

# Technical Plan for General eCommerce Marketplace

# 1. System Overview

#### Architecture Diagram:

```
Frontend (Next.js)

↓ ↓ ↓

Sanity CMS ↔ Third-Party APIs
```

#### **Key Components:**

- 1. Frontend (Next.js):
  - Serves as the user-facing layer for interaction.
  - Displays products, cart, and order details dynamically by fetching data.
- 2. Sanity CMS:
  - Acts as the backend database for managing products, customers, and

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 Acts as the backend database for managing products, customers, and orders.

#### 3. Third-Party APIs:

 Integrates additional functionalities like shipment tracking and payment processing.

#### **Example Data Flow:**

- 1. A user explores the product catalog on the frontend.
- 2. Product details are fetched in real-time from Sanity CMS.
- 3. After an order is placed:
  - The system saves it to Sanity CMS.
  - Shipment data is retrieved from an external API.
  - Payment is processed via a gateway API, and the status is updated.

## 2. Core Processes

### **Product Display:**

- Customers browse product categories or search for specific items.
- Product data is retrieved via the /products endpoint from Sanity CMS.

#### Checkout Process:

- Users select items and proceed to the checkout page.
- The system collects user details and processes the order, saving it in Sanity CMS.

## **Order Tracking:**

- Order updates are fetched through a third-party API.
- Tracking information is shown on the customer's account page.

# 3. API Definitions

Endpoint	Method	Purpose	Example Response
/products	GET	Fetches a list of available products.	{ "id": 1, "name": "Product A", "price": 100 }
/orders	POST	Submits a new order to the system.	{ "orderId": 123, "status": "Order Placed" }
/shipment	GET	Retrieves shipping status for orders.	{ "shipmentId": 789, "status": "Out for Delivery" }

# 4. Sanity Schema Design

#### **Product Schema:**

#### **Order Schema:**

## **Abdul Haseeb**

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