DAY 3 - API INTEGRATION AND DATA MIGRATION

Studio Cards

Furniro

Home   Shop   Blo

S Default   + Create   Q

Content

📁 Product

Product   +   ...

Q Search list

Sunny Chic

Reflective Haven

Modern Serenity

Timeless Elegance

Nordic Elegance

Serene Seat

Sleek Living

Tropical Vibe

Zen Table
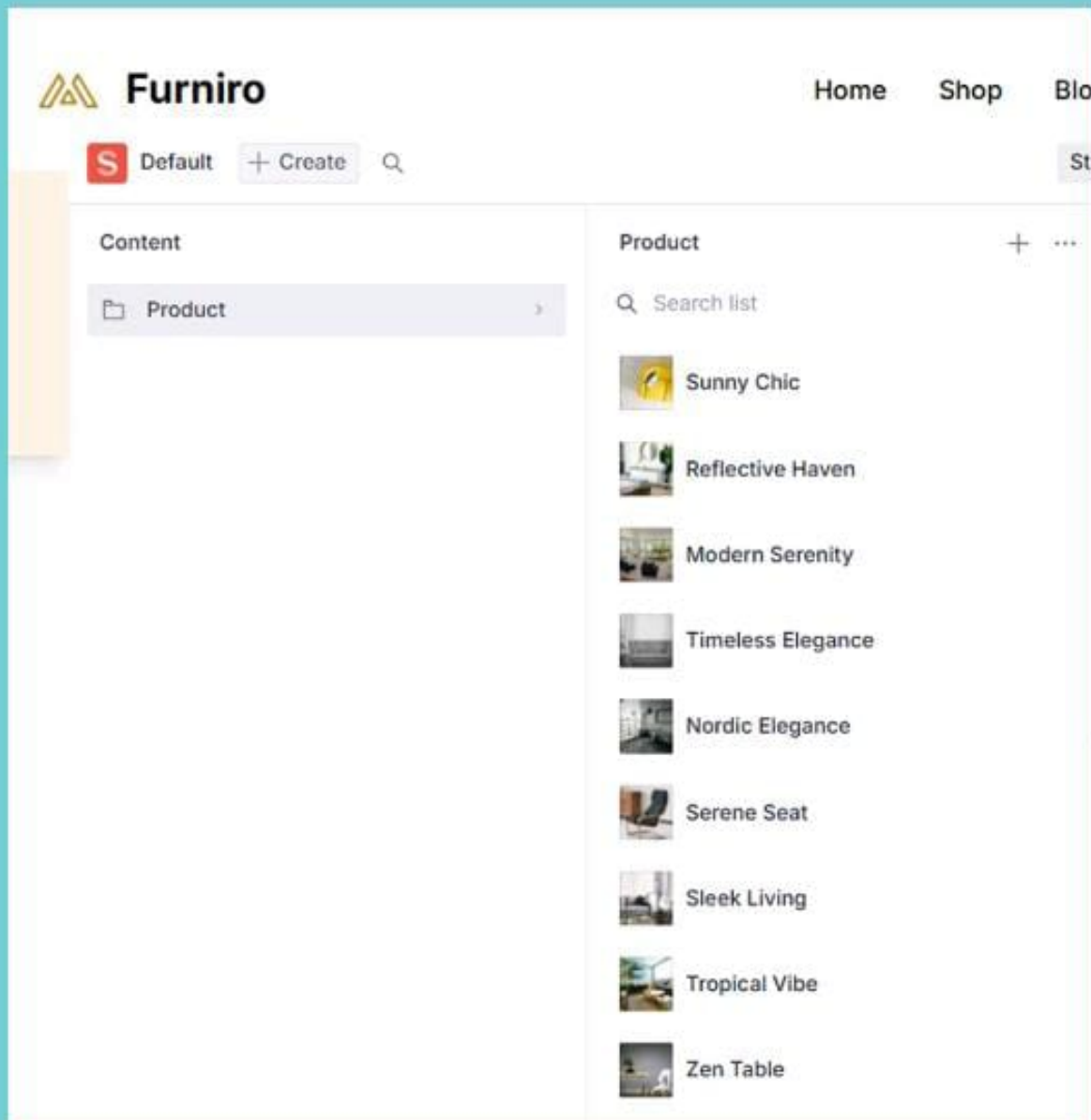
Fatching Data

```ts
rvices > TS mockApi.ts > ...
import { client } from "@/sanity/lib/client";

async function uploadImageToSanity(imageUrl: string) {
  try {
    const response = await fetch(imageUrl);
    if (!response.ok) throw new Error(`Failed to fetch image: ${response.statusText}`);
    const blob = await response.blob();
    const asset = await client.assets.upload("image", blob);

    return asset;
  } catch (error) {
    console.error("Image upload failed:", error); //aik new folder create karay is project ko close kary ok is ko cmd mein open karay
    throw error;
  }
}

export async function fetchData() {
  try {
    const response = await fetch("https://template6-six.vercel.app/api/products");
    console.log("😊 Response status:", response.status);

    if (!response.ok) throw new Error(`Failed to fetch products: ${response.statusText}`);
    const products = await response.json();
    console.log("Fetched products:", products);

    // Upload images concurrently
    const uploadPromises = products.map(async (product: any) => {
      if (!product.image) {
        console.warn(`Skipping product with missing image: ${product.id}`);
        return;
      }

      const imageAsset = await uploadImageToSanity(product.image);

    //   await client.createOrReplace(sanityProduct);
```

GroQ

DATASET	API VERSION	CUSTOM API VERSION	PERSPECTIVE	QUERY URL [COPY TO CLIPBOARD]
production	Other	v2025-01-17	raw	https://83bwh2q7.api.sanity.io/v2025-01-17/data/query/p

QUERY
```
1  *[_type == 'product']
```

PARAMS
```
1  {
2
3  }
```

RESULT
```
[...] 24 items
• 0: {...} 12 properties
    isNew: false
    title: Bold Nest
    _updatedAt: 2025-01-18T12:36:17Z
  • tags: [...] 5 items
      0: bold
      1: nest
      2: furniture
      3: modern
      4: contemporary
    price: 260
    _id: 9pIJ0O8PMKhFhzCfbSupto
    _rev: 9pIJ0O8PMKhFhzCfbSupq1
    _type: product
    description: Welcome to BoldNest—where fearless design meets comfort and creativity. Crafted for those who
    embrace individuality and bold expressions, BoldNest is more than just a piece of furniture; it's a
    statement. With its striking design, exceptional comfort, and modern aesthetics, BoldNest is perfect for
    anyone looking to add a unique touch to their home or office. The BoldNest collection combines daring colors,
```

▶ Fetch   ▶ Listen   Execution: 14ms   End-to-end: 177ms   Save result as   🔒 JSON   🔒 CSV

What is API Integration?

API (Application Programming Interface) integration is the process of connecting different software systems or applications to enable them to communicate and share data seamlessly. APIs act as intermediaries that define how applications or components should interact. Through API integration, businesses can enhance their workflows by enabling real-time data sharing, automating processes, and connecting third-party services or tools with their existing systems. This process ensures systems can exchange information efficiently, reducing manual intervention and improving overall productivity.

What is Data Migration?

Data migration involves transferring data from one system, database, or storage format to another. This process is often required when upgrading to a new system, consolidating data from multiple sources, or adopting cloud-based technologies. Data migration ensures that critical information is preserved and accessible in the new environment while maintaining data accuracy and integrity. Proper planning, validation, and testing are crucial for a successful data migration to minimize downtime and prevent data loss during the transition.

Both processes are vital for modernizing systems and ensuring smooth operation across platforms, especially during system upgrades or digital transformations.

Schema

```ts
src > constant > TS product.ts > ...
1    // Types for our products
2    interface Product {
3        id: string
4        name: string
5        category: string
6        image: string
7        price: number
8        originalPrice?: number
9        discount?: number
10       isNew?: boolean
11   }
12
13   // Sample product data
14   export const products: Product[] = [
15     {
16       id: "1",
17       name: "Syltherine",
18       category: "Stylish cafe chair",
19       image: "/Syltherine.png",
20       price: 2500000,
21       originalPrice: 3500000,
22       discount: 30,
23     },
24     {
25       id: "2",
26       name: "Leviosa",
27       category: "Stylish cafe chair",
28       image: "/Leviosa.png",
29       price: 2500000,
30     },
31     {
32       id: "3",
33       name: "Lolito",
34       category: "Luxury big sofa",
35       image: "/Lolito.png",
36       price: 7000000,
37       originalPrice: 14000000,
```

GroQ

```tsx
const page = async () => {
    const res = await client.fetch(`*[_type == 'product']{
  'productImage': productImage.asset->url,
    price,
    // tags,
    description,
    // isNew,
    title,
    dicountPercentage
}`);

    //console.log("data", res)
    return (
      <div className="container px-10 py-10">
      <h2 className="text-3xl font-bold text-center py-10 leading-10">Our Products</h2>
      {/* Wrapper div for flex grid */}
      <div className="grid grid-cols-1 sm:grid-cols-2 md:grid-cols-3 lg:grid-cols-4 gap-y-4 justify-items-center">


        {/* Map Method to render ourProduct cards */}
        (res.map((ourProduct: any, i: any) => (
          return (
            <div key = {i}
            className=" bg-white rounded-lg shadow-md border border-gray-300 justify-center items-center w-[280px] h-[400px]" // Fixed card
            >
            <div className="relative w-full h-[270px]">
              {" "}
              {/* Fixed image container */}
              <Image
                src={ourProduct.productImage}
                alt={"ourProduc"}
```

Cards on Website

Rustic Vase Set

Bring the charm of nature into your home with the Rustic Vase Set...

$210

−10%

Cloud Haven Chair

Sink into comfort with the Cloud Haven Chair—where softness...

$230

−20%

Bright Space

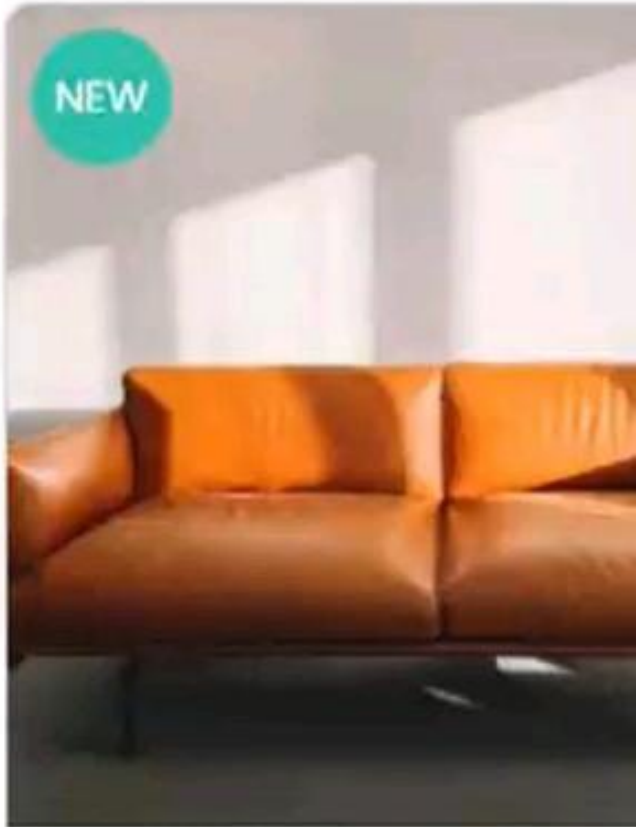Welcome to BrightSpace—a collection designed to infuse your...

$180

−10%

Add to Cart

Share   Compare   Like

Cards

Cafe-Chair

Stylish cafe chair

$4500

NEW

2-Seater-Sofa

Compact 2 Seater Sofa

$17000