HACKATON #03

DAY 2:- Planning the Technical Foundation

Goal Of the Day:

The primary goal of Day 2 is to transition from business - oriented planning to technical preparation by creating a high-level technical plan. The focus is On:

Designing system architecture.
Defining workflows and API requirements.
Aligning technical solution with business goals for a scalable and efficient marketplace.

ACTIVITIES: Transitioning to Technical Planning

STEP 1: Define Technical Requirements

1. Frontend Requirements:

* A responsive, user-friendly interface for browsing furniture products.

* Pages Planned: Home, Product Listing, Product Details, Cart, Checkout, and order Confirmation.

2. Sanity CMS for Backend:

* Manage Product data, Customer details, and orders

* Align Schemas in Sanity CMS with the data structure defined in Day 1.

3. Third-Party APIs:

* Integrated APIs for shipment tracking and secure payment processing.

STEP 2: Design System Architecture

A detailed architecture was created Showing interactions between the frontend

(e.g. React/Next.js), Sanity CMS, and third-party APIS.

* <u>Example Workflow:</u>

1. A user browses the marketplace frontend.

2. Product data is fetched from Sanity CMS.

3. Orders are recorded in Sanity CMS and updated via APIS for shipment tracking and payment processing.

STEP 3: <u>Define API Requirements</u>

Drafted API endpoints based on the business Schema.

1. <u>Endpoint: / Products:</u>

* Method: GET

* Purpose: Fetch product details (e.g., furniture name, price, availability).

2. Endpoint: /orders:

* Method: POST

* Purpose: Save new orders, including customer and product details.

3. Endpoint: /shipment

* Method: GET

* Purpose: Fetch Shipment status for tracking.

STEP 4: Create Technical Documentation

To mainly clarity and structure:

* System Architecture Document:

outlines component interactions.

* API Specification Document:

Lists endpoints, methods, and responses.

* **Workflow Diagram:**

Visualizes user actions (e.g., Product browsing to order placement).

STEP5: Incorporate Feedback

Collaborated with peers and mentors for insights on scalability, performance, and user experience improvements.

Conclusion:

By the end of Day 2, we successfully defined the technical foundation of our furniture marketplace. This includes a robust system architecture, API requirements, and technical documentation aligned with the business goals from Day 1.

These steps ensure that the platform will be scalable, user-friendly, and ready for the implementation phase on Day 3.