

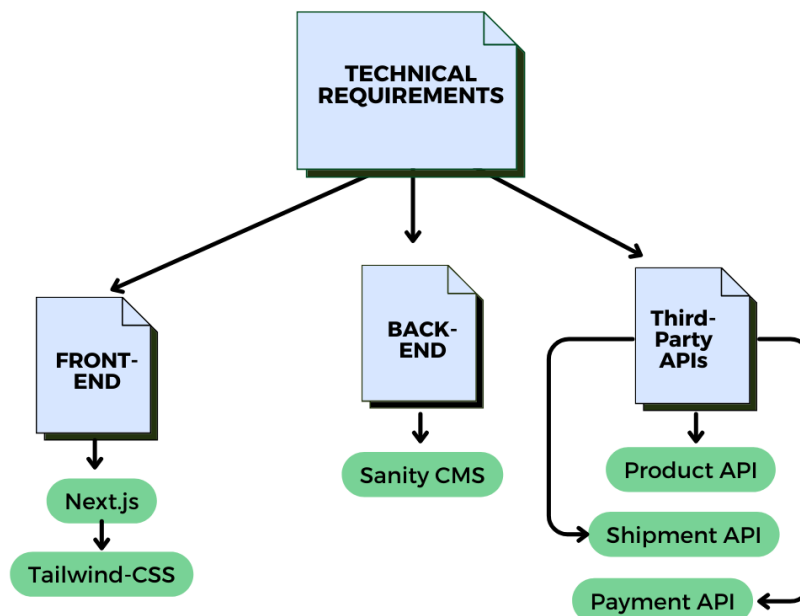
# Technical Planning For SHOP.CO

MY E-COMMERCE WEBSITE UI: <https://hackathone-figma-24-hour.vercel.app/>

## DAY # 2 GOAL:

### 1. Technical Requirement:

Diagram:



### *Detailed Requirements with it's Works:*

#### Frontend (Next.js + Tailwind CSS)

- **Purpose:**
  - SSR (Server-Side Rendering) for better SEO and performance.
  - Dynamic routing for pages like products, categories, and user profiles.
- **Key Features:**
  - **Responsive UI:** Tailwind CSS ensures a mobile-friendly, clean design.
  - **Pages:**
    1. Landing Page (Hero Sec, Product, with filters).
    2. Product Listing
    3. Product Details.

4. Cart.
  5. Checkout.
  6. User Profile (Orders, Saved Items).
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## Backend & CMS (Sanity)

- **Purpose:**
    - Acts as a **headless CMS** to store and manage:
      - Product data (images, descriptions, categories).
      - Orders.
      - User-specific data (e.g., wishlists).
  - **API:**
    - Sanity's GROQ API will fetch data for the frontend.
    - Product API
    - Shipment API
    - Payment API
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## Authentication (NextAuth.js)

- **Purpose:**
    1. Handle user login/signup securely.
  - **Key Features:**
    1. Social login (Google, etc.).
    2. Token-based session management.
  - **Workflow:**
    1. User clicks "Login with Google."
    2. NextAuth.js redirects to Google OAuth.
    3. User data is stored in session for authenticated requests.
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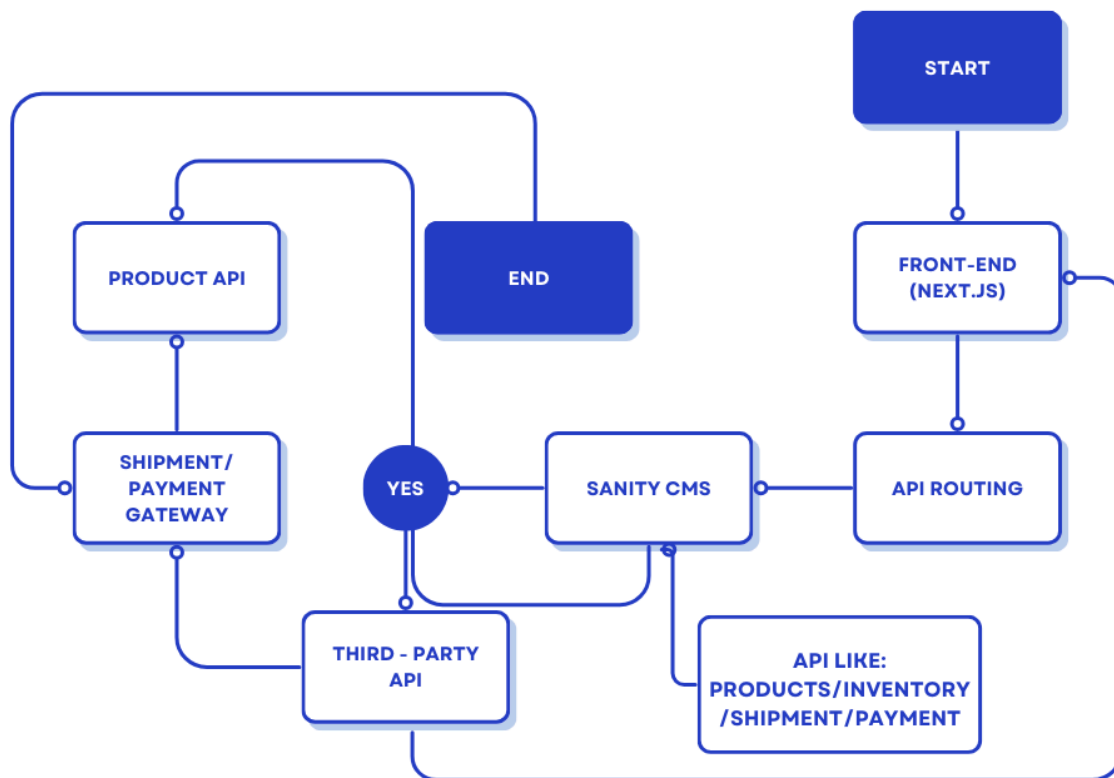
## Payment Integration (Stripe)

- **Purpose:**
    1. Secure and reliable payment handling.
  - **Workflow:**
    1. On **Checkout**, create a Stripe payment intent.
    2. Process payments via Stripe's API.
    3. Update order status in Sanity after successful payment.
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## Deployment (Vercel)

- **Purpose:**
    1. Easily deploy the Next.js frontend.
  - **Steps:**
    1. Connect GitHub repo to Vercel.
    2. Configure environment variables (e.g., Sanity, Stripe keys).
    3. Automatic build & deploy on every push to the `main` branch.
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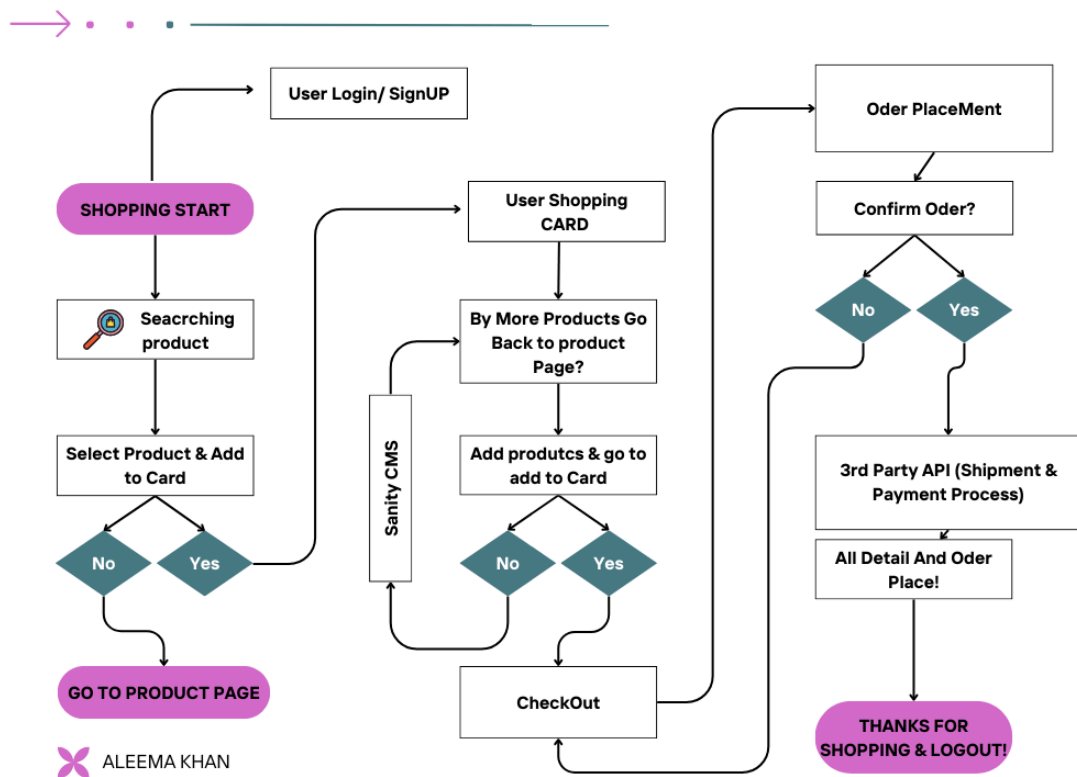
## System Architecture OverView:



## API EndPoints :

A	B	C	D
Endpoint	Method	Purpose	Response
/api/register	POST	Register a new user	User details, session token
/api/login	POST	Authenticate existing user	User token
/api/logout	POST	Logout user	Success message
/api/products	GET	Fetch all products	Product list
/api/products/{id}	GET	Fetch product details	Product details
/api/cart	GET	Retrieve cart items	Cart contents
/api/cart	POST	Add product to cart	Updated cart
/api/checkout	POST	Initiate checkout process	Stripe payment intent
/api/shipment	POST	Add shipping details	Shipment confirmation
/api/payment	POST	Process payment	Payment confirmation
/api/order-status	GET	Retrieve order status	Order details
/api/orders	GET	Get user order history	List of orders

## WORK FLOW DIAGRAM:



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**Documentation Author: Aleema Khan**

**Slot: (Saturday 2 to 5)**

**Task Given By : Sir Ameen Alam**

**Class Teacher : Sir Muhammad Bilal &**

**Sir Ali Aftab Sheikh**