Day 3 - API Integration Report - Food Marketplace

API Integration Process

1. Environmental Setup:

- Installed necessary dependencies such as `@sanity/client`, `axios`, and `dotenv` using npm.
- Configured environment variables to store Sanity project credentials securely.

2. Sanity Client Creation:

- Initialized Sanity client using:
    - **Key Variables:**
        - `SANITY_PROJECT_ID`
        - `SANITY_DATASET`
        - `SANITY_API_TOKEN`

3. Data Fetching:

- Used `axios OR Fetch M<ethos` to fetch data from API endpoints for food and chef data.

4. Data Processing:

- Mapped the fetched data to match the adjusted schema structure.

5. Sanity Document Creation:

- Populated CMS using Sanity's `createOrReplace` method.

6. Error Handling:

- Implemented try-catch blocks and data validation to ensure smooth processing.

Adjustments Made to Schemas

Chef Schema:

- **Fields Added:**
  - ○ `position`: Chef's designation.
  - ○ `experience`: Total years of experience.
  - ○ `speciality`: Area of expertise.
  - ○ `available`: Boolean indicating availability.

Food Schema:

- **Fields Added:**
  - ○ `category`: Food category (e.g., Dessert, Main Course).
  - ○ `price`: Selling price.
  - ○ `originalPrice`: Original price before discounts.
  - ○ `tags`: Array of tags for filtering.
  - ○ `available`: Boolean indicating availability.

  Hotspot Option:

- Enabled hotspot and crop features for images in both schemas to allow resizing and cropping directly from Sanity Studio.

Migration Steps and Tools Used

1. Preparation:

- Verified API access and created a plan to map the API response to the Sanity schema.

2. Data Import Script:

- Developed a script to fetch, process, and import data into Sanity.

3. Image Handling:

- Uploaded and attached images to documents using Sanity's asset API.

4. Document Creation:

- Iteratively created or updated documents in Sanity using processed data.

Tools Used:

- **Node.js Modules:**
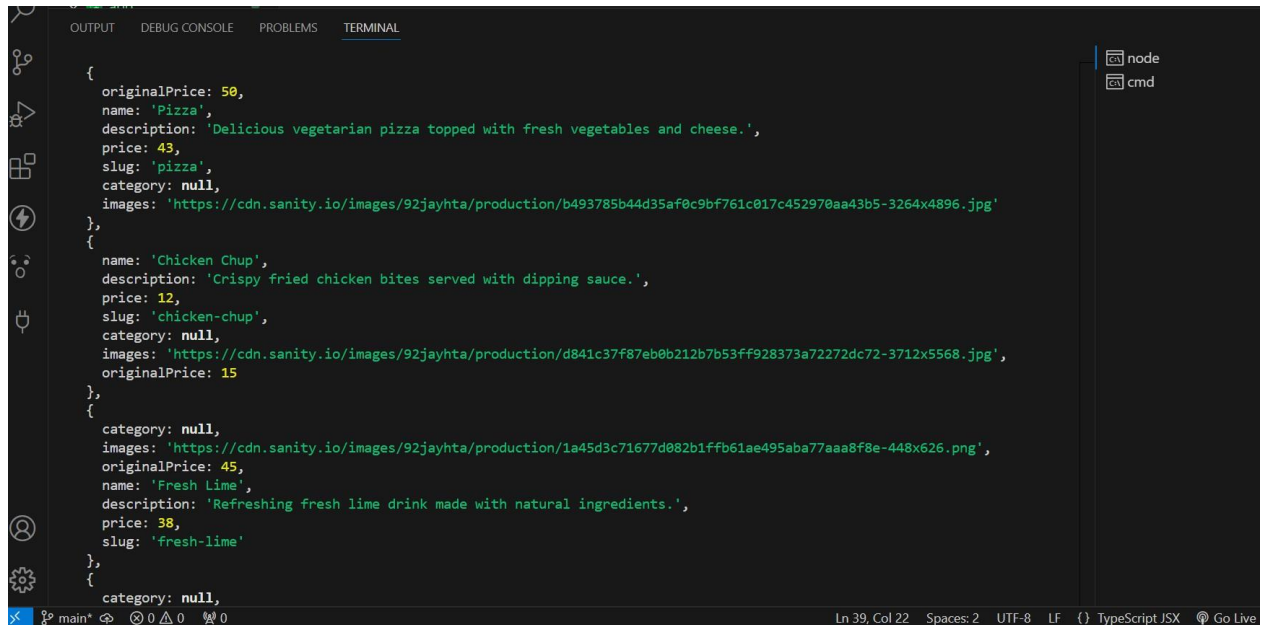 - ○ `@sanity/client`
  - ○ `axios`

- ○ `dotenv`
- **Sanity Features:**
  - ○ Hotspot and crop options for images.
  - ○ `createOrReplace` method for seamless updates.

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```javascript
 7    // Load environment variables from .env.local
 8    const __filename = fileURLToPath(import.meta.url);
 9    const __dirname = path.dirname(__filename);
10    dotenv.config({ path: path.resolve(__dirname, '../../.env.local') });
11
12    // Create Sanity client
13    const client = createClient({
14      projectId: process.env.NEXT_PUBLIC_SANITY_PROJECT_ID,
15      dataset: process.env.NEXT_PUBLIC_SANITY_DATASET,
16      useCdn: false,
17      token: process.env.SANITY_API_TOKEN,
18      apiVersion: '2021-08-31',
19    });
20
21    async function uploadImageToSanity(imageUrl) {
22      try {
23        console.log(`Uploading image: ${imageUrl}`);
24        const response = await axios.get(imageUrl, { responseType: 'arraybuffer' });
25        const buffer = Buffer.from(response.data);
26        const asset = await client.assets.upload('image', buffer, {
27          filename: imageUrl.split('/').pop(),
28        });
29        console.log(`Image uploaded successfully: ${asset._id}`);
30        return asset._id;
31      } catch (error) {
32        console.error('Failed to upload image:', imageUrl, error);
33        return null;
34      }
```

```
51        const foods = foodsResponse.data;
52        const chefs = chefsResponse.data;
53
54        for (const food of foods) {
55          console.log(`Processing food: ${food.name}`);
56
57          let imageRef = null;
58          if (food.image) {
59            imageRef = await uploadImageToSanity(food.image);
60          }
61
62          const sanityFood = {
63            _type: 'food',
64            name: food.name,
65            category: food.category || null,
66            price: food.price,
67            originalPrice: food.originalPrice || null,
68            tags: food.tags || [],
69            description: food.description || '',
70            available: food.available !== undefined ? food.available : true,
71            image: imageRef
72              ? {
73                  _type: 'image',
74                  asset: {
75                    _type: 'reference',
76                    _ref: imageRef,
77                  },
78                }
79              : undefined,
80          };
81
82          console.log('Uploading food to Sanity:', sanityFood.name);
83          const result = await client.create(sanityFood);
```
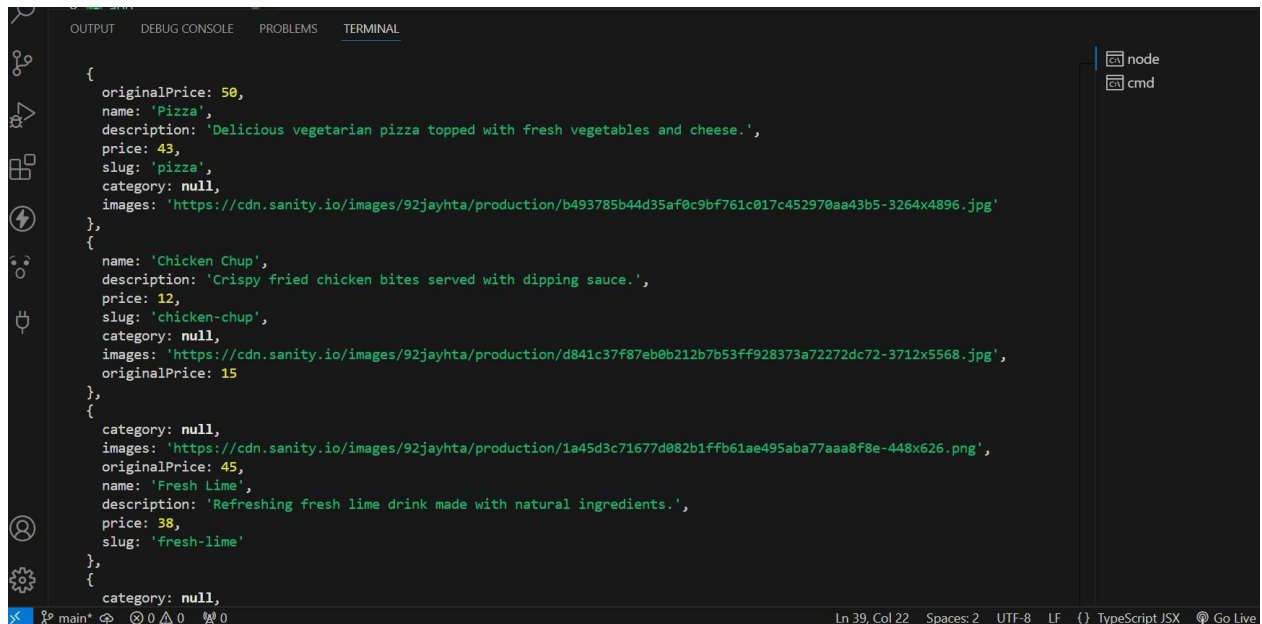
API Calls Food:


```
OUTPUT   DEBUG CONSOLE   PROBLEMS   TERMINAL

  {
    originalPrice: 50,
    name: 'Pizza',
    description: 'Delicious vegetarian pizza topped with fresh vegetables and cheese.',
    price: 43,
    slug: 'pizza',
    category: null,
    images: 'https://cdn.sanity.io/images/92jayhta/production/b493785b44d35af0c9bf761c017c452970aa43b5-3264x4896.jpg'
  },
  {
    name: 'Chicken Chup',
    description: 'Crispy fried chicken bites served with dipping sauce.',
    price: 12,
    slug: 'chicken-chup',
    category: null,
    images: 'https://cdn.sanity.io/images/92jayhta/production/d841c37f87eb0b212b7b53ff928373a72272dc72-3712x5568.jpg',
    originalPrice: 15
  },
  {
    category: null,
    images: 'https://cdn.sanity.io/images/92jayhta/production/1a45d3c71677d082b1ffb61ae495aba77aaa8f8e-448x626.png',
    originalPrice: 45,
    name: 'Fresh Lime',
    description: 'Refreshing fresh lime drink made with natural ingredients.',
    price: 38,
    slug: 'fresh-lime'
  },
  {
    category: null,
```
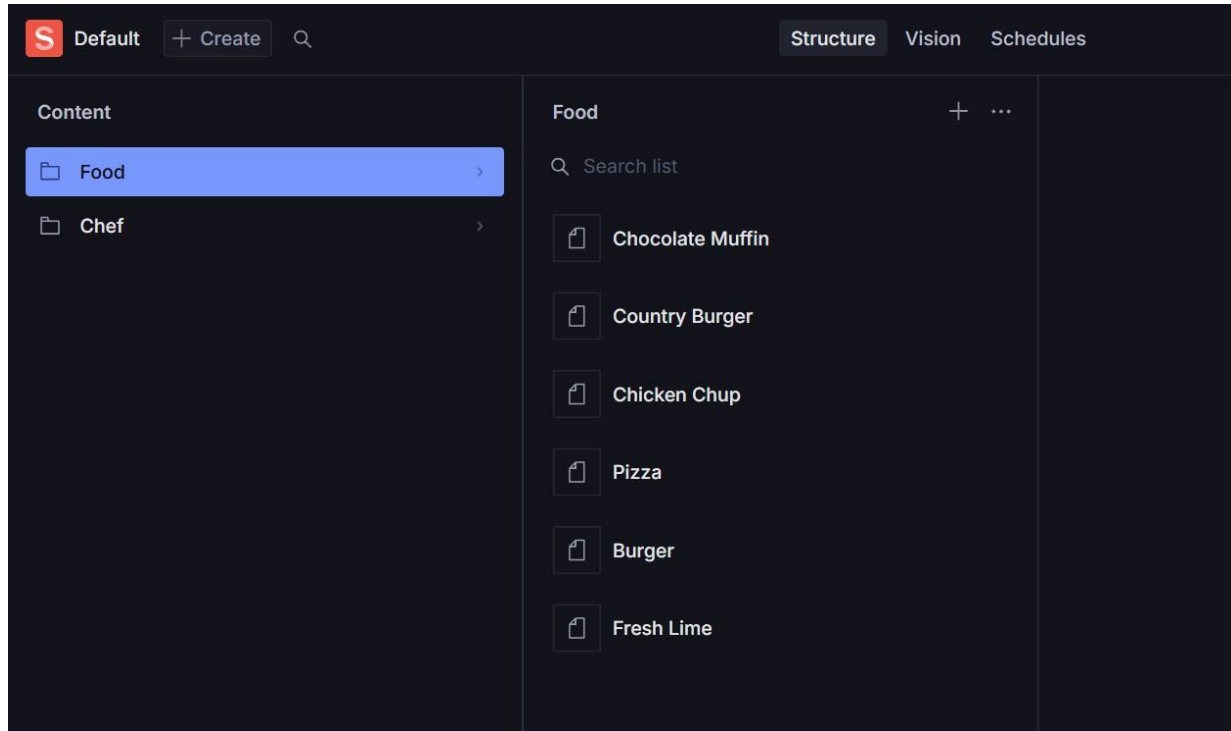
API Calls Chefs:


```
OUTPUT   DEBUG CONSOLE   PROBLEMS   TERMINAL

  {
    originalPrice: 50,
    name: 'Pizza',
    description: 'Delicious vegetarian pizza topped with fresh vegetables and cheese.',
    price: 43,
    slug: 'pizza',
    category: null,
    images: 'https://cdn.sanity.io/images/92jayhta/production/b493785b44d35af0c9bf761c017c452970aa43b5-3264x4896.jpg'
  },
  {
    name: 'Chicken Chup',
    description: 'Crispy fried chicken bites served with dipping sauce.',
    price: 12,
    slug: 'chicken-chup',
    category: null,
    images: 'https://cdn.sanity.io/images/92jayhta/production/d841c37f87eb0b212b7b53ff928373a72272dc72-3712x5568.jpg',
    originalPrice: 15
  },
  {
    category: null,
    images: 'https://cdn.sanity.io/images/92jayhta/production/1a45d3c71677d082b1ffb61ae495aba77aaa8f8e-448x626.png',
    originalPrice: 45,
    name: 'Fresh Lime',
    description: 'Refreshing fresh lime drink made with natural ingredients.',
    price: 38,
    slug: 'fresh-lime'
  },
  {
    category: null,
```
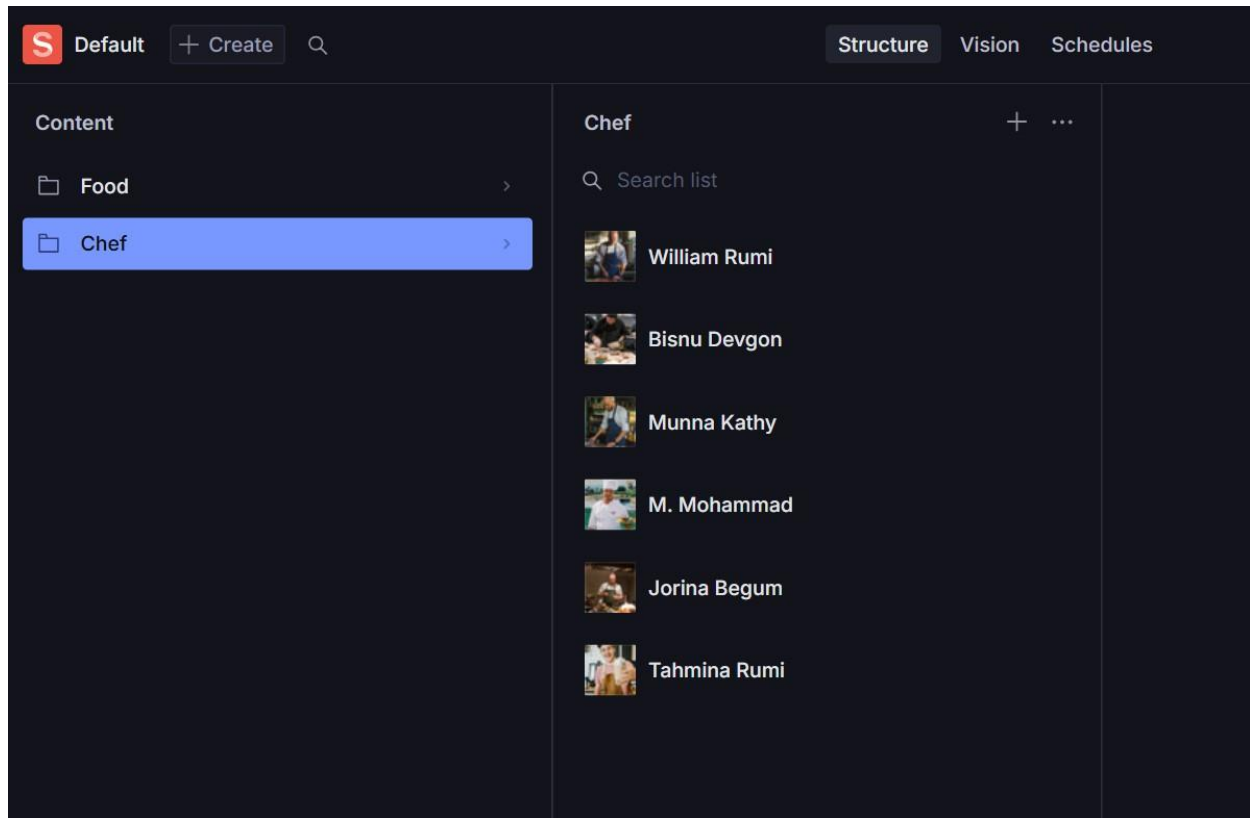
Sanity CMS Fields

Food

Sanity CMS Fields

Chef

Data Displayed In FointEnd (Next.Js)

Our Shop

Home / Shop

Pizza
$43.00 $50.00

Chicken Chup
$12.00 $15.00

Fresh Lime
$38.00 $45.00

Chocolate Muffin
$28.00 $30.00

Burger
$21.00 $45.00

Country Burger
$45.00 $50.00