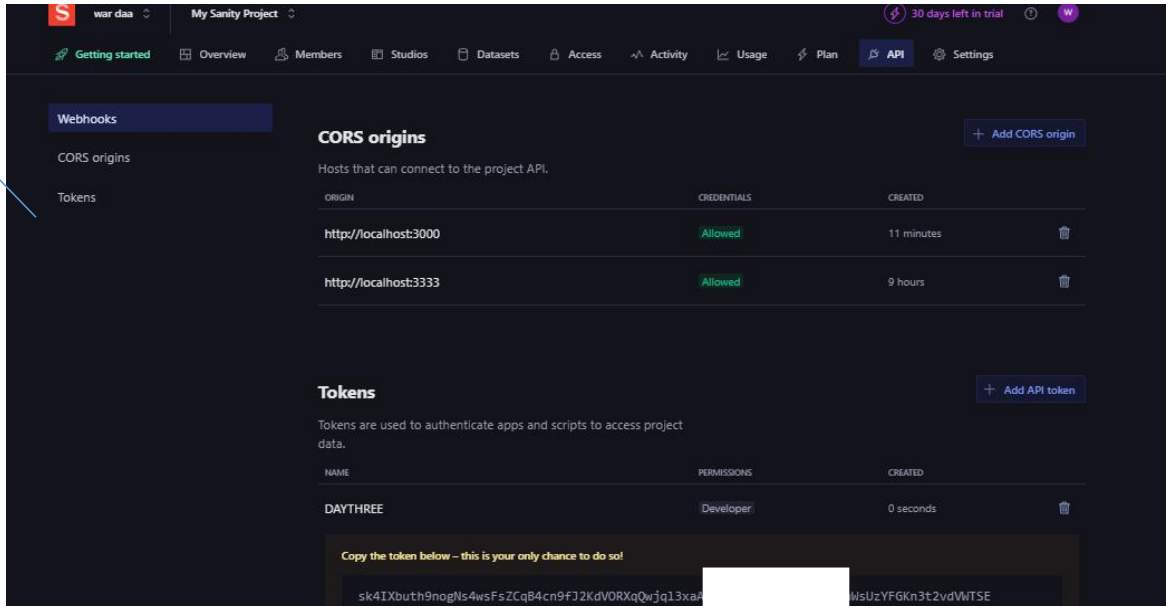
- API Token

  Generate a Sanity API token & Copy the generated token Paste your .env.local file

Add CORS

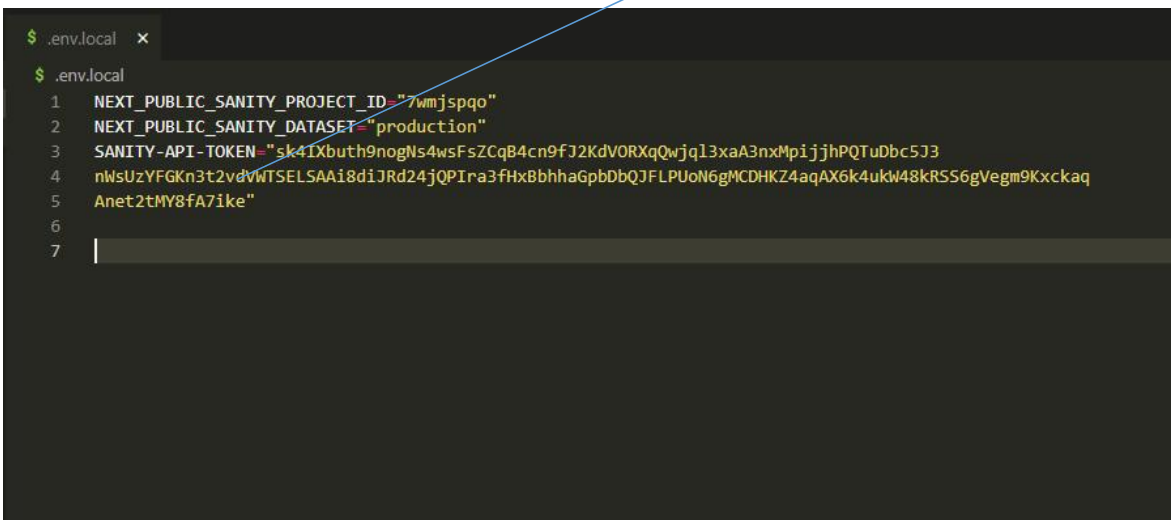
API

Token



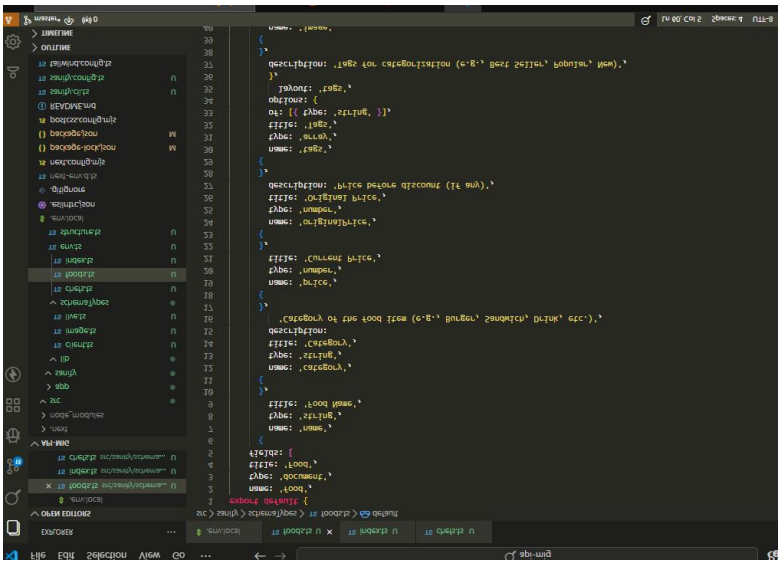
API Token

Add our Token in .env.local file

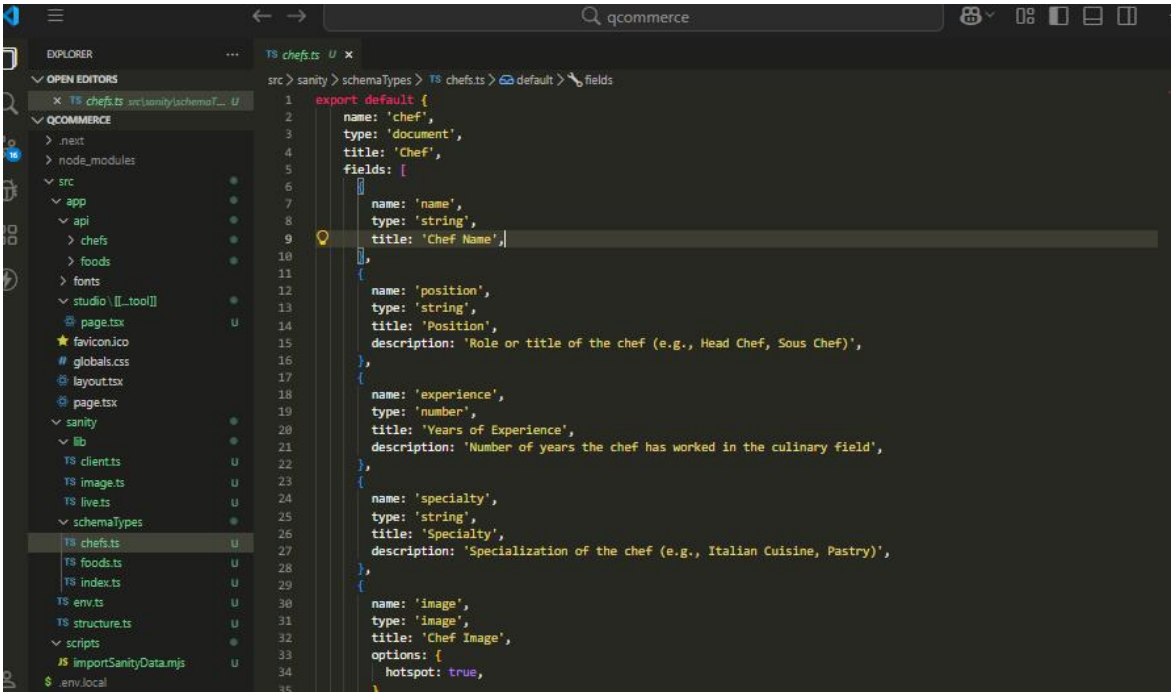


Create the sanity schema

Step 1. Create a file called Foods.ts In sanity/schematypes



Step 2. Create a file called Chef.ts In sanity/schematypes



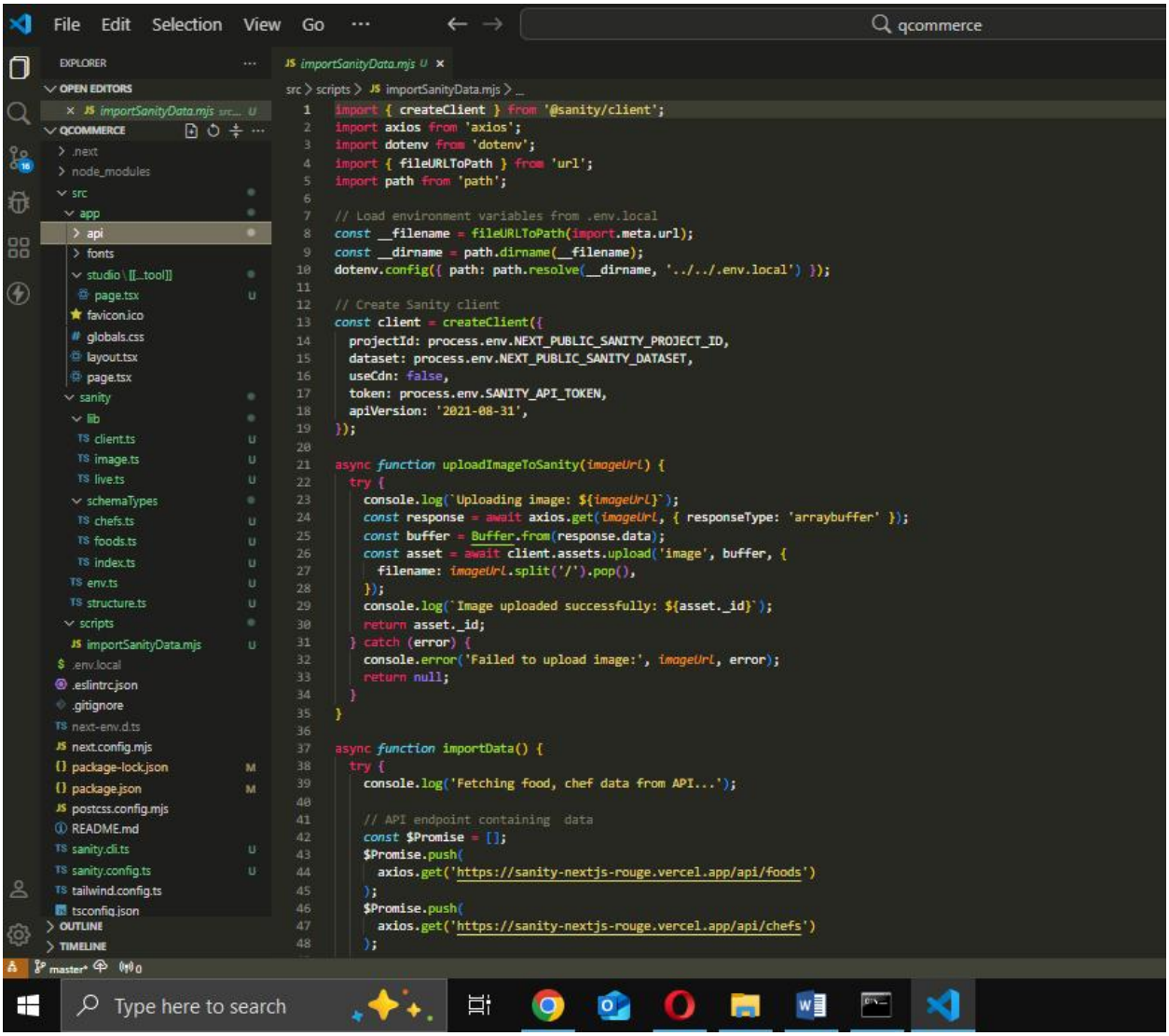
Step 3. Add types sanity/schematypes/index.ts

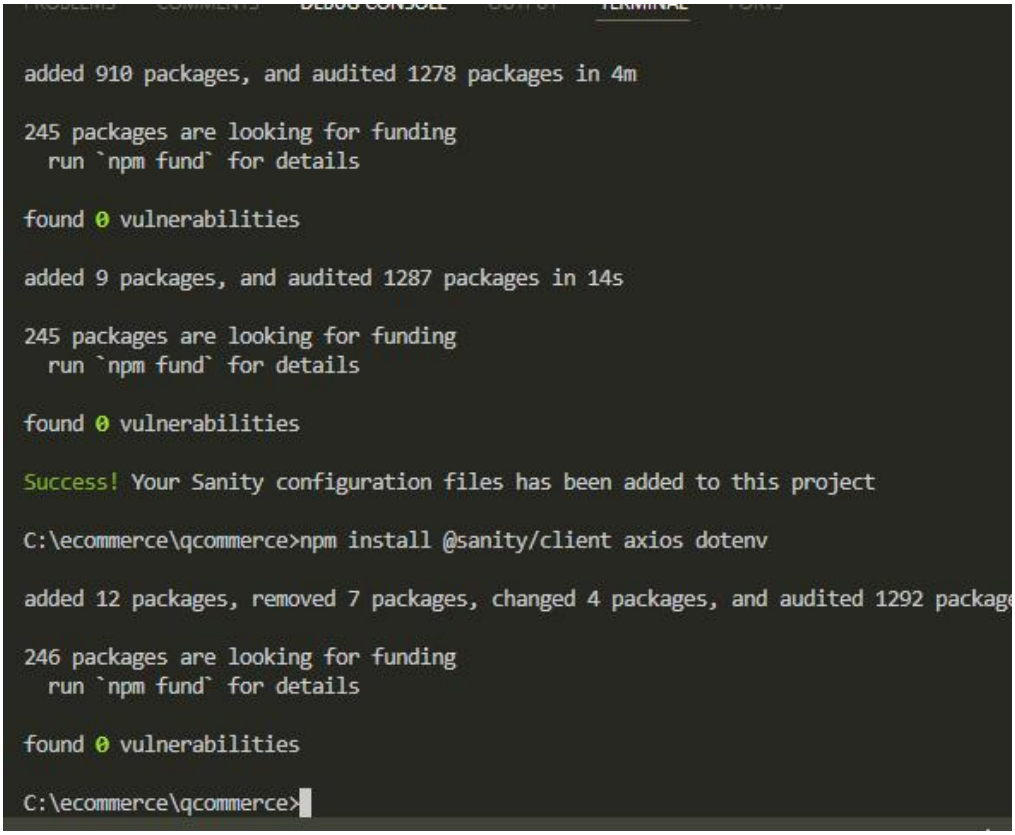
src > sanity > schemaTypes > index.ts > schema > types

```ts
import foods from './foods'
import chefs from './chefs'

export const schema: { types: SchemaTypeDefinition[] } = {
  types: [foods, chefs],
}

```

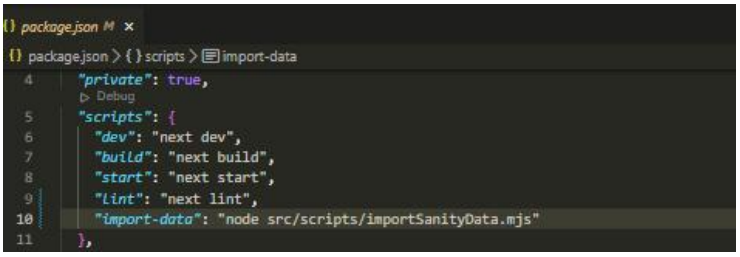
Step 4. Set up the Data import Script & install sanity/client axios

```
npm install @sanity/client axios dotenv
```



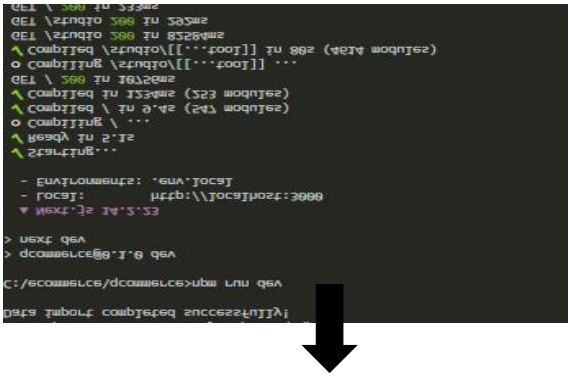


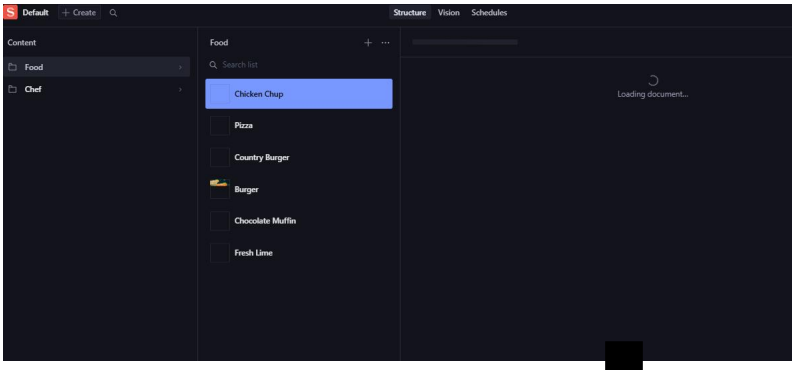
Step 5. Add a new Import-data script

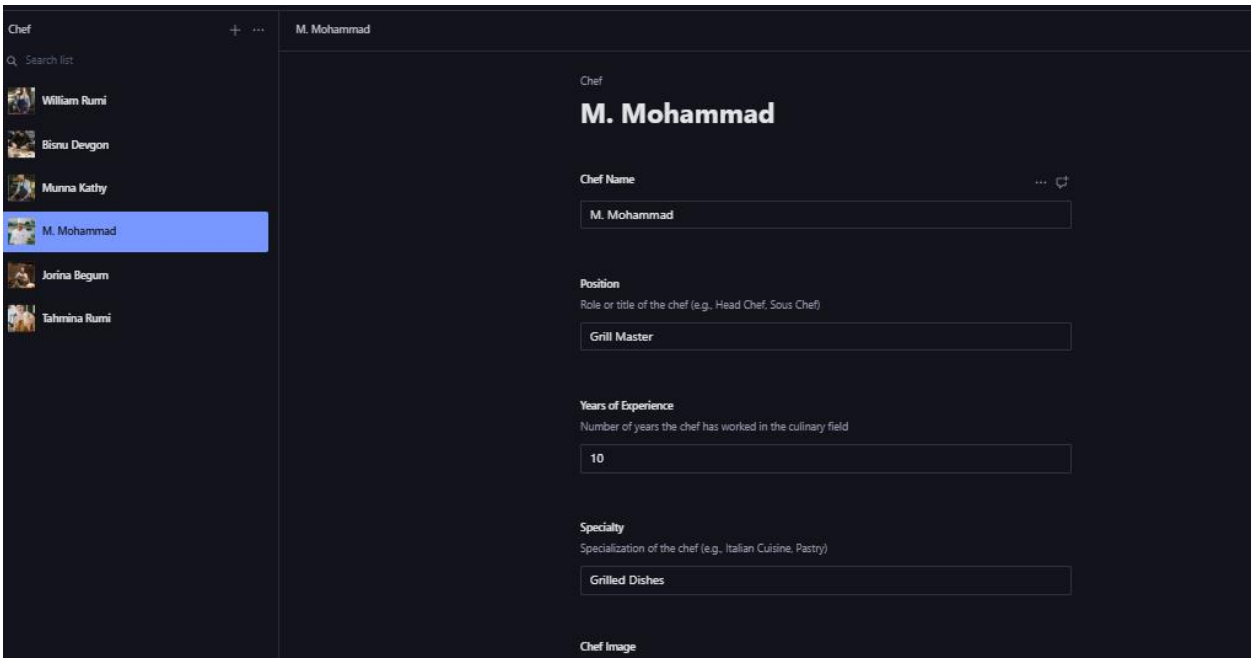


Step 5. Run Project in terminal

```
Node.js v20.11.1

C:\ecommerce\qcommerce>npm run import-data

> qcommerce@0.1.0 import-data
> node src/scripts/importSanityData.mjs

Fetching food, chef data from API...
Processing food: Fresh Lime
Uploading image: https://sanity-nextjs-rouge.vercel.app/food/food-1.png
Image uploaded successfully: image-e155a50cdbcd0e02ca81649945bd30a2fc111276-1248x1068-png
Uploading food to Sanity: Fresh Lime
Food uploaded successfully: FoP6QGkAI9c8N6wTb8QZTB
Processing food: Chocolate Muffin
Uploading image: https://sanity-nextjs-rouge.vercel.app/food/food-2.png
Image uploaded successfully: image-2392122ad0508b5c890aebd8ca36436c214fd7db-1248x1068-png
Uploading food to Sanity: Chocolate Muffin
Food uploaded successfully: CpL9FWqkqp36faTVGL62vg
Processing food: Burger
Uploading image: https://sanity-nextjs-rouge.vercel.app/food/food-3.png
Image uploaded successfully: image-95a970acfaa0bc5e7df93be9527c2d8a1bc93562-1248x1068-png
Uploading food to Sanity: Burger
Food uploaded successfully: igLuitmzTAn5GgSnt8jb3o
Processing food: Country Burger
Uploading image: https://sanity-nextjs-rouge.vercel.app/food/food-4.png
Image uploaded successfully: image-ea501a87e980fc084fb7deacca2c3538b167a477-1248x1068-png
Uploading food to Sanity: Country Burger
Food uploaded successfully: CpL9FWqkqp36faTVGL640m
Processing food: Pizza
Uploading image: https://sanity-nextjs-rouge.vercel.app/food/food-5.png
Image uploaded successfully: image-59499bc14b7749f088d0017b8871e06a47a9deb1-1248x1068-png
Uploading food to Sanity: Pizza
Food uploaded successfully: CpL9FWqkqp36faTVGL65IS
Processing food: Chicken Chup
Uploading image: https://sanity-nextjs-rouge.vercel.app/food/food-6.png
Image uploaded successfully: image-79c2f2263eb44b0c35a3b7d0f53bd9a34a5700b6-1248x1068-png
Uploading food to Sanity: Chicken Chup
Food uploaded successfully: igLuitmzTAn5GgSnt8jcyW
Processing chef: Tahmina Rumi
Uploading image: https://sanity-nextjs-rouge.vercel.app/chef/chef-1.png
Image uploaded successfully: image-62f6ba8dd16f1b27ea593b692ee692bfb8eb860c-1248x1517-png
Uploading chef to Sanity: Tahmina Rumi
Chef uploaded successfully: CpL9FWqkqp36faTVGL66a8
Processing chef: Jorina Begum
Uploading image: https://sanity-nextjs-rouge.vercel.app/chef/chef-2.png
Image uploaded successfully: image-a8a4535b34a230733d2ef6eb5c0a4169f65226d5-1248x1517-png
Uploading chef to Sanity: Jorina Begum
Chef uploaded successfully: igLuitmzTAn5GgSnt8jeiu
Processing chef: M. Mohammad
Uploading chef to Sanity: M. Mohammad
Chef uploaded successfully: igLuitmzTAn5GgSnt8jfTM
Processing chef: Munna Kathy
Uploading image: https://sanity-nextjs-rouge.vercel.app/chef/chef-4.png
```

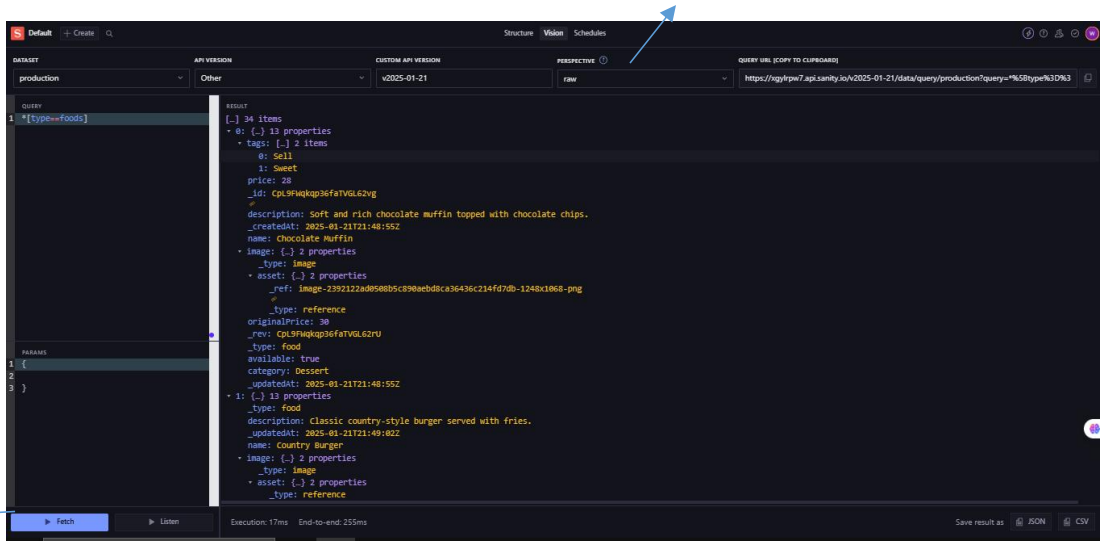



Default
Create
Structure
Vision
Schedules
Content
Food
Chef
Food
Search list
Chicken Chup
Pizza
Country Burger
Burger
Chocolate Muffin
Fresh Lime
Loading document...


Chef
Search list
William Rumi
Bisnu Devgon
Munna Kathy
M. Mohammad
Jorina Begum
Tahmina Rumi
M. Mohammad
Chef
M. Mohammad
Chef Name
M. Mohammad
Position
Role or title of the chef (e.g., Head Chef, Sous Chef)
Grill Master
Years of Experience
Number of years the chef has worked in the culinary field
10
Specialty
Specialization of the chef (e.g., Italian Cuisine, Pastry)
Grilled Dishes
Chef Image

vession

Fetch our data On Vession



Data Fetch

Data successfully displayed in the frontend.

src > data > {} food.json > { } 2 > image

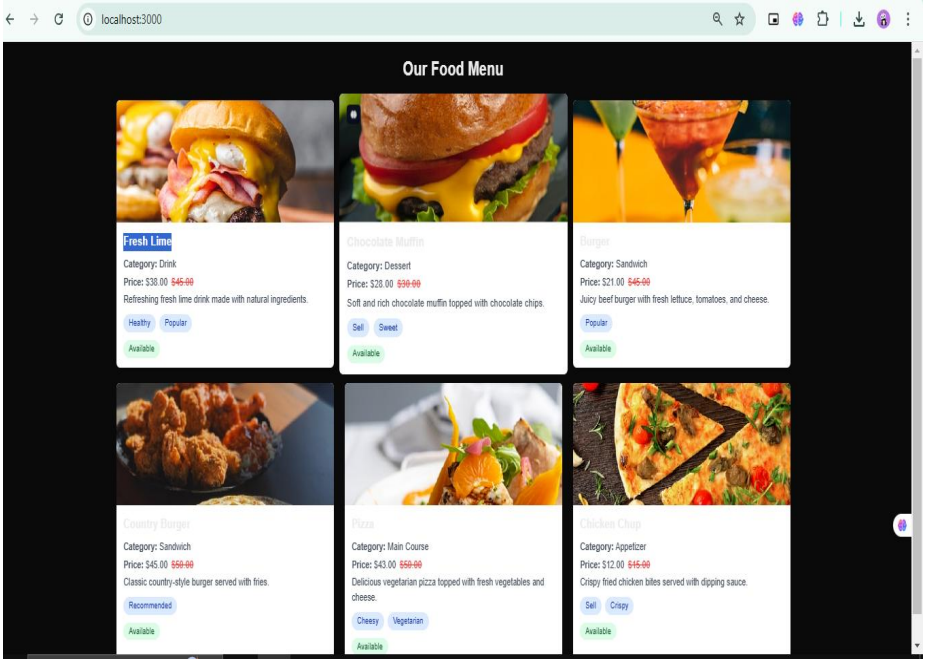

```
[
  {
    "name": "Fresh Lime",
    "category": "Drink",
    "price": 38.0,
    "originalPrice": 45.0,
    "tags": ["Healthy", "Popular"],
    "image": "https://sanity-nextjs-rouge.vercel.app/food/food-1.png",
    "description": "Refreshing fresh lime drink made with natural ingredients.",
    "available": true
  },
  {
    "name": "Chocolate Muffin",
    "category": "Dessert",
    "price": 28.0,
    "originalPrice": 30.0,
    "tags": ["Sell", "Sweet"],
    "image": "https://sanity-nextjs-rouge.vercel.app/food/food-2.png",
    "description": "Soft and rich chocolate muffin topped with chocolate chips.",
    "available": true
  },
  {
    "name": "Burger",
    "category": "Sandwich",
    "price": 21.0,
    "originalPrice": 45.0,
    "tags": ["Popular"],
    "image": "https://sanity-nextjs-rouge.vercel.app/food/food-3.png",
    "description": "Juicy beef burger with fresh lettuce, tomatoes, and cheese.",
    "available": true
  },
  {
    "name": "Country Burger",
    "category": "Sandwich",
    "price": 45.0,
    "originalPrice": 50.0,
    "tags": ["Recommended"],
    "image": "https://sanity-nextjs-rouge.vercel.app/food/food-4.png",
    "description": "Classic country-style burger served with fries.",
    "available": true
  },
  {
    "name": "Pizza",
    "category": "Main Course",
    "price": 43.0,
    "originalPrice": 50.0,
    "tags": ["Cheesy", "Vegetarian"],
    "image": "https://sanity-nextjs-rouge.vercel.app/food/food-5.png",
```

src > app > api > chefs > TS route.ts > ...

```ts
import { NextResponse } from 'next/server';
import data from '@/data/chef.json';

export async function GET() {
  return NextResponse.json(data);
}
```

app > Foods > page.tsx > FoodPage > useEffect() callback > fetchFoodItems

```tsx
// app/food/page.tsx

'use client';

import React, { useEffect, useState } from 'react';

type FoodItem = {
  name: string;
  category: string;
  price: number;
  originalPrice: number;
  tags: string[];
  image: string;
  description: string;
  available: boolean;
};

const FoodPage = () => {
  const [foodItems, setFoodItems] = useState<FoodItem[]>([]);
  const [loading, setLoading] = useState<boolean>(true);

  useEffect(() => {
    const fetchFoodItems = async () => {
      try {
        // API call to fetch the data from the server
        const response = await fetch('/api/foods'); // Ensure the correct API route is used
        const data = await response.json();
        setFoodItems(data);
      } catch (error) {
        console.error('Error fetching food data:', error);
      } finally {
        setLoading(false);
      }
    };

    fetchFoodItems();
  }, []);

  if (loading) {
    return <div className="text-center mt-10">Loading...</div>;
  }

  return (
    <div className="container mx-auto p-6">
      <h1 className="text-3xl font-bold text-center mb-8">Our Food Menu</h1>
      <div className="grid grid-cols-1 sm:grid-cols-2 lg:grid-cols-3 gap-6">
        {foodItems.map((food, index) => (
          <div
```



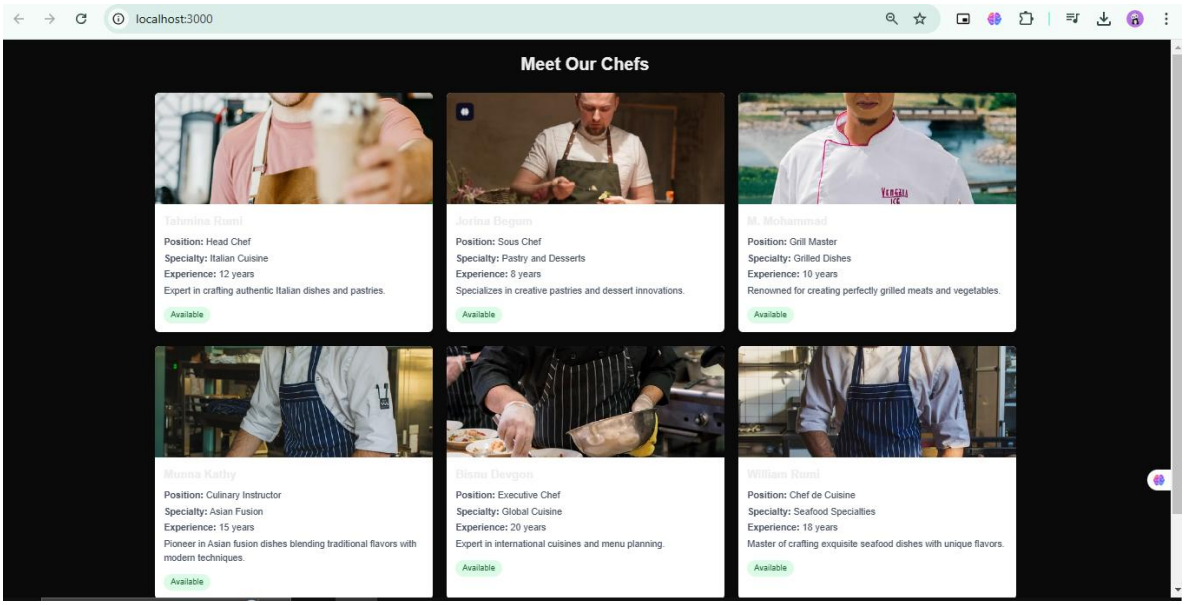
src > app > api > foods > TS route.ts > ...

```ts
import { NextResponse } from 'next/server';
import data from '@/data/food.json';

export async function GET() {
    return NextResponse.json(data);
}
```

page.tsx U

src > app > Chefs > page.tsx > Chef

```ts
'use client'; // Mark this component as a Client Component

import React from 'react';

type Chef = {
  name: string;
  position: string;
  experience: number;
  specialty: string;
  image: string;
  description: string;
  available: boolean;
};

const chefs: Chef[] = [
  {
    name: 'Tahmina Rumi',
    position: 'Head Chef',
    experience: 12,
    specialty: 'Italian Cuisine',
    image: 'https://sanity-nextjs-rouge.vercel.app/chef/chef-1.png',
    description: 'Expert in crafting authentic Italian dishes and pastries.',
    available: true,
  },
  {
    name: 'Jorina Begum',
    position: 'Sous Chef',
    experience: 8,
    specialty: 'Pastry and Desserts',
    image: 'https://sanity-nextjs-rouge.vercel.app/chef/chef-2.png',
    description: 'Specializes in creative pastries and dessert innovations.',
    available: true,
  },
  {
    name: 'M. Mohammad',
    position: 'Grill Master',
    experience: 10,
    specialty: 'Grilled Dishes',
    image: 'https://sanity-nextjs-rouge.vercel.app/chef/chef-3.png',
    description: 'Renowned for creating perfectly grilled meats and vegetables.',
    available: true,
  },
  {
    name: 'Munna Kathy',
    position: 'Culinary Instructor',
    experience: 15,
    specialty: 'Asian Fusion',
    image: 'https://sanity-nextjs-rouge.vercel.app/chef/chef-4.png',
```



Day 3 Checklist:

Self-Validation Checklist:

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

Hackhton3 Day3 Quarter2

MARKETPLACE API INTEGRATION AND DATA MIGRATION REPORT BY WARDA

Shift: Tuesday 2 to 5 GIAIC

https://www.linkedin.com