Day 3 Hackathon:

API Integration and Data Migration

API integrations connect different services like banking and payment systems. This helps with secure transactions, automating financial tasks, and getting real-time data on accounts and market trends, making financial management more efficient

"Sanity integrating API" means that the Sanity content management system (CMS) allows developers to connect and exchange data with other applications and services through its Application Programming Interface (API), enabling seamless integration with various platforms and tools to manage content across different systems effectively

Data migration is the process of moving data from one system to another, such as from one database to another, or from one storage device to another

Understand The Provided API.

This documentation will guide you through the setup and implementation of a Sanity schema, a migration script for transferring data to another Sanity account, and overall project setup.

Step 1: Create a new Next.js project

npx create-next-app . (used in Folder Directory CMD)

Step 2: Install Sanity Studio

Copy your project link from sanity Overview section and paste in Folder Directory CMD.

Step 3: Run the Studio locally.

npm run dev

This will start the next js project. Once the build is complete, you can head over to

http://localhost:3000/studio

Sanity Schema:

`Validate and Adjust Schema.`

The information is sourced from a specialized API endpoint designed to deliver detailed data on a wide range of cars.

This API offers comprehensive details, including:

- Product Name.
- Product Description.
- Product Price.
- Product Image.
- Product Rating
- Product Stock

src > sanity > schemaTypes > products.ts > productSchema >

```ts
import { defineType } from "sanity";

export const productSchema = defineType({
  name: "products",
  title: "Products",
  type: "document",
  fields: [
    {
      name: "title",
      title: "Product Title",
      type: "string",
    },
    {
      name: "price",
      title: "Price",
      type: "number",
    },
    {
      title: "Price without Discount",
      name: "priceWithoutDiscount",
      type: "number",
    },
    {
      name: "badge",
      title: "Badge",
      type: "string",
    },
```

src > sanity > schemaTypes > categories.ts > ...

```ts
import { defineType } from "sanity";

export const categorySchema = defineType({
    name: 'categories',
    title: 'Categories',
    type: 'document',
    fields: [
        {
            name: 'title',
            title: 'Category Title',
            type: 'string',
        },
        {
            (property) title: string
            title: 'Category Image',
            type: 'image',
        },
        {
            title: 'Number of Products',
            name: 'products',
            type: 'number',
        }
    ],
});
```

src > sanity > schemaTypes > index.ts > ...

```ts
import { type SchemaTypeDefinition } from 'sanity'

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

Data Migration:

1) Setting Up Environment Variables

   Create a `.env` file in the root of your project

   Create `.env` file and add the following variables:

```
NEXT_PUBLIC_SANITY_PROJECT_ID="<Project ID>" # Add your project Id

NEXT_PUBLIC_SANITY_DATASET="production"

NEXT_PUBLIC_SANITY_AUTH_TOKEN="<Auth Token>" # Add your token
```

   Create `migrate.mjs` inside of the script folder

   And paste the code from link here.

End Point Products


```
[
  {
    "_id": "2P4ew3n0aFKlAn3Aum9jzF",
    "title": "SleekSpin",
    "priceWithoutDiscount": null,
    "category": {
      "_id": "b5710116-09af-4d0e-aa9a-dcd02fe919a9",
      "title": "Desk Chair"
    },
    "tags": [
      "gallery"
    ],
    "price": 20,
    "badge": null,
    "imageUrl": "https://cdn.sanity.io/images/5x47y4y0/produc
    "description": "Lorem ipsum dolor sit amet, consectetur a
consectetur adipiscing",
    "inventory": 10
  },
  {
    "inventory": 20,
    "tags": [
      "featured",
      "instagram",
      "gallery"
    ],
    "badge": null,
    "imageUrl": "https://cdn.sanity.io/images/5x47y4y0/produc
    "price": 20,
    "priceWithoutDiscount": null,
    "category": {
      "_id": "b5710116-09af-4d0e-aa9a-dcd02fe919a9",
      "title": "Desk Chair"
    },
```


Category End Point


```
[
  {
    "_id": "26fd7176-3c4d-40fc-a73a-3b85a9b5e15f",
    "title": "Wing Chair",
    "imageUrl": "https://cdn.sanity.io/images/5x47y4y0/prod
  },
  {
    "_id": "407a8583-6203-4f61-becf-8e8b4c5461b6",
    "title": "Wooden Chair",
    "imageUrl": "https://cdn.sanity.io/images/5x47y4y0/prod
  },
  {
    "_id": "b5710116-09af-4d0e-aa9a-dcd02fe919a9",
    "title": "Desk Chair",
    "imageUrl": "https://cdn.sanity.io/images/5x47y4y0/prod
  }
]
```