

Day 3 - API Integration Report

Objective:

Day 3 is to focus on API integration and data migration for the marketplace. This includes integrating external APIs for functionalities such as product management, user authentication, and payment processing. The day will also involve migrating data from your content management system (Sanity) to ensure the smooth display of content on the frontend. By the end of the day, your marketplace will have a fully functional API setup, with data properly integrated and displayed, laying the groundwork for a seamless user experience.

API integration process:

- **Define Endpoints:** Identify API endpoints for products, orders, customer data, and payment systems (e.g., EasyPaisa, JazzCash).
- **Sanity Integration:** Use the Sanity client to manage product, customer, and order data, creating schema models and queries to fetch data.
- **API Communication:** Use Axios or fetch API to interact with external APIs and handle data fetching in frontend components.
- **Error Handling:** Implement error handling for API requests and display user-friendly messages for failed operations.
- **Data Mapping:** Ensure data from APIs is correctly formatted and displayed on the frontend, and migrate any legacy data if needed.
- **Testing:** Validate API responses and ensure seamless functionality across the platform.

Adjustments Made to Schemas:

Product Schema:

- Added fields for `category`, `price`, `stock`, and `description` to better manage product details.
- Introduced references to categories and images to improve data structure and flexibility.

Category Schema:

- Added fields for `categoryName` and `categoryDescription` to better organize products into categories.

- Integrated product references to create relationships between categories and their respective products.

Migration Steps and Tools Used:

- **Data Mapping:** Mapped product data to the new Sanity schema (category, price, stock, description).
- **Migration Script:** Used the provided migration script to import data from the legacy system or CSV to Sanity CMS.
- **Sanity CLI:** Utilized for managing dataset imports and exports.
- **Testing:** Validated data accuracy and relationships post-migration.

ScreenShots Sanity populated data and migration: