DAY 3 - API INTEGRATION AND DATA MIGRATION Step-3:

Data Migration Options:

1: Make a folder at root of project.

Like this here <u>script</u> folder is at the root of the project.

Make a file inside the script folder name like migrate.mjs.

Then copy the given code in the documentation for migration into the file.

As shown in the screen shots

```
.next
                             > node_modules
 name: 'isFeaturedProduct
                               public
 title: 'Is Featured Prod'> scripts
 type: 'boolean',
                             > src
                             達 .env
                             $ .env.local
                             .eslintrc.json
 name: 'stockLevel',
                             .gitignore
 title: 'Stock Level',
                             components.json
                             's next-env.d.ts
 type: 'number',
                             IS next.config.mjs
                             package-lock.json
                             package.json
 name: 'category',
                             postcss.config.mjs
                             README.md
 title: 'Category',
                             sanity.cli.ts
 type: 'string',
                             's sanity.config.ts
scripts
 Js migrate.mjs
```

And here is the script

```
import "dotenv/config";
// Import the Sanity client to interact with the Sanity backend
import { createClient } from "@sanity/client";
// Load required environment variables
const {
 NEXT_PUBLIC_SANITY_PROJECT_ID, // Sanity project ID
 NEXT_PUBLIC_SANITY_DATASET, // Sanity dataset (e.g., "production")
 NEXT_PUBLIC_SANITY_AUTH_TOKEN, // Sanity API token
 BASE_URL = "https://giaic-hackathon-template-08.vercel.app", // API base URL
for products and categories
} = process.env;
console.log(NEXT_PUBLIC_SANITY_PROJECT_ID ,"project id is consoling ")
console.log(NEXT_PUBLIC_SANITY_DATASET ,"project dataset is consoling ")
console.log(NEXT_PUBLIC_SANITY_AUTH_TOKEN ,"project id is consoling ")
// Check if the required environment variables are provided
if (!NEXT PUBLIC SANITY PROJECT ID | !NEXT PUBLIC SANITY AUTH TOKEN) {
  console.error("Missing required environment variables. Please check
your .env.local file.");
  process.exit(1); // Stop execution if variables are missing
// Create a Sanity client instance to interact with the target Sanity dataset
const targetClient = createClient({
 projectId: NEXT_PUBLIC_SANITY_PROJECT_ID, // Your Sanity project ID
  dataset: NEXT PUBLIC SANITY DATASET | "production", // Default to "production"
if not set
  useCdn: false, // Disable CDN for real-time updates
  apiVersion: "2023-01-01", // Sanity API version
 token: NEXT_PUBLIC_SANITY_AUTH_TOKEN, // API token for authentication
});
// Function to upload an image to Sanity
async function uploadImageToSanity(imageUrl) {
 try {
    // Fetch the image from the provided URL
   const response = await fetch(imageUrl);
    if (!response.ok) throw new Error(`Failed to fetch image: ${imageUrl}`);
    // Convert the image to a buffer (binary format)
    const buffer = await response.arrayBuffer();
```

```
// Upload the image to Sanity and get its asset ID
    const uploadedAsset = await targetClient.assets.upload("image",
Buffer.from(buffer), {
      filename: imageUrl.split("/").pop(), // Use the file name from the URL
    });
    return uploadedAsset._id; // Return the asset ID
  } catch (error) {
    console.error("Error uploading image:", error.message);
    return null; // Return null if the upload fails
  }
// Main function to migrate data from REST API to Sanity
async function migrateData() {
  console.log("Starting data migration...");
 try {
    // Fetch products from the REST API
    const productsResponse = await fetch(`${BASE_URL}/api/products`);
    if (!productsResponse.ok) throw new Error("Failed to fetch products.");
    const productsData = await productsResponse.json(); // Parse response to JSON
    // Migrate products
    for (const product of productsData) {
      console.log(`Migrating product: ${product.title}`);
      const imageId = await uploadImageToSanity(product.imageUrl); // Upload
product image
      // Prepare the new product object
      const newProduct = {
       _type: 'product',
        id: product.id,
```

```
name: product.name,
        imagePath: product.imageId,
       price: parseFloat(product.price),
       description: product.description,
       discountPercentage: product.discountPercentage,
       isFeaturedProduct: product.isFeaturedProduct,
       stockLevel: product.stockLevel,
       category: product.category,
     };
     // Save the product to Sanity
     const result = await targetClient.create(newProduct);
     console.log(`Migrated product: ${product.title} (ID: ${result._id})`);
   console.log("Data migration completed successfully!");
 } catch (error) {
   console.error("Error during migration:", error.message);
   console.log("error while sending data to the sanity ")
   process.exit(1); // Stop execution if an error occurs
// Start the migration process
migrateData();
```

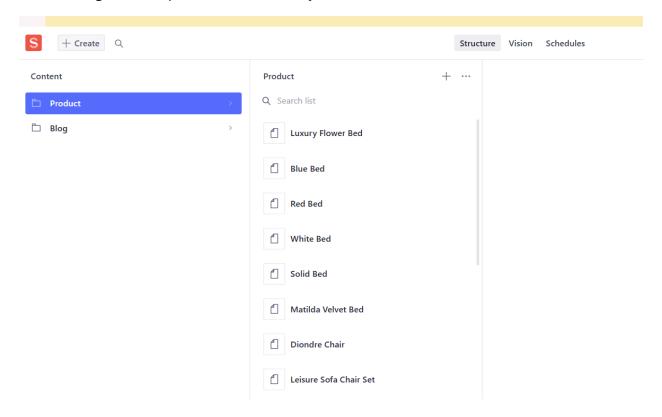
Remeber to make these changes before running this code

1:make change in the file Packadge.json

Then run npm run migrate

```
"scripts": {
    "dev": "next dev",
    "build": "next build",
    "start": "next start",
    "lint": "next lint",
    "migrate": "node scripts/migrate.mjs"
}
```

This will migrate the Api data into the sanity .



Like this.

Then fetch the stored data into next.js project by using GroqQueries.

```
*[_type == "product" && id ==
```

'9'][0]{ name,price,description,imagePath,category,stockLevel }



High Quality Modern Sofa
A simple and lightweight chair id...
Rs: 150 Stocks: 50

Add to Cart



Blue Bed
A modern cantilever chair with a...



Alpha Table
A sturdy oak chair with a sleek a...
Rs: 900 Stocks: 18

Add to Cart



Luxury Flower Bed
A luxurious shell-shaped chair wi...



Matilda Velvet Bed
A vibrant pink velvet chair with a..
Rs: 600 Stocks: 12

Add to Cart



Chair Wibe
A sleek outdoor chair with natura...

Red Bed
An acrylic dining chair with a sle...
Rs: 320 Stocks: 20

Add to Cart



Pink Lounge Chairgs to activate

A spacious lounge chair with a...