Day 3 - API Integration and Data Migration

Step 1: API Integration Summary

API URL: https://hackathon-apis.vercel.app/api/products

- This API provides product data for our marketplace.
- Next.js fetches this data and displays it on the frontend.

Step 2: Sanity Schema Adjustments

API Response Example:

{ 'id': '1', 'title': 'Wooden Dining Table', 'description': 'Premium quality table', 'price': 25000, 'category': 'Furniture', 'image': 'https://example.com/table.jpg', 'stock': 10 }

Sanity Schema (Updated):

```
export default {
  name: 'product', type: 'document', title: 'Product',
  fields: [
    { name: 'title', type: 'string', title: 'Product Name' },
    { name: 'description', type: 'text', title: 'Description' },
    { name: 'price', type: 'number', title: 'Price' },
    { name: 'category', type: 'string', title: 'Category' },
    { name: 'image', type: 'image', title: 'Product Image' },
    { name: 'stock', type: 'number', title: 'Stock Available' }
  ]
};
```

Step 3: Data Migration Steps

1. Fetch data from API.
2. Transform and insert data into Sanity CMS.
3. Run migration script to import products.

Migration Script Example:

```
import fetch from 'node-fetch';
import client from '../sanityClient.js';
```

```
const API_URL = 'https://hackathon-apis.vercel.app/api/products';

async function importProducts() {
  const response = await fetch(API_URL);
  const products = await response.json();

  for (const product of products) {
    await client.create({ _type: 'product', title: product.title, description: product.description,
      price: product.price, category: product.category, image: { asset: { _ref: product.image } },
      stock: product.stock });
    console.log(`Imported: ${product.title}`);
  }
}

importProducts();
```

Step 4: API Integration in Next.js

Next.js API Call Function:

```
export async function getProducts() {
  const res = await fetch('https://hackathon-apis.vercel.app/api/products');
  const data = await res.json();
  return data;
}
```

Rendering API Data in React Component:

```
import { useEffect, useState } from 'react';
import { getProducts } from '../utils/fetchProducts';

export default function ProductList() {
  const [products, setProducts] = useState([]);

  useEffect(() => {
    async function fetchData() {
```

```
      const data = await getProducts();
      setProducts(data);
    }
    fetchData();
  }, []);

  return (
    <div>
      <h2>Available Products</h2>
      <ul>
        {products.map((product) => (
          <li key={product.id}>
            <img src={product.image} alt={product.title} width='100' />
            <h3>{product.title}</h3>
            <p>{product.description}</p>
            <p>Price: Rs. {product.price}</p>
          </li>
        ))}
      </ul>
    </div>
  );
}
```

Step 5: Documentation & Submission

Final Submission Format:

- Create a 'day-3' folder in your GitHub repository.
- Save this technical document as 'Day_3_API_Integration_Report.pdf'.
- Commit and push it to GitHub using the following commands:

```
git add .
git commit -m 'Added Day-3 API Integration and Data Migration'
git push origin main
```