Hackathon Day 2: Define Technical Requirements

Frontend Requirements

Framework:

- o *Use **Next.js** for server-side rendering, SEO optimization, and fast page loads.*

Styling:

- o *Implement **Tailwind CSS** for a responsive and customizable design.*

Essential Pages:

- o ***Home**: Showcase featured products, categories, and promotions.*

- o ***Shop**: Display all products with filters (e.g., category, price, rating).*

- o ***Product Details**: Show product images, descriptions, pricing, reviews, and "Add to Cart" button.*

- o ***Cart**: List selected items, quantity adjustments, and total cost calculation.*

- o ***Checkout**: Collect customer details, shipping information, and payment options.*

- o ***Order Confirmation**: Display order summary and estimated delivery details.*

Routing:

- o *Use dynamic routing in Next.js for product pages (/products/[id]).*

Backend Requirements

Content Management:

- o *Use **Sanity CMS** to manage:*

  - ▪ *Product data (name, price, stock, description, images).*

  - ▪ *Customer details (name, email, address, phone).*

  - ▪ *Order records (order ID, customer ID, products, status).*

APIs:

- o *Sanity's API for fetching and updating product, customer, and order data.*

Third-Party APIs

1. **Shipment Tracking**:

   o *Integrate shipment tracking APIs (e.g., Shippo, EasyPost) to fetch delivery updates.*

2. **Payment Gateways**:

   o *Use APIs like Stripe, PayPal for secure payment processing.*

3. **Backend Services**:

   o *Authentication: Use services like Auth0 or Firebase for secure user login.*

   o *Notifications: Integrate email/SMS APIs (e.g., SendGrid, Twilio) for order updates.*

API Functionality

1. **Sanity API**:

   o *Fetch product data for frontend pages.*

   o *Store and retrieve customer details and order records.*

2. **Shipment Tracking API**:

   o *Fetch shipment status and estimated delivery date for order confirmation page.*

Payment Gateway API:

   o *Process payments securely and provide real-time payment status updates.*