Bandage Online Shopping Platform

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Role: Bandage Online Shopping

Overview

This document outlines the technical foundation and enhanced workflow for the Bandage Online Shopping Platform. It includes system architecture, key workflows, API endpoints, and a technical roadmap.

System Architecture

High-Level Diagram

(See the diagram below for a high-level overview of the system.)

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System Architecture: High-Level Overview

  - Frontend (Next.js)
  - Sanity CMS
  - APIs (Stripe, ShipEngine)
  - Authentication (Clerk)
```

Component Descriptions

- Frontend (Next.js): Provides a responsive and interactive user interface.

- Sanity CMS: Centralized backend for managing data.

- Third-Party APIs:

  1. Shipment Tracking API (ShipEngine): Fetches real-time shipping updates.

2. Payment Gateway (Stripe): Processes secure payments.

- Authentication (Clerk): Handles user registration and session management.

Key Workflows

User Registration Workflow

(See the diagram below for the user registration process.)

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Key Workflows: User Registration Flow

  - User enters details
  - Frontend sends data
  - Clerk handles authentication
  - Data stored in Sanity CMS
```

API Endpoints

(See the diagram below for API communication flow.)

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API Endpoints: Communication Flow

  - GET /products - Fetch product details
  - POST /order - Submit order
  - Third-party API calls
```

Endpoint	Method	Purpose	Response Example
/products	GET	Fetch all product details	[{ "name": "Product Name", "price": 100 }]
/order	POST	Submit new order details	{ "orderId": 123, "status": "success" }

Technical Roadmap

Development Phase:

- Implement Clerk for authentication and integrate it with Sanity CMS.

Testing Phase:

- Conduct end-to-end testing for all workflows.

Launch Phase:

- Deploy the platform using Vercel or Netlify for scalability.

Conclusion

The Bandage Online Shopping Platform aims to deliver a seamless shopping experience with robust functionality.