

Hackathon Day: "2"

Planning the Technical Foundation:- "[E-Commerce]"

* This document describes the user journey flow for an eCommerce marketplace, focusing on key steps and their technical implementation. It is tailored for building a robust and user friendly platform.

1: **HomePage:** User lands on the homepage. Displays featured categories, popular products, and a search bar.

2: **Product Browsing:** User selects a category or uses the search bar. Products are displayed with options to filter by price, brand, or ratings.

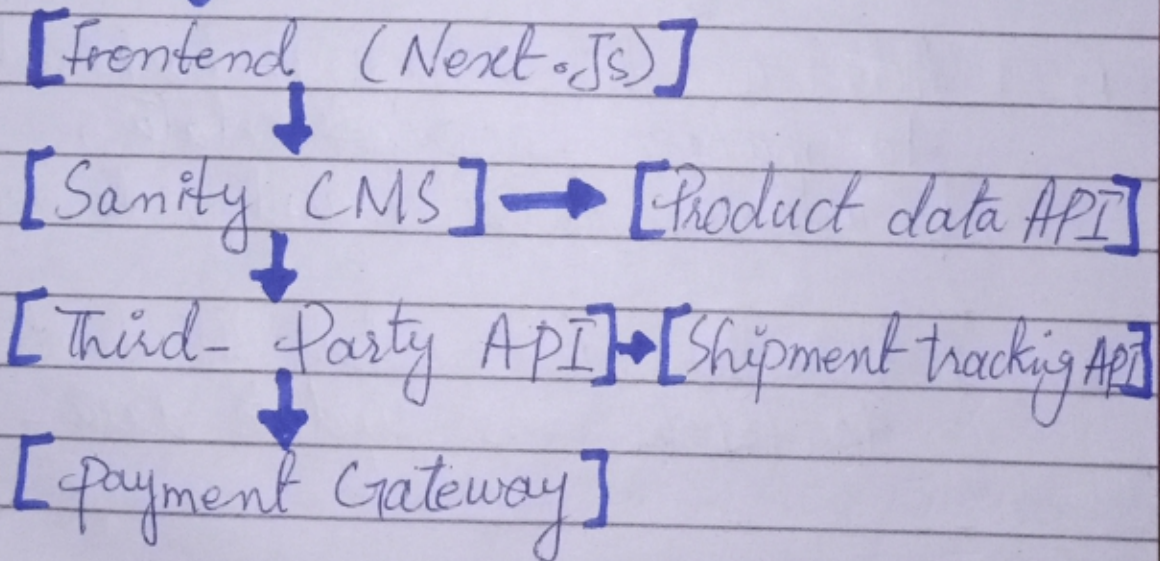
- 3: **Product Details:** user clicks on a product to view its details. Page includes product descriptions, price, availability, and user reviews.
- 4: **Add to Cart:** user adds the product to the cart. Cart updates dynamically with quantity and price.
- 5: **Checkout:** User proceeds to the checkout page. Provides shipping address and selects a delivery option.
- 6: **Payment:** User enters payment details. Secure payment gateway processes the transaction.
- 7: **Order Confirmation:** Order details are displayed and sent via email. Order status is updated in the backend.

8: **Shipment Tracking**: user visits the "Order History" section - Real-Time Shipment Tracking is enabled via API integration.

9: **Delivery**: Product is delivered to the user's address.

* System Architecture Overview:

Diagram:



* Components and Roles:

1: Frontend (Next.js):

1: Display the user interface for browsing products, managing Cart, and placing orders.

2: Handles user interactions and communicates with backend Service via APIs.

2: Sanity CMS:

1: Acts as the primary backend to manage product data, Customer details, and orders.

2: Provides APIs for the front to fetch and update data.

3: Products Data API:

- Provides endpoints to fetch product listings, details, and inventory status.

4: Third Party APIs:

- Integrate Services like shipment tracking and payment processing.

5: Payment Gateway:

- Processes user payments securely and provides transaction confirmation.

+ Example Entities:

1: Items: • fields: [id, name, price, description, image, categoryid]

2: Categories: • fields: [id, name]

3: Users: • fields: [id, name, email, Password.]

4: Orders: • fields: [id, userId, OrderDate, Status.]

* Workflow diagram visual Representation.

