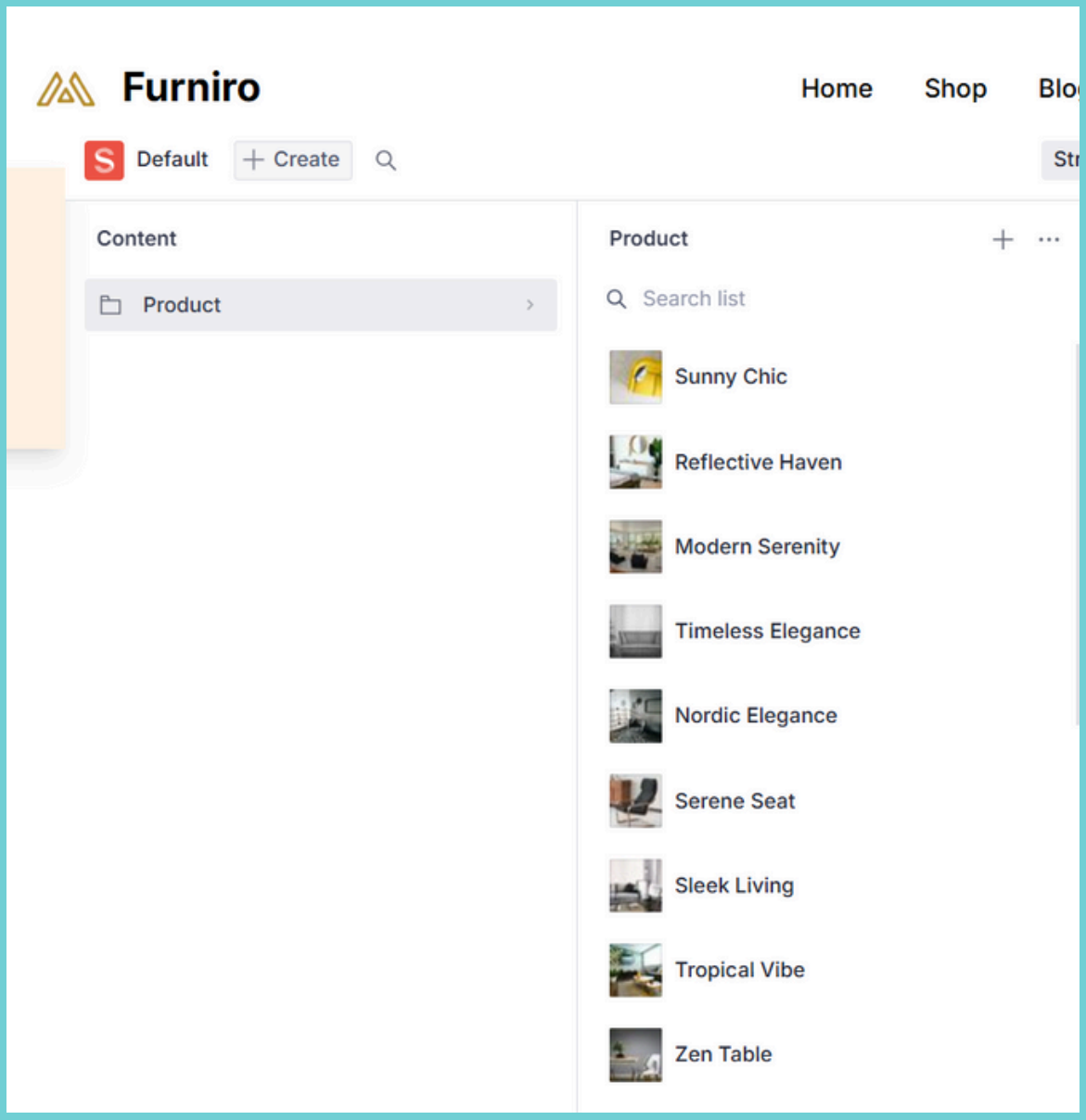
# DAY 3 - API INTEGRATION AND DATA MIGRATION

# Studio Cards



# GroQ

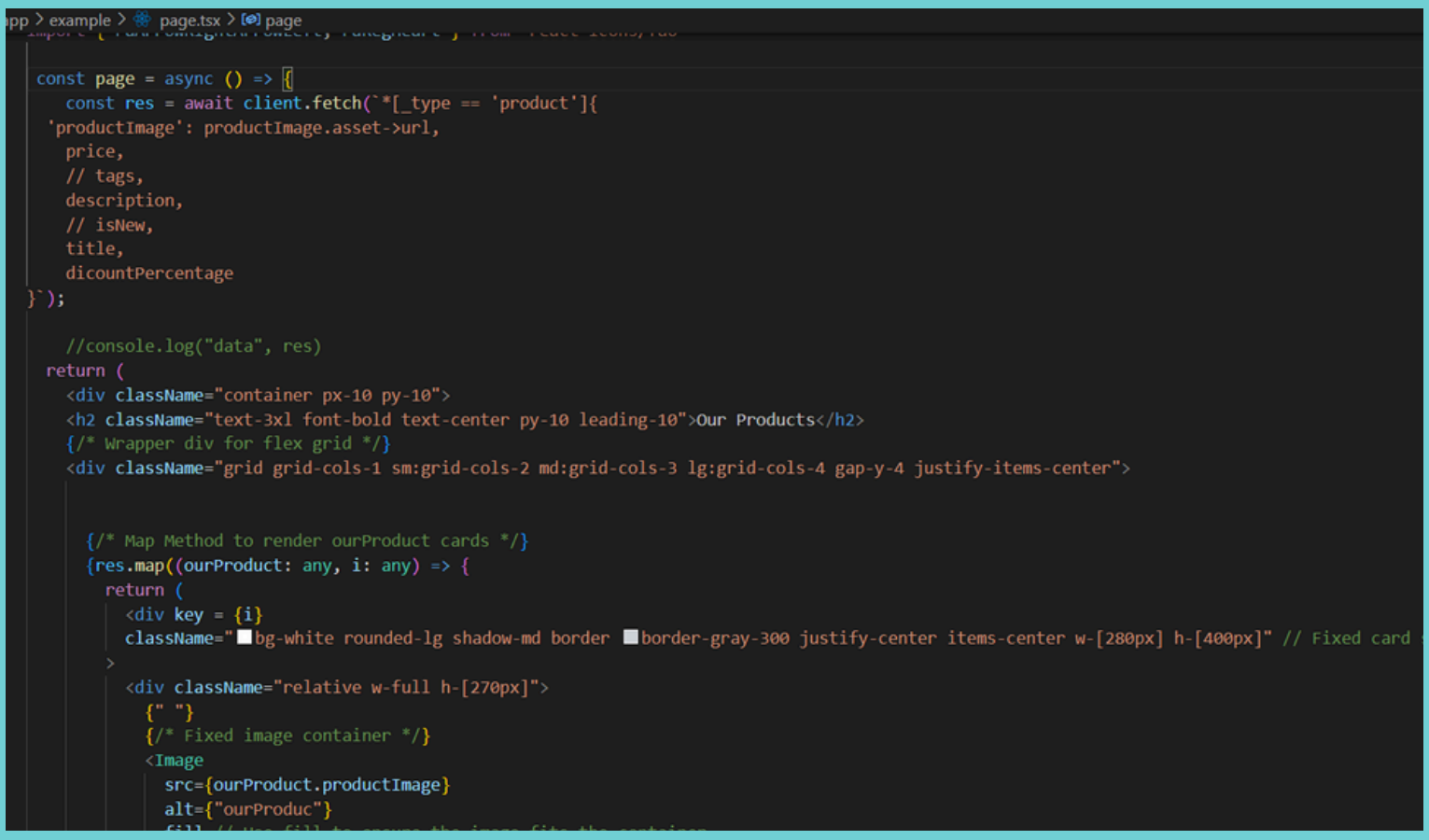

DATASET
production
API VERSION
Other
CUSTOM API VERSION
v2025-01-17
PERSPECTIVE
raw
QUERY URL (COPY TO CLIPBOARD)
https://83bwh2q7.api.sanity.io/v2025-01-17/data/query/p
QUERY
1 *[_type == 'product']
PARAMS
1 {
2
3 }
RESULT
[…] 24 items
▾ 0: {…} 12 properties
isNew: false
title: Bold Nest
_updatedAt: 2025-01-18T12:36:17Z
▾ tags: […] 5 items
0: bold
1: nest
2: furniture
3: modern
4: contemporary
price: 260
_id: 9pIJ0O0PMKhFhzCfbSupto
_rev: 9pIJ0O0PMKhFhzCfbSupq1
_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

# Fatching Data

rvices > TS mockApi.ts > ...

```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


pp > example > page.tsx > page
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 (

<h2 className="text-3xl font-bold text-center py-10 leading-10">Our Products</h2>
{/* Wrapper div for flex grid */}

{/* 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
>

{" "}
{/* Fixed image container */}
<Image
src={ourProduct.productImage}
alt={"ourProduc"}

# Schema

src > constant > TS product.ts > ...

```ts
// Types for our products
interface Product {
    id: string
    name: string
    category: string
    image: string
    price: number
    originalPrice?: number
    discount?: number
    isNew?: boolean
  }

  // Sample product data
  export const products: Product[] = [
    {
      id: "1",
      name: "Syltherine",
      category: "Stylish cafe chair",
      image: "/Syltherine.png",
      price: 2500000,
      originalPrice: 3500000,
      discount: 30,
    },
    {
      id: "2",
      name: "Leviosa",
      category: "Stylish cafe chair",
      image: "/Leviosa.png",
      price: 2500000,
    },
    {
      id: "3",
      name: "Lolito",
      category: "Luxury big sofa",
      image: "/Lolito.png",
      price: 7000000,
      originalPrice: 14000000,
```

# 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.

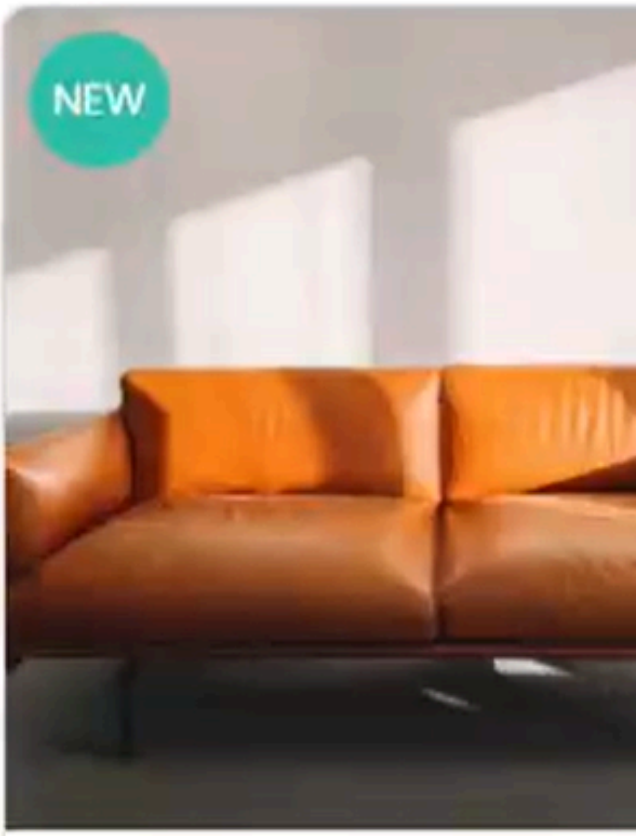
Both processes are vital for modernizing systems and ensuring smooth operation across platforms, especially during system upgrades or digital transformations.

# Cards

**Cafe-Chair**

Stylish cafe chair

**$4500**




**2-Seater-Sofa**

Compact 2 Seater Sofa

**$17000**

# Cards on Website