

**HACKATHON: 03**

**DAY: 03**

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## API INTEGRATION & DATA MIGRATION

### **1. How to Integrate API**

- Read the API documentation.
- Set up your development environment.
- Get API credentials (key or token).
- Test API endpoints with Postman or similar tools.
- Write code to make requests (e.g., GET, POST).
- Handle responses and errors.
- Test integration thoroughly.
- Monitor for changes or updates.

### **2. How to adjust Schemas**

- Find Problems: Look for slow queries or unnecessary data.
- Simplify Connections: Make table relationships clearer.
- Add Indexes: Speed up searches by indexing important fields.
- Remove Unneeded Data: Delete extra tables or columns.
- Change Data Types: Update fields for better storage.
- Update Rules: Change keys and constraints if needed.
- Test It: Check if the changes work well.

### **3. How to link Sanity CMS with Next.js**

#### **❖ Create a Sanity Project:**

- Install the Sanity CLI and create a new Sanity project using the command line.
- Set up your project by choosing a template or creating custom content types (schemas).

### ❖ Link Sanity with Next.js:

- In your Next.js project, install the Sanity client package to connect to your Sanity project.
- Set up a configuration to link your Next.js app with your Sanity project by providing your project ID and dataset name.

### ❖ Fetch Content:

- Use the Sanity client in your Next.js project to fetch data from Sanity's content API.

### ❖ Display Content:

- Use the fetched content in your Next.js pages or components to display the data dynamically.

## Sanity Schema

```
1  export default {
2    name: 'product',
3    type: 'document',
4    title: 'Product',
5    fields: [
6      {
7        name: 'name',
8        type: 'string',
9        title: 'Name',
10     },
11     {
12       name: 'image',
13       type: 'image',
14       title: 'Image',
15       options: {
16         hotspot: true, // Enable image cropping
17       },
18     },
19     {
20       name: 'price',
21       type: 'number',
22       title: 'Price',
23     },
24   ],
25 }
```

## Add “import-data” in Script of package.json

```
1  {
2    "name": "hack",
3    "version": "0.1.0",
4    "private": true,
5    "scripts": {
6      "dev": "next dev --turbo",
7      "build": "next build",
8      "start": "next start",
9      "lint": "next lint",
10     "import-data": "node scripts/importSanityData.mjs"
11   },
```

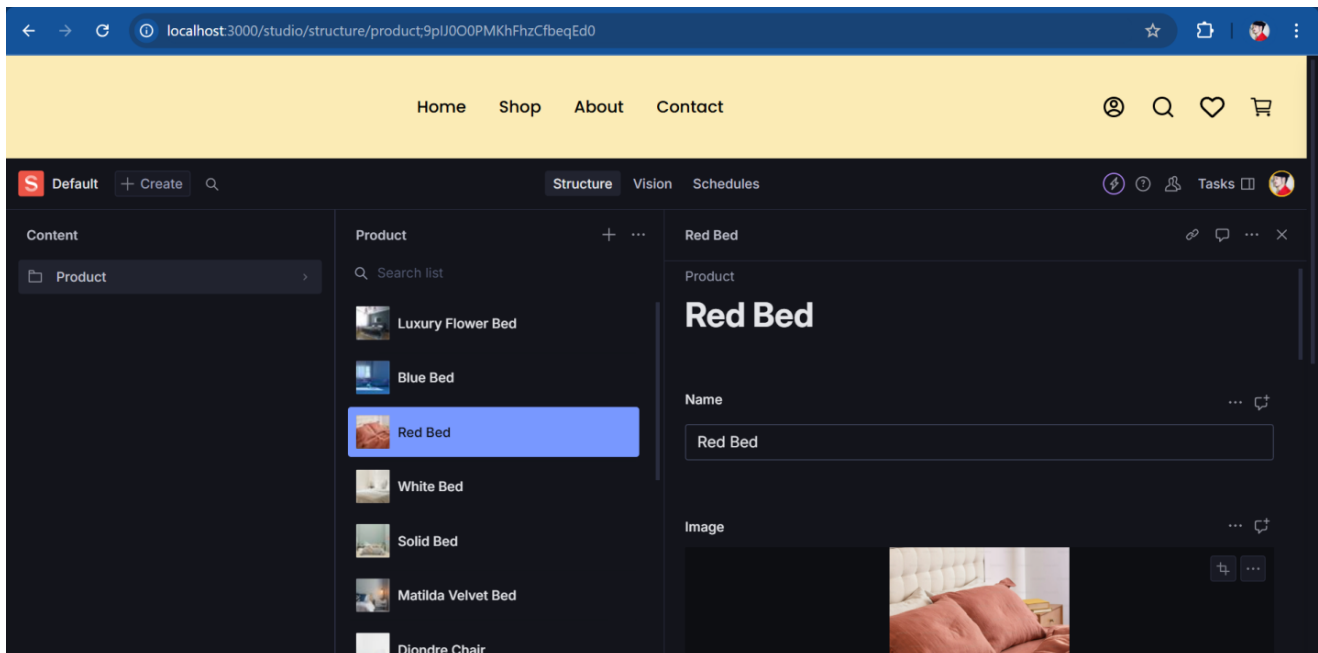
## Data migrate from API into sanity

```
1  import { createClient } from '@sanity/client';
2  import fetch from 'node-fetch';
3
4  // Initialize Sanity client
5  const client = createClient({
6    projectId: "7s1qo6dh",
7    dataset: "production",
8    useCdn: false, // Set to true if you want faster reads
9    apiVersion: '2025-01-13',
10    token: "skSzpFRt4k3skzgaV7e6eKFjPAOB5BWKtJHovjC3uWZDUPYq3gI44zdMv06KqI25kwGZPJEG35M9s90FyT9X0ZWP6Ww0TbKbh1WSEV1bBVY3iirfUF0UcF9P0Iw9Q6Z60fhfJeiCx13ZYBBs611oG8VgRrYRznwJhUJnHwMsc1D1vTa30Jh"
11  });
12
13  // Function to upload an image to Sanity
14  async function uploadImageToSanity(imageUrl) {
15    try {
16      console.log(`Uploading image: ${imageUrl}`);
17
18      const response = await fetch(imageUrl);
19      if (!response.ok) {
20        throw new Error(`Failed to fetch image: ${imageUrl}`);
21      }
22
23      const buffer = await response.arrayBuffer();
24      const bufferImage = Buffer.from(buffer);
25
26      const asset = await client.assets.upload('image', bufferImage, {
27        filename: imageUrl.split('/').pop(),
28      });
29    } catch (error) {
30      console.error(`Failed to upload image:`, imageUrl, error);
31      return null;
32    }
33  }
34
35  console.log('Image uploaded successfully: ${asset._id}');
36  return asset._id;
37 }
```

## Successfully Data import

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS COMMENTS
_updatedAt: '2025-01-19T19:12:10Z',
category: 'Bed',
description: 'A luxurious shell-shaped chair with gold brass metal legs.',
discountPercentage: 0,
id: '21',
image: {
  _type: 'image',
  asset: {
    _ref: 'image-432c20d55e31514d09985305e657cb342317d57b-2059x1391-jpg'
  }
},
isFeaturedProduct: true,
name: 'Luxury Flower Bed',
price: 2500,
stockLevel: 2
}
```

## Sanity studio/structure



# Product Display



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