Technical Documentation

Marketplace Technical Foundation - CommerceCore

1. System Architecture Overview

System Architecture Diagram

- Include a labeled diagram that shows how the frontend interacts with Sanity CMS, third-party APIs, and other components.
- Use arrows to indicate data flow between components.

Component Descriptions

1. Frontend (Next.js)

• Displays the user interface and handles interactions such as browsing products, managing the cart, and placing orders.

2. Sanity CMS

• Stores product data, user data, and order details. Acts as the backend for content management and API requests.

3. Third-Party APIs

 Handles functionalities such as shipment tracking and payment processing.

4. Payment Gateway

 Processes secure transactions and sends payment confirmation to the system.

2. Key Workflows

1. User Browses Products

Steps:

- 1. User visits the website.
- 2. Frontend sends a GET request to the /products endpoint.
- 3. Sanity CMS responds with a list of available products.
- 4. Products are displayed dynamically on the user interface.

2. User Adds Products to Cart

Steps:

- User selects a product and clicks "Add to Cart."
- 2. The frontend stores product details in the cart (stored in local storage or backend).
- 3. Cart contents are displayed in real time on the website.

3. User Places an Order

Steps:

- 1. User proceeds to checkout and fills in their details.
- 2. Frontend sends a POST request to the /orders endpoint with the user's information and cart details.
- 3. Sanity CMS saves the order and returns an order confirmation ID.
- 4. Confirmation is displayed to the user.

4. User Tracks Shipment

Steps:

- 1. User enters the order ID on the tracking page.
- 2. Frontend sends a GET request to the /shipment endpoint with the order's shipment ID.
- Third-party API responds with the current shipment status.
- 4. Status is displayed to the user in real time.