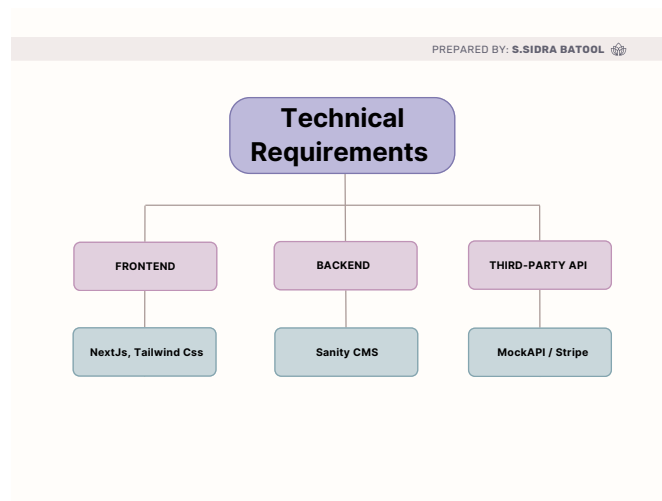


Marketplace Technical Foundation - SHOP.CO

1. Technical Requirements:



Tech Stack Overview:

-Frontend (Next.js + Tailwind CSS)

- Next.js → Provides SSR, SSG, and API Routes for backend logic.
- Tailwind CSS → Fast and responsive styling.

-Backend (Sanity CMS)

- Sanity CMS → Stores products, users, orders, reviews.

-Authentication (NextAuth.js + JWT)

- NextAuth.js → Supports Google OAuth + Custom Credentials.
- JWT Tokens → Ensures secure user sessions.

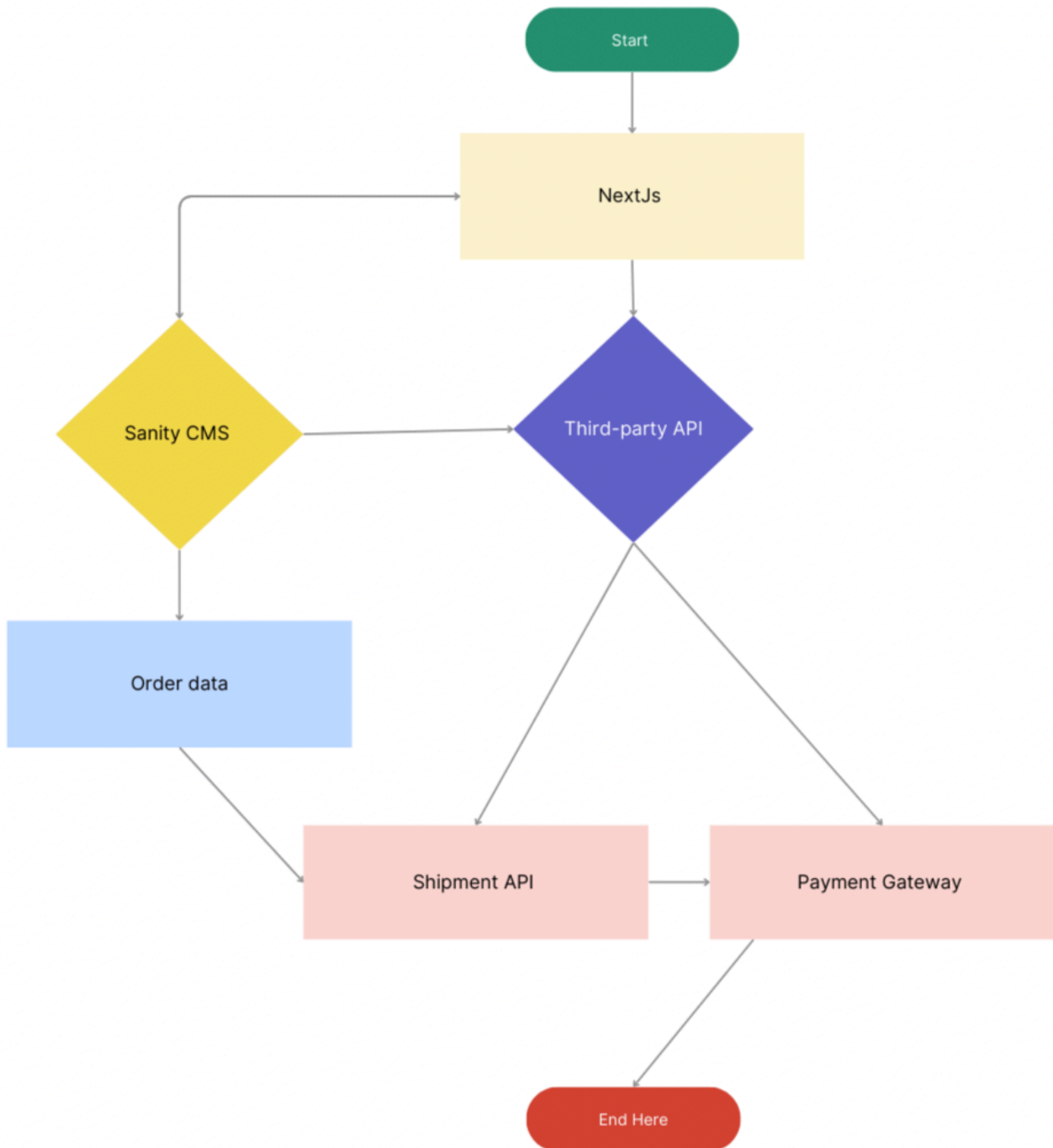
-Third-Party APIs

- Simulates shipping, inventory, analytics.
- Stripe (Payment Gateway)

-Deployment & Hosting

- Vercel (Easy deployment)

2. System Architecture:



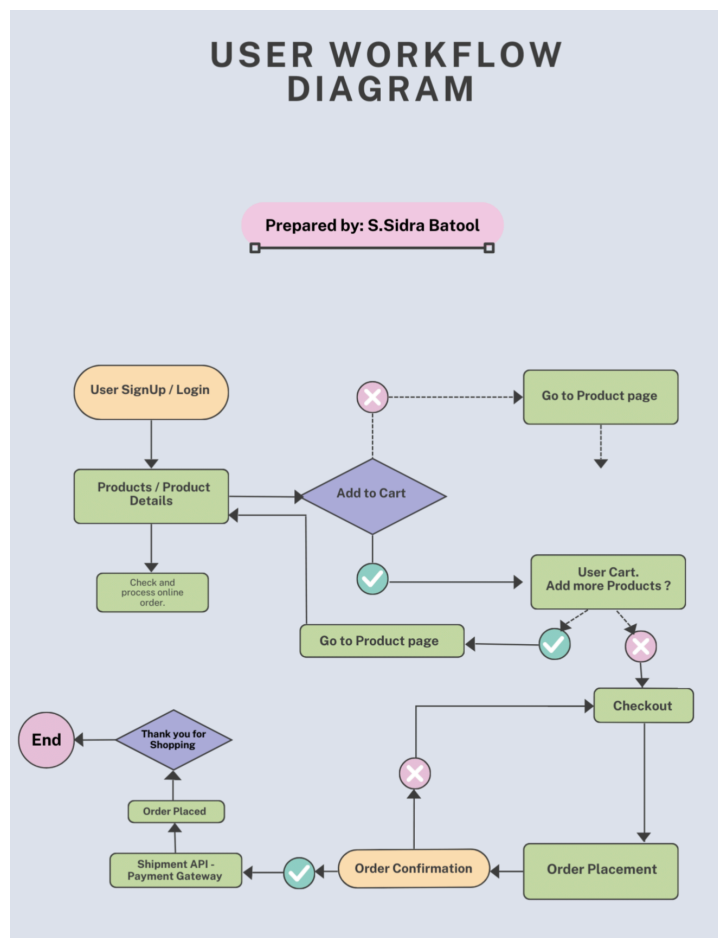
System Workflow:

- 1 User visits the Next.js frontend to browse products.
- 2 API fetches product data from Sanity CMS. User adds items and proceeds to checkout.
- 3 Order is saved in Sanity CMS & payment is processed via Stripe.
- 4 Delivery tracking is fetched from API & shown to the user.

3. API Endpoints:

Endpoint	Method	Purpose	Response
/api/register	POST	Register a new user	User details
/api/login	POST	Authenticate a user	Login
/api/session	GET	logged in user session details	session details
/api/logout	POST	log out the user, end session	logout successfully
/api/products	GET	Fetch all products	Product list
/api/products/:id	GET	Fetch a specific product	Product Details
/api/cart	GET	Fetch user's cart details	Cart items
/api/cart/add	POST	Add an item to cart	Updated cart
/api/cart/remove	DELETE	Remove an item from the cart	Cart updated
/api/orders	POST	Create an order	New order
/api/orders/:id	GET	Retrieve order details	Order details
/api/shipment	POST	Add shipping details	Shipment confirmation
/api/payments	POST	Initiate stripe transaction	Stripe Payment
/api/payments/:id	GET	Check payment status	Payment details
/api/delivery/:orderId	GET	Fetch order delivery status	Order status
/api/inventory/productId	GET	Check stock availability	Stock quantity

4. Workflow Diagram:



Task given by **Sir Ameen Alam**

Teachers: **Sir Bilal Muhammad & Sir Ali Aftab**