

Marketplace Builder Hackathon 2025

Day 3 : API Integration and Data Migration

This document outlines the steps taken to integrate the Template 7 API into the Sanity CMS project and the process of migrating data from the Template 7 API into Sanity. The purpose of this guide is to provide the steps and prerequisites to achieve API integration and Data migration from external API.

Prerequisites

- Access to the API
- Set up Sanity project and configure it.
- Install Node.js on the development machine.
- Know about the basic of Sanity CLI and API.

API Overview

Template 7 API provides data for Cars

Key Endpoints:

Endpoint	Method	Response
/template7	GET	All cars data
/template7/:id	GET	Specific car data

Integration Steps

Step 1: Correct Sanity Schema for the API Data

Corrected previous schema in Sanity to match the structure of the Template 7 API data.

```
import { defineField, defineType } from "sanity";
```

```
export const car = defineType({
```

```
name: 'car',

type: 'document',

title: 'Car',

fields: [

  defineField({

    name: 'name',

    type: 'string',

    title: 'Car Name',

  }),

  defineField({

    name: 'type',

    type: 'string',

    title: 'Car Type',

    description: 'Type of the car (e.g., Sport, Sedan, SUV, etc.)',

  }),

  defineField({

    name: 'fuelCapacity',

    type: 'string',

    title: 'Fuel Capacity',

    description: 'Fuel capacity or battery capacity (e.g., 90L, 100kWh)',

  }),

  defineField({

    name: 'transmission',

    type: 'string',

    title: 'Transmission',

    description: 'Type of transmission (e.g., Manual, Automatic)',

  }),
```

```
defineField({
```

```
  name: 'seatingCapacity',
```

```
  type: 'string',
```

```
  title: 'Seating Capacity',
```

```
  description: 'Number of seats (e.g., 2 People, 4 seats)',
```

```
}),
```

```
defineField({
```

```
  name: 'pricePerDay',
```

```
  type: 'string',
```

```
  title: 'Price Per Day',
```

```
  description: 'Rental price per day',
```

```
}),
```

```
defineField({
```

```
  name: 'brand',
```

```
  type: 'string',
```

```
  title: 'Brand',
```

```
  description: 'Brand of the car (e.g., Nissan, Tesla, etc.)',
```

```
}),
```

```
defineField({
```

```
  name: 'tags',
```

```
  type: 'array',
```

```
  title: 'Tags',
```

```
  of: [{ type: 'string' }],
```

```
  options: {
```

```
    layout: 'tags',
```

```
  },
```

```
  description: 'Tags for categorization (e.g., popular, recommended)',
```

```

    }},
    defineField({
      name: 'originalPrice',
      type: 'string',
      title: 'Original Price',
      description: 'Original price before discount (if applicable)',
    }),
    defineField({
      name: 'image',
      type: 'image',
      title: 'Car Image',
      options: {
        hotspot: true
      }
    }),
  ],
});

```

Step 2: Write a Migration Script

Use the Sanity client to import data fetched from the Template 7 API into Sanity.

```

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

import axios from 'axios';

import dotenv from 'dotenv';

import { fileURLToPath } from 'url';

import path from 'path';

const __filename = fileURLToPath(import.meta.url);

const __dirname = path.dirname(__filename);

dotenv.config({ path: path.resolve(__dirname, '../.env.local') });

```

```
const client = createClient({
  projectId: process.env.NEXT_PUBLIC_SANITY_PROJECT_ID,
  dataset: process.env.NEXT_PUBLIC_SANITY_DATASET,
  useCdn: false,
  token: process.env.SANITY_API_TOKEN,
  apiVersion: '2025-01-08'
});

async function uploadImageToSanity(imageUrl) {
  try {
    console.log('Uploading image: ${imageUrl}');

    const response = await axios.get(imageUrl, { responseType: 'arraybuffer' });

    const buffer = Buffer.from(response.data);

    const asset = await client.assets.upload('image', buffer, {
      filename: imageUrl.split('/').pop()
    });

    console.log('Image uploaded successfully: ${asset._id}');

    return asset._id;
  } catch (error) {
    console.error('Failed to upload image:', imageUrl, error);

    return null;
  }
}

async function importData() {
  try {
    console.log('Fetching car data from API...');

    const response = await axios.get('https://sanity-nextjs-application.vercel.app/api/hackathon/template7');

    const cars = response.data;
```

```
console.log('Fetched ${cars.length} cars');

for (const car of cars) {

  console.log('Processing car: ${car.name}');

  let imageRef = null;

  if (car.image_url) {

    imageRef = await uploadImageToSanity(car.image_url);

  }

  const sanityCar = {

    _type: 'car',

    name: car.name,

    brand: car.brand || null,

    type: car.type,

    fuelCapacity: car.fuel_capacity,

    transmission: car.transmission,

    seatingCapacity: car.seating_capacity,

    pricePerDay: car.price_per_day,

    originalPrice: car.original_price || null,

    tags: car.tags || [],

    image: imageRef ? {

      _type: 'image',

      asset: {

        _type: 'reference',

        _ref: imageRef,

      },

    } : undefined,

  };

  console.log('Uploading car to Sanity:', sanityCar.name);
```

```
const result = await client.create(sanityCar);
```

```
console.log(`Car uploaded successfully: ${result._id}`);
```

```
}
```

```
console.log('Data import completed successfully!');
```

```
} catch (error) {
```

```
console.error('Error importing data:', error);
```

```
}
```

```
}
```

```
importData();
```

Snippets of Work

Imported Data to Sanity:



