Day 2: Technical Foundation - Sports E-commerce Marketplace

1. Introduction

This document outlines the technical foundation established for the sports e-commerce marketplace on Day 2 of the hackathon. It details the chosen technologies, API designs, project structure, and initial setup for key services.

2. Detailed Technology Stack

- **Frontend:** Next.js 15, Shadcn UI
- **Backend/CMS:** Sanity (latest version)
- **Authentication:** Clerk (latest version)
- **Payment Gateway:** Stripe
- **Shipping API (Dummy):** (Details below)
- **Other:** ShipEngine

3. API Design

- **Order API (/api/order)**
  - **Method:** POST
  - **Request Body:**
    JSON
    ```
    {
      "userId": "user123",
      "cartItems": [
        { "productId": "product456", "quantity": 2 },
        // ... other cart items
      ],
      "billingDetails": {
        "address": "123 Main St",
        "city": "Anytown",
        // ... other billing details
      },
      "totalPrice": 99.99,
      "orderStatus": "pending" // Initial status
    }
    ```
  - **Response:**
    - **Success (200):**
      JSON
      ```
      {
        "message": "Order created successfully",
        "order": {
          "_id": "order789", // Sanity-generated ID
          "orderId": "user123-2024-10-27-...", // Custom order ID
          // ... other order details
        }
      }
      ```

        - **Error (500):**
          JSON
          ```
          {
            "message": "Error creating order",
            "error": { /* Error details */ }
          }
          ```
    - **Functionality:** Creates a new order in the Sanity CMS. Generates a unique orderId.
- **Stripe API (/api/checkout)**
    - **Method:** POST
    - **Request Body:**
      JSON
      ```
      {
        "lineItems": [
          {
            "price_data": {
              "currency": "usd",
              "product_data": {
                "name": "T-Shirt",
              },
              "unit_amount": 2000, // $20.00 in cents
            },
            "quantity": 1,
          },
          // ... other line items
        ]
      }
      ```
    - **Response:**
        - **Success (200):**
          JSON
          ```
          {
            "url": "https://checkout.stripe.com/..." // Stripe checkout URL
          }
          ```
        - **Error (500):**
          JSON
          ```
          {
            "error": "Error creating checkout session"
          }
          ```
    - **Functionality:** Creates a Stripe checkout session.
- **Dummy Shipping API (/api/shipping)**
    - **Method:** POST
    - **Request Body:** (Example)
      JSON
      ```
      {
      ```

```
  "shippingAddress": { /* Address details */ },
  "cartItems": [ /* Cart items */ ]
}
```

- **Response:** (Example)
  JSON
  ```
  {
    "shippingCost": 10.00,
    "estimatedDelivery": "3-5 business days"
  }
  ```
- **Functionality:** For now, this API will return dummy shipping data. It can be integrated with ShipEngine or another shipping provider later.

4. Project Structure

- Next.js App Router structure.
- app/api: Contains API routes (order, checkout, shipping).
- app/components: Reusable components.
- sanity: Sanity CMS configuration and schemas.

5. Version Control Setup

- GitHub Repository: Burair Design Jam

6. Authentication Implementation

- Clerk is used for authentication. Google authentication is currently implemented.

7. Next Steps

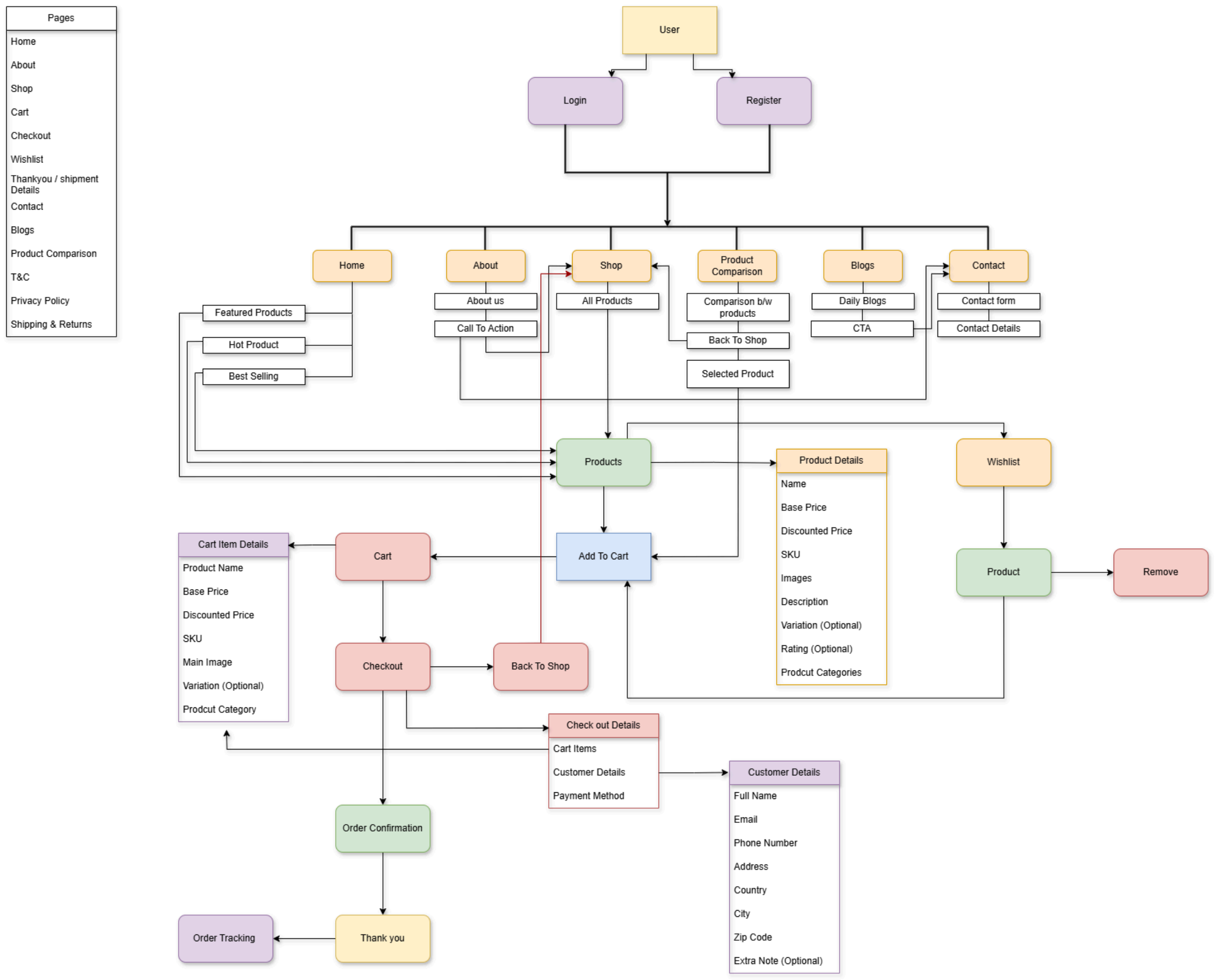
- Implement the actual shipping integration with ShipEngine.
- Develop more API endpoints as needed (e.g., product retrieval, user profiles).
- Start working on the frontend components and pages.

8. User Flow

- **Description:** This section outlines the typical user flow for a customer placing an order on the sports e-commerce marketplace. It illustrates the steps involved from browsing products to order confirmation.

- **Diagram:**

User Flow For E-Commerce Marketplace


Pages
Home
About
Shop
Cart
Checkout
Wishlist
Thankyou / shipment Details
Contact
Blogs
Product Comparison
T&C
Privacy Policy
Shipping & Returns
User
Login
Register
Home
About
Shop
Product Comparison
Blogs
Contact
Featured Products
Hot Product
Best Selling
About us
Call To Action
All Products
Comparison b/w products
Back To Shop
Selected Product
Daily Blogs
CTA
Contact form
Contact Details
Products
Product Details
Name
Base Price
Discounted Price
SKU
Images
Description
Variation (Optional)
Rating (Optional)
Prodcut Categories
Wishlist
Product
Remove
Cart Item Details
Product Name
Base Price
Discounted Price
SKU
Main Image
Variation (Optional)
Prodcut Category
Cart
Add To Cart
Checkout
Back To Shop
Check out Details
Cart Items
Customer Details
Payment Method
Customer Details
Full Name
Email
Phone Number
Address
Country
City
Zip Code
Extra Note (Optional)
Order Confirmation
Thank you
Order Tracking