"Hackaton 3 (Day 2)"

PLANNING THE TECHNICAL FOUNDATION

MARKETPLACE TECHNICAL DOCUMENTATION (FURNITURE MARKETPLACE)

Defining Your Website Project and Furniture Business

My website project is a furniture website. I have built my website using frontend, backend, and third-party APIs to ensure efficient functionality and a robust user experience.

Frontend: For the frontend, I have used **Next.js** to create pages for my website, such as the Home Page, Product, Contact, About, Cart, Checkout, Blog, etc. Utilizing Next.js allows me to leverage features like dynamic routing, server-side rendering (SSR), and client-side rendering (CSR) to enhance the website's performance and deliver a seamless user experience. Additionally:

- I have implemented a responsive design using **Tailwind CSS** to ensure the website functions well on all devices.
- Navigation and user interaction elements, such as dropdown menus and modals, are optimized for usability.
- SEO-friendly practices are incorporated by using Next.js's built-in tools for metadata and routing.

Backend: For the backend, I have utilized **Sanity CMS** to store all backend-related tasks. This includes:

- Managing contact forms and storing customer details.
- Adding products to the cart with real-time data synchronization.
- Processing checkouts and retrieving customer details from forms.
- Handling payment details, such as bank transactions or Easypaisa payments, with secure storage protocols.
- Storing shipment details, including tracking IDs, product details, and all related information.
- Configuring dynamic content fields in Sanity CMS to update product details, promotional banners, and blogs directly from the CMS dashboard. Using Sanity CMS ensures that all backend operations are managed efficiently and stored securely, providing scalability for future updates and expansions.

Third-Party APIs: In my website, I have integrated third-party APIs for various purposes:

- Fetching and integrating product data into my Next.js project to maintain an up-to-date product catalog.
- Updating product details dynamically to ensure accuracy and consistency across the platform.
- Managing shipment details using third-party APIs for logistics and real-time tracking to keep users informed about their orders.
- Facilitating payment methods through APIs for secure transactions, supporting multiple payment gateways to provide flexibility to customers.
- Leveraging analytics APIs to track user behavior and gather insights for future improvements.

"Website Schema"

User

↓

Frontend (Next JS)

Backend (Sanity CMS) ⟷ **Third Party (API)**

→ **Product List**

→ **Add to Cart**

→ **Check Out**

→ **Customer Info**

→ **Payment Method**

→ **Shipping and Tracking Id**