

Hackathon Day 3

API INTEGRATION AND DATA MIGRATION REPORT

This Document contains the Setup and Implementation of a Sanity Schema , a Migration Script for transferring data to another Sanity Account , and Overall Project Setup Details .

1 . Installation of Next.js Project

Command: npx create-next-app@14.2.20

2 . Sanity

- Create a New Project of Sanity In Sanity dashboard .
- Then run the Project installation command in Next.js Project .

3 . Sanity Schema

- After the installation navigate to schema Types folder.


/src/sanity/schemaTypes

- Create a New File and the following Code . **File Name:** product.ts

```
export default {
  name: 'product',
  title: 'Product',
  type: 'Document',
  fields: [
    {
      name: 'id',
      title: 'id',
      type: 'string',
      required: true
    },
    {
      name: 'name',
      title: 'Name',
      type: 'string',
      required: true
    },
    {
      name: 'image',
      title: 'Image',
      type: 'image',
      required: true
    },
    {
      name: 'imageSet',
      title: 'Image Set',
      type: 'array',
      required: true
    },
    {
      name: 'price',
      title: 'Price',
      type: 'number',
      required: true
    },
    {
      name: 'description',
      title: 'Description',
      type: 'text',
      required: true
    },
    {
      name: 'discountPercentage',
      title: 'Discount Percentage',
      type: 'number',
      required: true
    },
    {
      name: 'isFeaturedProduct',
      title: 'Is Featured Product',
      type: 'boolean',
      required: true
    },
    {
      name: 'stockLevel',
      title: 'Stock Level',
      type: 'number',
      required: true
    },
    {
      name: 'category',
      title: 'Category',
      type: 'string',
      required: true
    }
  ]
}
```

4 . Environment Variables

- Create .env file and add the following variables .



```
NEXT_PUBLIC_SANITY_PROJECT_ID="o21vn94w"  
NEXT_PUBLIC_SANITY_DATASET="production"  
SANITY_API_TOKEN=  
"skDhXZaGazL3YaHiYrD4Goa0o3SFaVP7q8uaAGBXdXYak  
bLz0nvsImtb6JTqWuSmoVRN7rEzrrYs5S7fi5tpGhIIoOj  
nsqacuFX73jZ6EVBbe30y9SUmx0in3lB0ldco9cMUPqLFe  
JaiaazlA3RVamHsWJ3Quh1AnDzpFHpupFRN1GN83BKr"
```

5 . Data Migration Script

- Create a Folder Scripts .
- Then make a file in the folder naming migrate.mjs and create the following Code .

```
import pat from 'pat';
const { h, m, s } = pat;
// Load environment variables from .env.local
const __filename = fileURLToPath(import.meta.url);
const __dirname = path.dirname(__filename);
dotenv.config({ path: path.resolve(__dirname, '../.env.local') });
const { h, m, s } = pat;
// Create Sanity client
const client = createClient({
  projectId: process.env.NEXT_PUBLIC_SANITY_PROJECT_ID,
  dataset: process.env.NEXT_PUBLIC_SANITY_DATASET,
  useCdn: false,
  token: process.env.SANITY_API_TOKEN,
  useVersion: '2021-08-11',
});

async function uploadImageToSanity(imageUrl) {
  try {
    const response = await axios.get(imageUrl, { responseType: 'arraybuffer' });
    const buffer = Buffer.from(response.data);
    const asset = await client.asset.upload('image', buffer, {
      filename: imageUrl.split('/').pop(),
    });
    console.log('Image uploaded successfully: ', asset._id);
    return asset._id;
  } catch (error) {
    console.error('Failed to upload image ', imageUrl, error.message);
    return null;
  }
}

async function importData() {
  try {
    console.log('Migrating data, please wait...');
    // Fetch products from the API
    const response = await axios.get('https://template-0-beta.vercel.app/api/product');
    const product = response.data;
    console.log('Products fetched: ', product);
    for (const product of product) {
      let imageUrl = null;
      if (product.imageUrl) {
        imageUrl = await uploadImageToSanity(product.imageUrl);
      }
      const sanityProduct = {
        type: 'product',
        id: product.id,
        name: product.name,
        category: product.category,
        description: product.description,
        discountPercentage: product.discountPercentage,
        featuredProduct: product.featuredProduct,
        stockLevel: product.stockLevel,
        price: product.price,
        image: imageUrl,
      };
      // Create product in Sanity
      await client.create(sanityProduct);
      console.log('Product created in Sanity: ', sanityProduct.id);
    }
    console.log('Data migrated successfully');
  } catch (error) {
    console.error('Error in migrating data ', error.message);
  }
}

importData();
```

6 . Install the following packages before running the code

```
npm install @sanity/client
```

```
npm install axios
```

```
npm install dotenv
```

7 . Now run command npm run migrate

- In terminal Success Message shown at the End .

8 . Sanity Studio

- Open the sanity studio by the following url .

<http://localhost:3000/studio>

- The data following data will be shown in sanity studio from API.

S

Default

+ Create

Q

StructureVisionSchedules


Content


Product


Product


+ ...


Q Search list


Luxury Flower Bed


Blue Bed


Red Bed


White Bed


Solid Bed

Matilda Velvet Bed

Diondre Chair

Leisure Sofa Chair Set

Liberty Center

Sleek Modern Table

What's new

Sanity Create Content Mapping, Visual Editing, and Content Releases

S

Default

+ Create

Q

StructureVisionSchedules


Content


Product


Product


+ ...


Q Search list


Luxury Flower Bed


Blue Bed


Red Bed


White Bed


Solid Bed

Matilda Velvet Bed

Diondre Chair

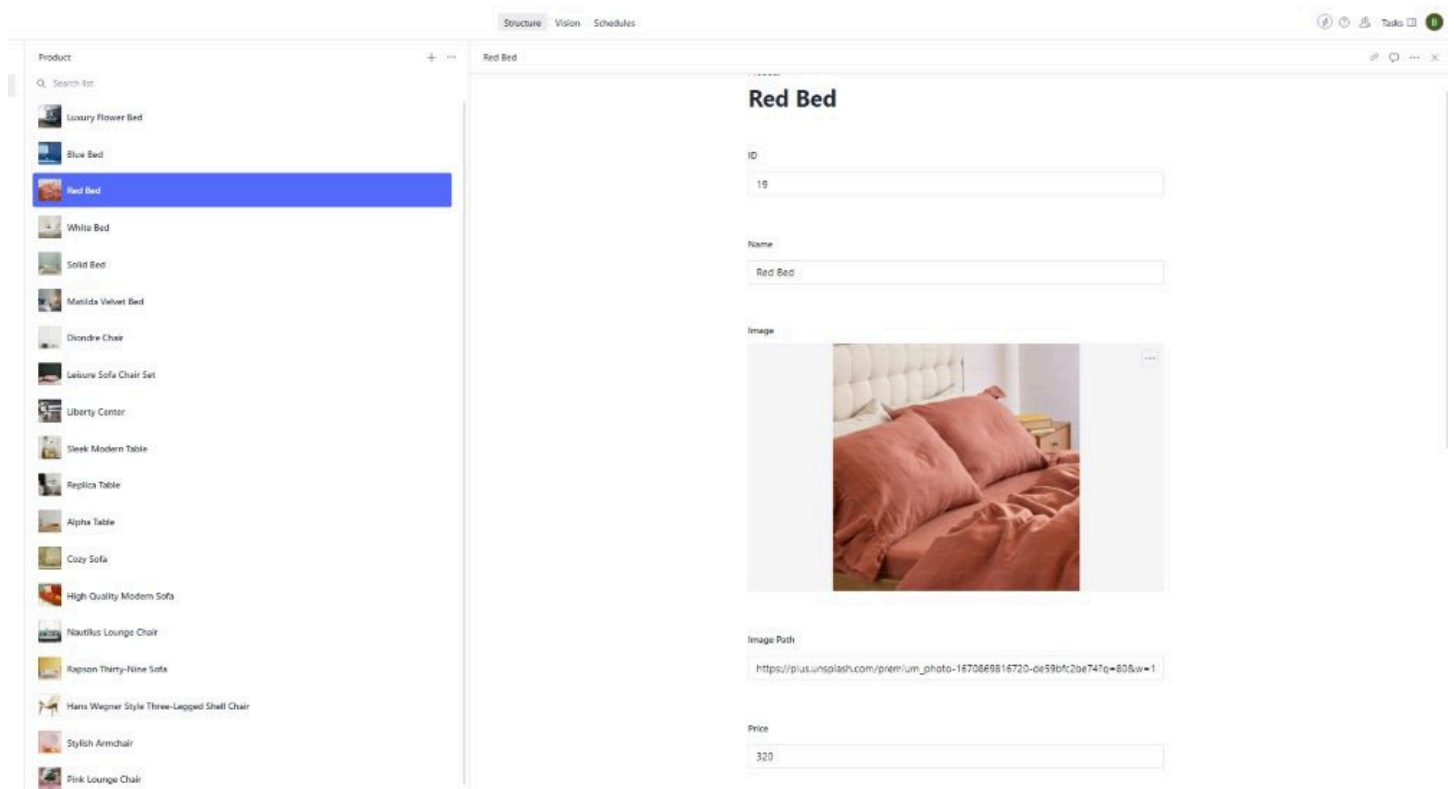
Leisure Sofa Chair Set

Liberty Center

Sleek Modern Table

What's new

Sanity Create Content Mapping, Visual Editing, and Content Releases



ENDED

Benish Saleem.....