

Day 3 -API Integration Report – [Rental E-commerce Website] Morent

API INTEGRATION

To successfully integrate the API for the Rental Car System, follow these key steps:

- ❖ Connect the frontend with the backend to enable dynamic data retrieval.
- ❖ Use Sanity CMS as the backend to store and manage car rental data.
- ❖ Retrieve car data via API and display it dynamically.
- ❖ Implement sorting for better user experience
- ❖ Ensure responsiveness and error handling.

Procedure

Step 1 Installing Sanity Studio

Create a new NEXT.JS Project with sanity or integrate a new sanity project into a new existing NEXT.JS project

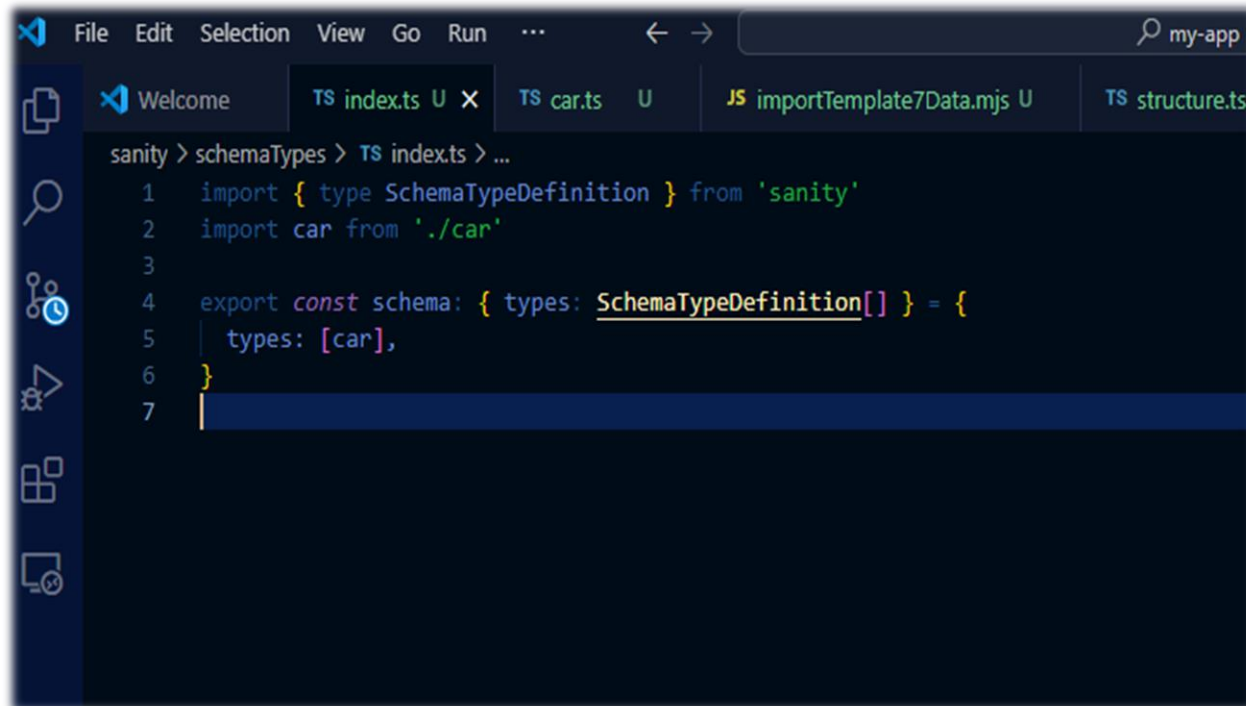
Step 2 Setting Environment Variables

- 1. Created a .env.local file at the root of the project.*
- 2. Added the following environment variables:*

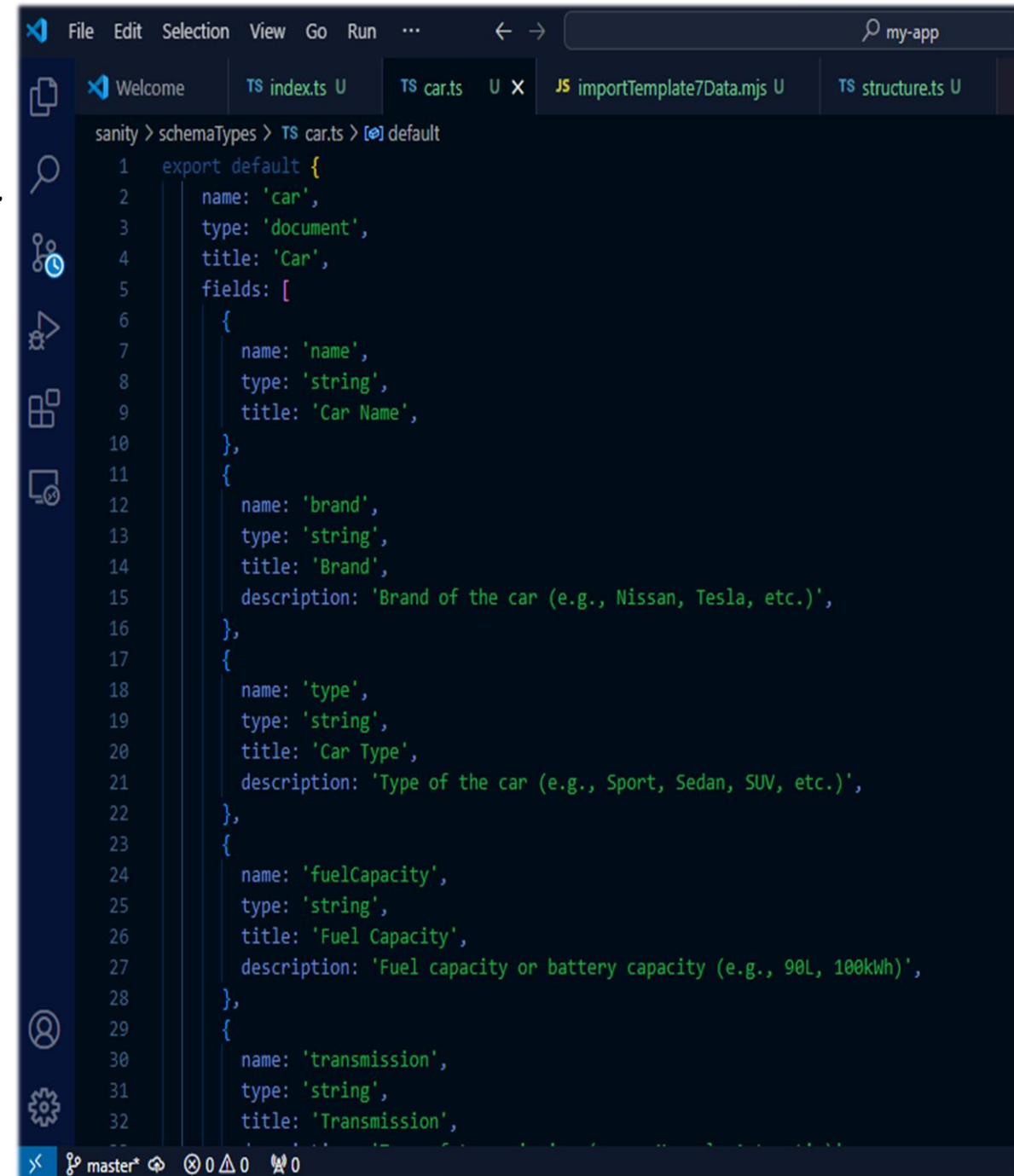
- a. NEXT_PUBLIC_SANITY_PROJECT_ID: Your Sanity project ID.*
- b. NEXT_PUBLIC_SANITY_DATASET: Dataset name (e.g ., production).*
- c. SANITY_API_TOKEN: Token for API authentication.*

Step 3 Configuration For Data Fetching

- *Configure Sanity, by defining schema, types and other settings.*
- *Define Car Data Types for the project*
- *Create a migration script to connect with Sanity CMS*
- *Update package.json*
- *Execute the script with npm commands*



```
sanity > schemaTypes > TS index.ts > ...
1 import { type SchemaTypeDefinition } from 'sanity'
2 import car from './car'
3
4 export const schema: { types: SchemaTypeDefinition[] } = {
5   types: [car],
6 }
7
```



```
sanity > schemaTypes > TS car.ts > [0] default
1 export default {
2   name: 'car',
3   type: 'document',
4   title: 'Car',
5   fields: [
6     {
7       name: 'name',
8       type: 'string',
9       title: 'Car Name',
10    },
11    {
12      name: 'brand',
13      type: 'string',
14      title: 'Brand',
15      description: 'Brand of the car (e.g., Nissan, Tesla, etc.)',
16    },
17    {
18      name: 'type',
19      type: 'string',
20      title: 'Car Type',
21      description: 'Type of the car (e.g., Sport, Sedan, SUV, etc.)',
22    },
23    {
24      name: 'fuelCapacity',
25      type: 'string',
26      title: 'Fuel Capacity',
27      description: 'Fuel capacity or battery capacity (e.g., 90L, 100kWh)',
28    },
29    {
30      name: 'transmission',
31      type: 'string',
32      title: 'Transmission',
33    },
34  ],
35 }
```

File Edit Selection View Go Run ...

PROBLEMS OUTPUT DEBUG CONSOLE **TERMINAL** PORTS COMM

E:\MOHAMMAD AHMAD\Courses\Governor Sindh IT\Q2\On-Site\Hackathon\my-app

```
> my-app@0.1.0 importTemplate7Data.mjs
> node scripts/importTemplate7Data.mjs
```

Fetching car data from API...
Fetched 16 cars
Processing car: Koenigsegg
Uploading image: https://car-rental-website-five.vercel.app/
Image uploaded successfully: image-8d4b40b0870d3054a95e666e8
Uploading car to Sanity: Koenigsegg
Car uploaded successfully: EJwtKv1AMm1jkttYWGtmWjZ
Processing car: Nissan GT-R
Uploading image: https://car-rental-website-five.vercel.app/
Image uploaded successfully: image-db21552aead2a561b7291136f
Uploading car to Sanity: Nissan GT-R
Car uploaded successfully: tiTonAuk6WGS0b8ZgbCTpQ
Processing car: Rolls-Royce
Uploading image: https://car-rental-website-five.vercel.app/
Image uploaded successfully: image-b914166a31106b58c6ffa6394
Uploading car to Sanity: Rolls-Royce
Car uploaded successfully: tiTonAuk6WGS0b8ZgbCTx1
Processing car: Nissan GT-R
Uploading image: https://car-rental-website-five.vercel.app/
Image uploaded successfully: image-db21552aead2a561b7291136f
Uploading car to Sanity: Nissan GT-R
Car uploaded successfully: tiTonAuk6WGS0b8ZgbCU34
Processing car: Tesla Model 3
Uploading image: https://car-rental-website-five.vercel.app/
Image uploaded successfully: image-e0afccc6fa45f6b1d1459e391
Uploading car to Sanity: Tesla Model 3
Car uploaded successfully: tiTonAuk6WGS0b8ZgbCU5L
Processing car: Ford Mustang

File Edit Selection View Go Run ...

my-app

Welcome TS index.ts U JS importTemplate7Data.mjs U X

```
scripts > JS importTemplate7Data.mjs > client
1 import { createClient } from '@sanity/client';
2 import axios from 'axios';
3 import dotenv from 'dotenv';
4 import { fileURLToPath } from 'url';
5 import path from 'path';
6
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: "8351h2iz",
15   dataset: "production",
16   useCdn: false,
17   token: "skflr6RMgTnPDFtCQFoaRNVTzwDBUawGM4kl8cioHfhofAqvBLJXnlxVbgJ1wjtrLRS1DfeAV9qJsep2i0ZjK2PiUgQQRByLQN8omST4zyYSGomAAjRhohod9dcJfuwIZRBpqfR",
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);
```

DATA SUCCESSFULLY MOUNTED

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Default

+ Create

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Structure

Vision

Schedules

⚡

?

👤

Tasks

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Content


📁 Car


>


Car


+ ...


Q Search list


MG ZX Exclusive


All New Terlos


CR-V


Rolls-Royce

Nissan Altima

Chevrolet Camaro

Porsche 911

Mercedes-Benz C-Class

Audi A6

New Car

🔗 💬 ... ✕

Car

New Car

Car Name

Brand

Brand of the car (e.g., Nissan, Tesla, etc.)

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\$96.00

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\$100.00/day

Rent Now

Audi A6

Hybrid



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\$120.00/day

Rent Now

All New Terlos

SUV



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\$74.00

Rent Now

Koenigsegg

Sport



90L Manual 2 People People

\$99.00

Rent Now

BMW X5

Diesel



70L Manual 7 seats People

\$150.00/day

Rent Now

Mercedes-Benz C-Class

Gasoline



65L Manual 5 seats People

\$140.00/day

Rent Now

Nissan Altima

Hybrid



50L Manual 5 seats People

\$90.00/day

Rent Now