DAY 2 - PLANNING THE TECHNICAL FOUNDATION.

1. Define Technical Requirements :
   - FRONT END :
     - Responsive pages : Home, Product Listing, Product Details, Cart, Check out, Order Confirmation.
     - Tools : React.js / Next.js for Interactivity.
   - BACKEND (SANITY CMS):
     - Schemas : Products, Users, Order.
   - THIRD PARTY APIs :
     - Shipment Tracking, Email Notification.
   - PAYMENT GATEWAY :
     - Various Payments Options available.

Explaination :

- Frontend : Place where the User Browse for the Product.
- Backend (Sanity CMS) : From where the System Processes & manages the data and Orders.
- Third Party APIs : API Processes the Payment and for Tracking The Shipment.

2. DESIGN SYSTEM ARCHITECTURE :

- Frontend communicates with Sanity CMS via REST or GraphQL.
- Sanity CMS manages data schemas.
- Third Party APIs handles Payments, shipping and email.

3. PLAN API REQUIREMENTS.

- Define endpoints:
  - / products (GET) : Fetch product details.
  - / orders (POST) : Place orders.
  - / shipment (GET) : Track shipments.

4. DOCUMENT TECHNICAL WORKFLOWS :

Document workflows such as interactions with product browsing, cart updates, and order placements.

SIMPLIFIED HUMANOID - STYLE :

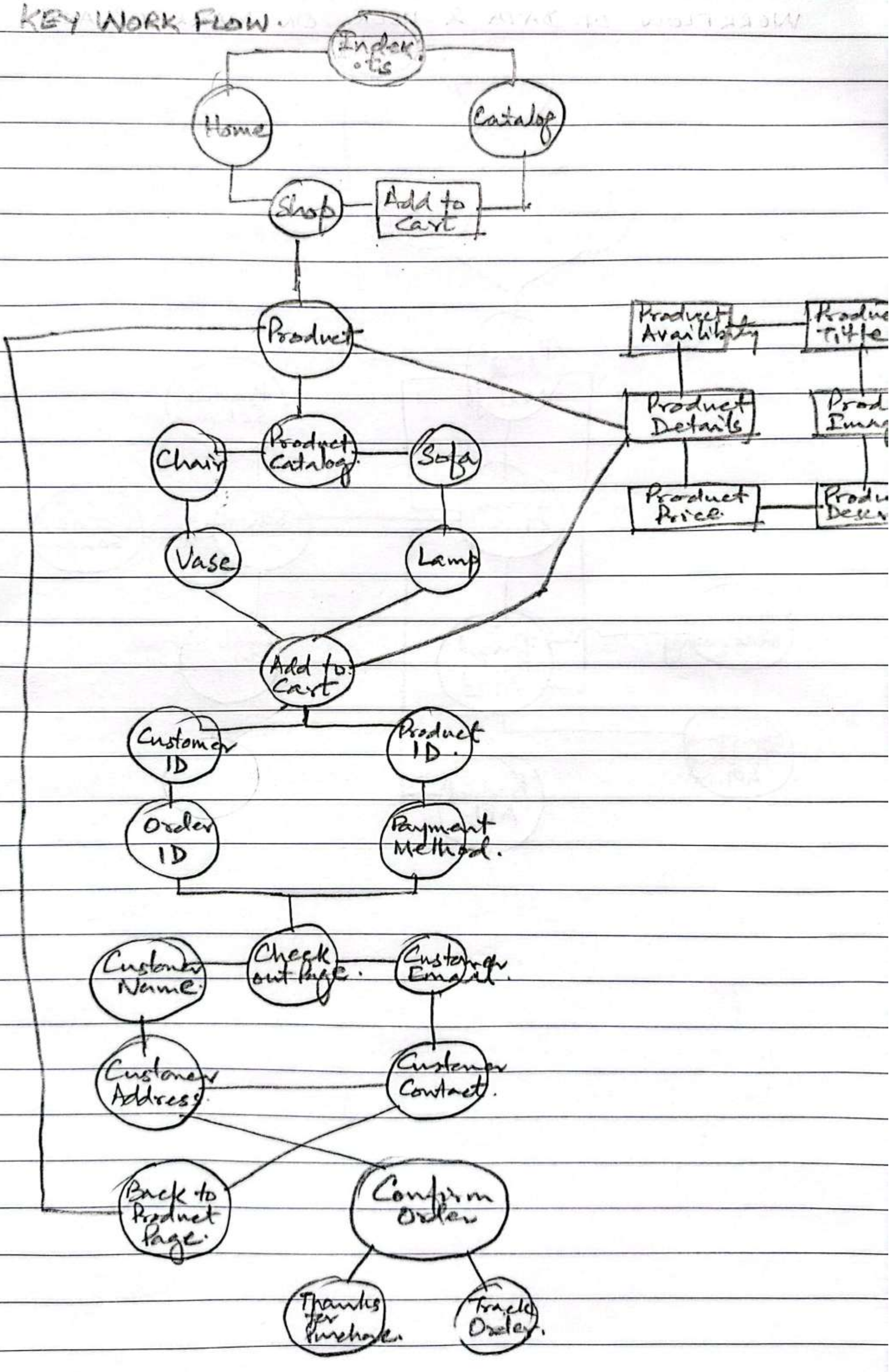
Imagine a humanoid style illustrating the Technical foundation of my e-commerce marketplace.

- HEAD (FRONTEND) : Responsible for the User Interaction.
- HEART (SANITY CMS): Central Data Storage and Schema Management.
- HANDS (THIRD PARTY APIs): Handles Payments, Shipping and Notifications.
- LEGS (SYSTEM ARCHITECTURE): Supports Data Flow between Components.
- FEET (DOCUMENTATION): Solid Foundation for Workflows and APIs.

WORK FLOWS INCLUDED :

- PRODUCT BROWSING —
  Frontend fetches product data from Sanity CMS.
- CART AND CHECKOUT :
  User adds items to the cart, processes payment via an API and confirms the Order.
- ORDER MANAGEMENT :
  Sanity CMS records order data, Shipping details are updated via third party APIs.

KEY WORK FLOW.



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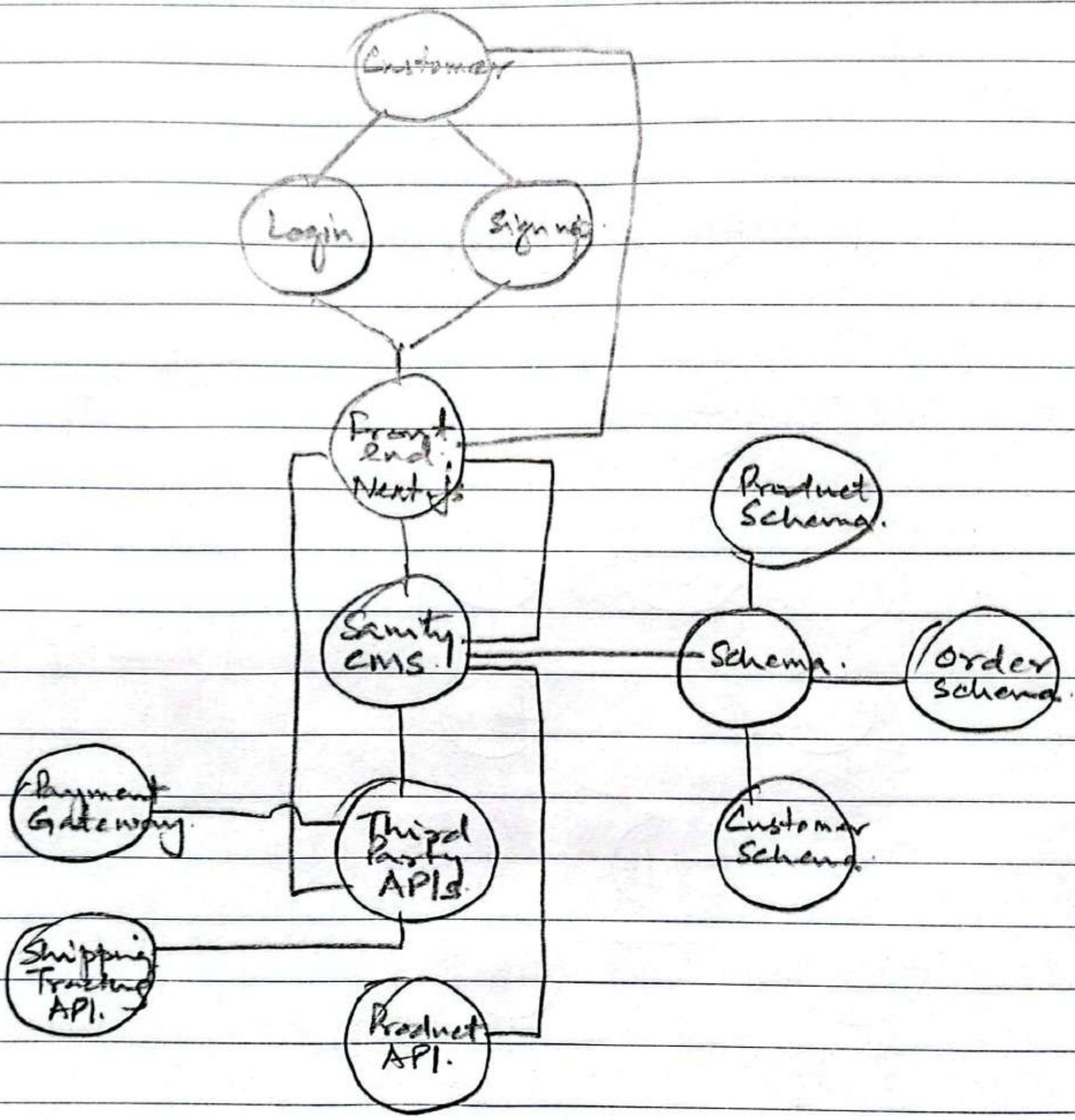
WORKFLOW OF DATA & USER ON MARKETPLACE.



Customer
Login
Sign up
Front End Next.js
Sanity CMS.
Schema.
Product Schema.
Order Schema.
Customer Schema.
Payment Gateway
Third Party APIs.
Shipping Tracking API.
Product API.