
Day 3 - API Integration and Data Migration

Sit & Style Studio

Date: 17-1-25

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Project: API Integration and Data Migration

Overview:

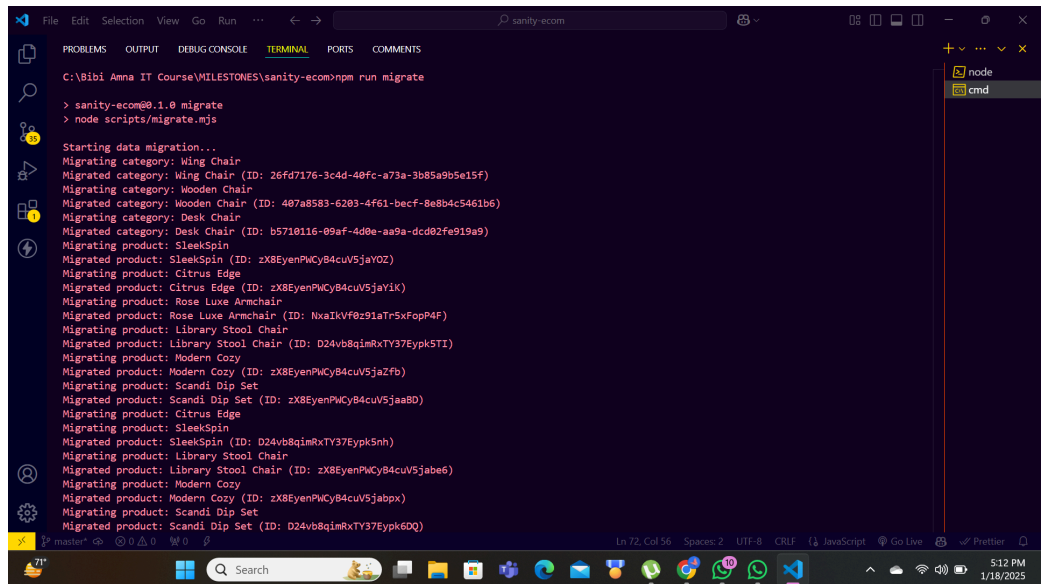
The focus on Day 3 was centered around integrating APIs, particularly with Sanity CMS, by using GROQ queries and updating the schema to accommodate dynamic data needs. Below is a summary of the tasks completed:

Key Objectives:

1. Establish a connection with Sanity CMS for efficient product data management.
 2. Use GROQ queries to dynamically fetch structured data from Sanity.
 3. Update the Sanity schema to meet evolving API requirements.
 4. Migrate product data, including images, from an external API to Sanity CMS.
 5. Test and validate the integration for smooth data flow between backend and frontend.
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1. API Data Migration to Sanity

- **Objective:** Migrate product data (including images) from an external API to Sanity CMS.
- **Steps Taken:**
 1. **Fetch Product Data:**
 - Utilized Axios to fetch product data from an external API.
 - Example API Endpoint: <https://template03api.vercel.app/api/products>.
 2. **Upload Images to Sanity:**
 - Used `client.assets.upload` to upload product images to Sanity.
 - Linked each image to its corresponding product.
 3. **Create Product Documents in Sanity:**
 - Iterated through the fetched data and created product documents in Sanity using `client.create()`.

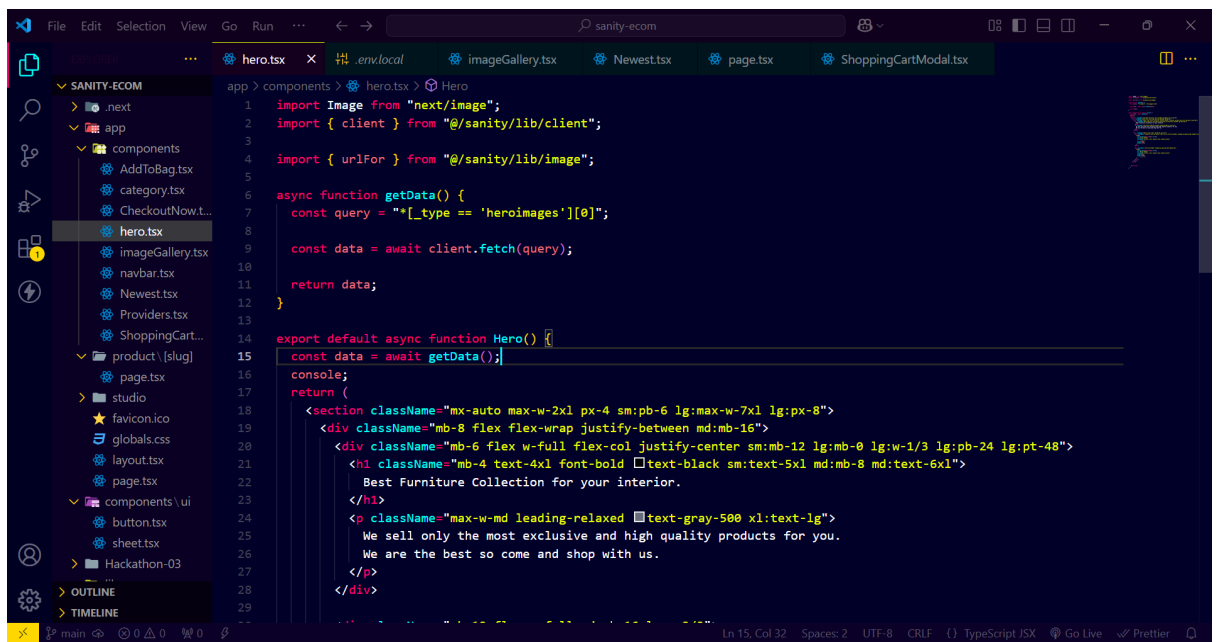


```
File Edit Selection View Go Run ... sanity-ecom
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS COMMENTS
C:\Bibi Anna IT Course\WILESTONES\sanity-ecom>npm run migrate
> sanity-ecom@0.1.0 migrate
> node scripts/migrate.mjs

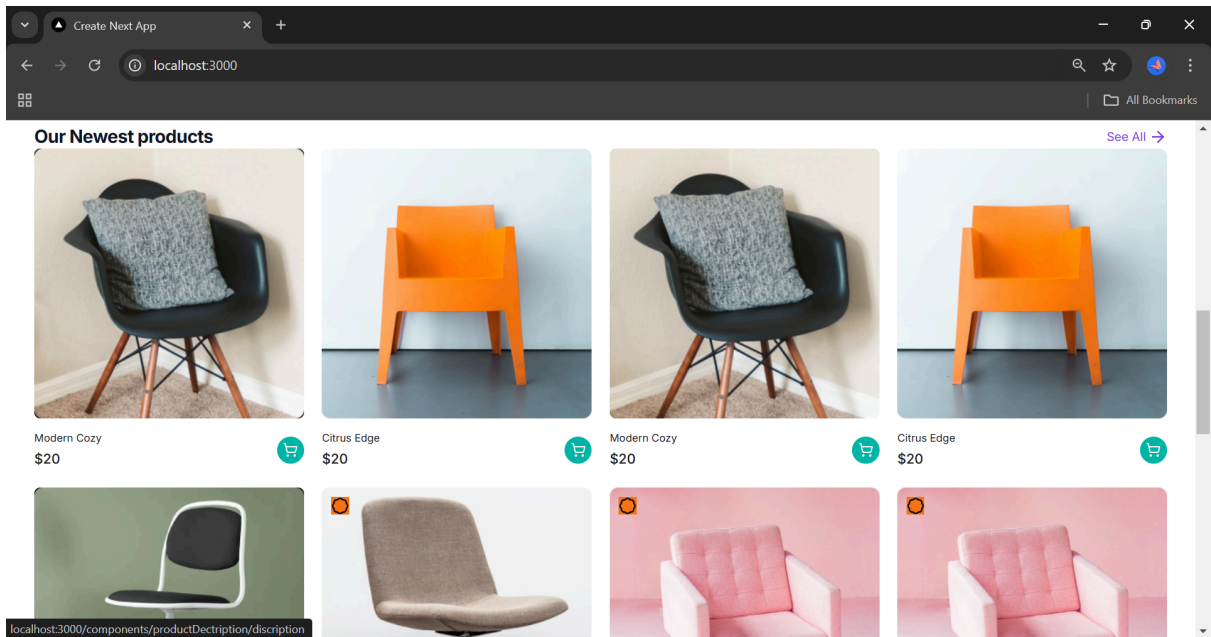
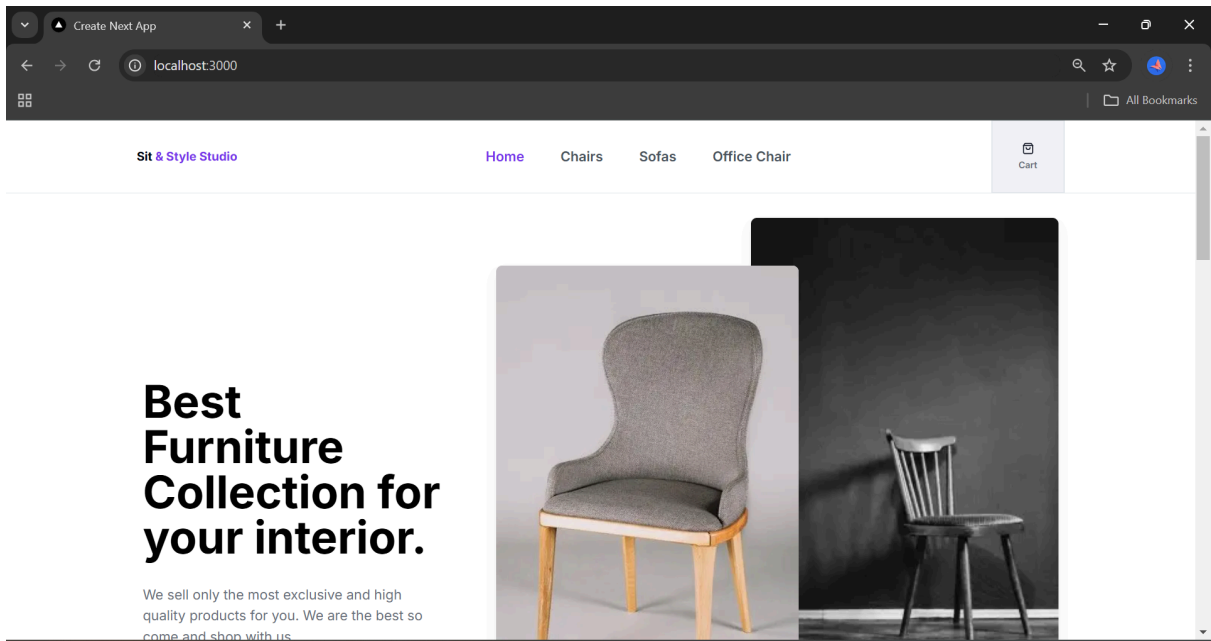
Starting data migration...
Migrating category: Wing Chair
Migrated category: Wing Chair (ID: 26fd7176-3c4d-40fc-a73a-3b85a9b5e15f)
Migrating category: Wooden Chair
Migrated category: Wooden Chair (ID: 407a8583-6203-4f61-becf-8e8b4c5461b6)
Migrating category: Desk Chair
Migrated category: Desk Chair (ID: b5710116-09af-4d0e-aa9a-dcd02fe919a9)
Migrating product: SleekSpin
Migrated product: SleekSpin (ID: zX8EyenPWCyB4cuV5jaYOZ)
Migrating product: Citrus Edge
Migrated product: Citrus Edge (ID: zX8EyenPWCyB4cuV5jaYiK)
Migrating product: Rose Luxe Armchair
Migrated product: Rose Luxe Armchair (ID: Nxa1kVf0z91aTr5xFopP4F)
Migrating product: Library Stool Chair
Migrated product: Library Stool Chair (ID: D24vb8qimRXTY37Eypk5TI)
Migrating product: Modern Cozy
Migrated product: Modern Cozy (ID: zX8EyenPWCyB4cuV5jaZfb)
Migrating product: Scandi Dip Set
Migrated product: Scandi Dip Set (ID: zX8EyenPWCyB4cuV5jaaB0)
Migrating product: Citrus Edge
Migrated product: SleekSpin
Migrated product: SleekSpin (ID: D24vb8qimRXTY37Eypk5nh)
Migrating product: Library Stool Chair
Migrated product: Library Stool Chair (ID: zX8EyenPWCyB4cuV5jabes)
Migrating product: Modern Cozy
Migrated product: Modern Cozy (ID: zX8EyenPWCyB4cuV5jabpx)
Migrating product: Scandi Dip Set
Migrated product: Scandi Dip Set (ID: D24vb8qimRXTY37Eypk6DQ)
```

2. Sanity CMS Integration

- **Connection Setup:**
 - Integrated the `@sanity/client` library to enable communication with Sanity CMS.
 - Configured the client with project-specific credentials (`projectId`, `dataset`, `apiVersion`).
- **Purpose:** Centralized product management by leveraging Sanity's features, including real-time updates, robust content modeling, and optimized image handling.

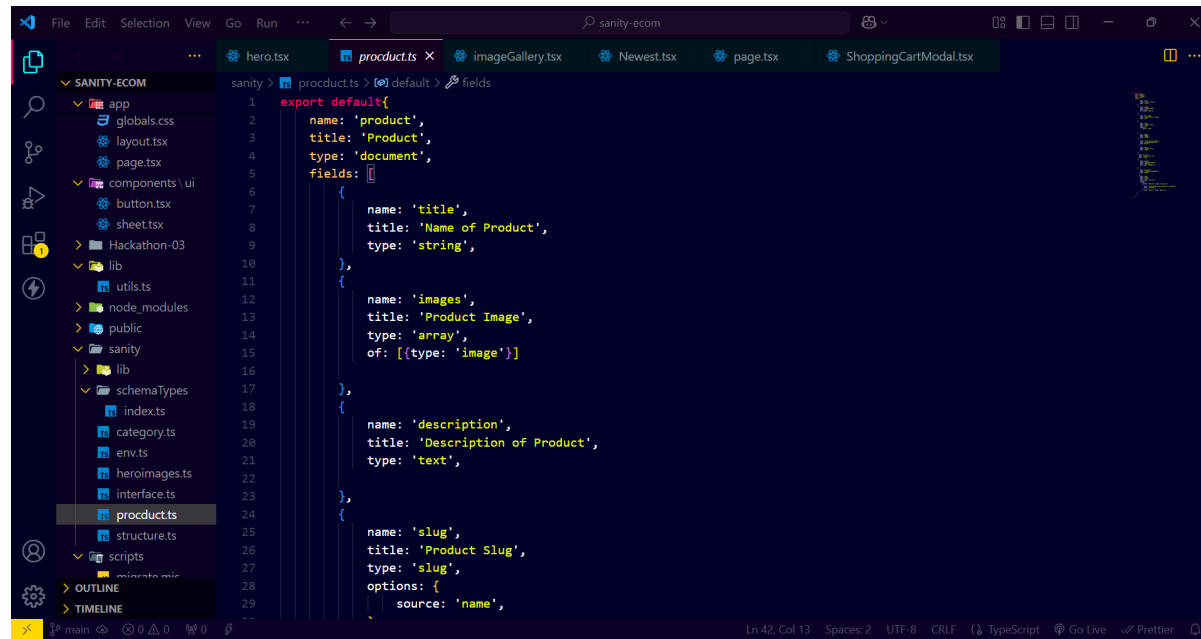


```
File Edit Selection View Go Run ... sanity-ecom
hero.tsx x .env.local imageGallery.tsx Newest.tsx page.tsx ShoppingCartModal.tsx
SANITY-ECOM
  .next
  app
    components
      AddToBag.tsx
      category.tsx
      CheckoutNow.tsx
      hero.tsx
      imageGallery.tsx
      navbar.tsx
      Newest.tsx
      Providers.tsx
      ShoppingCart.tsx
    product\ [slug]
      page.tsx
    studio
      favicon.ico
      globals.css
      layout.tsx
      page.tsx
    components\ ui
      button.tsx
      sheet.tsx
  Hackathon-03
  OUTLINE
  TIMELINE
app > components > hero.tsx > Hero
1 import Image from "next/image";
2 import { client } from "@sanity/lib/client";
3
4 import { urlFor } from "@sanity/lib/image";
5
6 async function getData() {
7   const query = `*[_type == 'heroimages'][0]`;
8
9   const data = await client.fetch(query);
10
11   return data;
12 }
13
14 export default async function Hero() {
15   const data = await getData();
16   console.log(data);
17   return (
18     <section className="mx-auto max-w-2xl px-4 sm:px-6 lg:max-w-7xl lg:px-8">
19       <div className="mb-8 flex flex-wrap justify-between md:mb-16">
20         <div className="mb-6 flex w-full flex-col justify-center sm:mb-12 lg:mb-0 lg:w-1/3 lg:pb-24 lg:pt-48">
21           <h1 className="mb-4 text-4xl font-bold text-black sm:text-5xl md:mb-8 md:text-6xl">
22             Best Furniture Collection for your interior.
23           </h1>
24           <p className="max-w-md leading-relaxed text-gray-500 xl:text-lg">
25             We sell only the most exclusive and high quality products for you.
26             We are the best so come and shop with us.
27           </p>
28         </div>
29       </div>
30     </section>
31   );
32 }
```



3. Schema Enhancements in Sanity CMS

- Updated the product schema to ensure it could accommodate new fields and validations.
- **Fields Added/Updated:**
 - **inventory:** Tracks product stock levels.
 - **colors:** Stores available color options as an array.



Self-Validation Checklist:

- **API Understanding:** ✓
 - **Schema Validation:** ✓
 - **Data Migration:** ✓
 - **API Integration in Next.js:** ✓
 - **Submission Preparation:** ✓
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Outcomes of Day 3:

- Successfully integrated Sanity CMS into the application.
- Implemented dynamic GROQ queries to retrieve and display product data.
- Enhanced the Sanity schema to accommodate extended product attributes.
- Migrated product data and images from an external API to Sanity CMS.
- Validated and tested the integration to ensure seamless data flow from backend to frontend.

This concludes my Day 3 Hackathon progress. I will continue to work diligently to bring these features to life for my e-commerce website.
