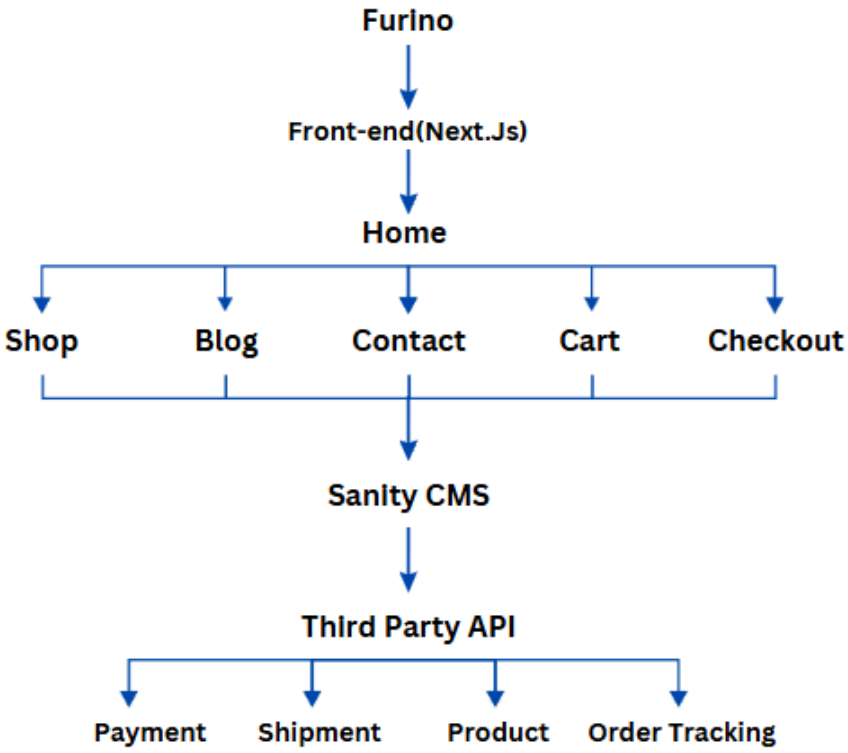
Marketplace Technical Foundation - FURINO

Day 2 Activities: Transitioning to Technical Planning

System Architecture



Roles Of Components

Furino

Represents the system or platform's overall branding and architecture. It acts as the starting point for the user experience.

Frontend (Next.js)

- The frontend is developed using **Next.js**, ensuring a responsive, fast-loading, and interactive user interface.
- Handles routing and rendering for various sections like Shop, Blog, Contact, Cart, and Checkout.

Home: Acts as the main landing page for users, providing navigation to different essential sections of the platform.

Shop: Displays products available for purchase, enabling users to browse, filter, and select items.

Blog: Shares insights, updates, or articles related to the products or platform, fostering customer engagement.

Contact: Provides users with a way to reach out for support, inquiries, or feedback.

Cart: Allows users to review and manage the products they intend to purchase.

Checkout: Facilitates the completion of a transaction, including payment details, shipment details and order confirmation.

Sanity CMS

- Manages backend data such as product information, blog content, user details, and order records.
- Acts as a database and content management solution, ensuring the platform's data is organized and accessible.

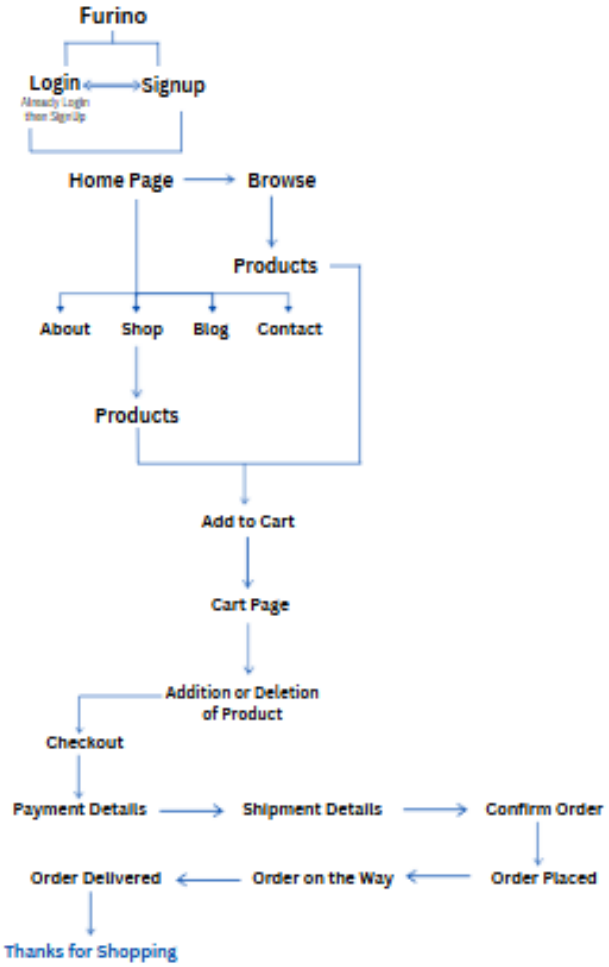
Third-Party API

- **Payment:** Integrates secure payment gateways for processing transactions.
- **Shipment:** Tracks and manages shipping details for orders.
- **Product:** Synchronizes product data between the frontend and backend.
- **Order Tracking:** Provides real-time updates on the status of customer orders.

API Specification

Endpoint	Method	Purpose	Response
/api/products	GET	Fetch all products	Product list
/api/products/{id}	GET	Fetch product details	ID, name, price, image
/api/cart	GET	Retrieve cart items	Products, Quantity, Total Bill
/api/shipment	POST	Add shipping details	Shipment ID, order ID, status, expected delivery date
/api/payment	POST	Process payment	Card details, Order ID, Price
/api/orders	GET	Get user order history	Customer info, product details, payment status

Work Flow Diagram



Data Schema Design

Technical Roadmap

This document provides an overview of the system architecture for transitioning to technical planning. The architecture is designed to support a scalable, responsive, and user-friendly online marketplace. The components are divided into three main layers:

1. **Front-end Architecture:**
   - Technology Stack: Tailwind-CSS and Next.js are used to build a responsive and dynamic user interface.
   - Key Features:
     - User-friendly design for seamless product browsing.
     - Support for multiple devices (mobile and desktop).
     - Essential pages, such as Home, Product Listing, Product Details, Cart, Checkout, and Order Confirmation.
   - Responsibilities:
     - Rendering UI components based on user interactions and API responses.
     - Ensuring performance and accessibility standards.

2. **Back-end Architecture:**
   - Technology Stack: Sanity CMS is employed as the primary back-end solution.
   - Key Features:
     - Centralized management of product data, customer information, and order records.
     - Schema design tailored to meet business goals identified during the planning phase.
   - Responsibilities:
     - Storing and managing data efficiently.
     - Providing APIs for the frontend to fetch and update data.
3. **Third-Party Integrations:**
   - APIs:
     - Integration of shipment tracking services.
     - Payment gateway integration for secure transactions.
     - Other necessary backend services for a complete e-commerce solution.
   - Key Features:
     - Seamless data flow between frontend, backend, and third-party services.
     - Ensuring reliability and security in transactions and operations.
   - Responsibilities:
     - Facilitating backend operations.
     - Providing data for frontend components to function effectively.

By: Khudaja Murtaza