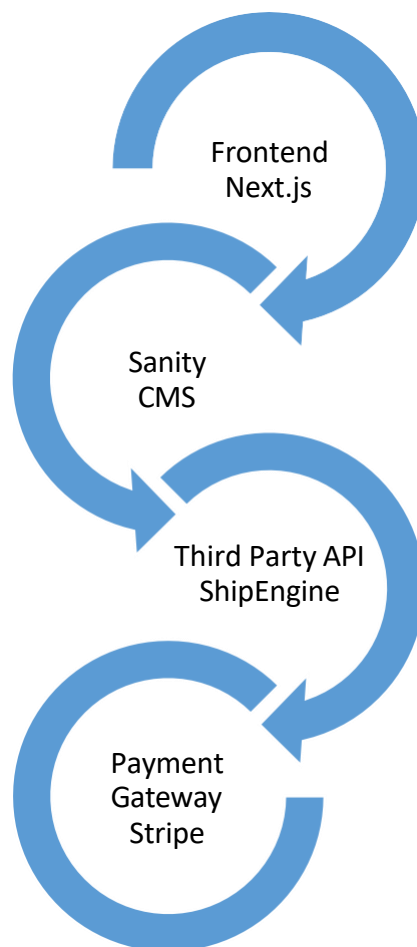# Hackathon Day 2: Planning the Technical Foundation

Day 2 Goal

The primary goal of Day 2 is to shift from business-oriented planning to technical preparation. In this phase, the focus will be on developing a high-level technical plan for the e-commerce clothing site, including system architecture, workflows, and API requirements. This blueprint will guide the implementation phase and ensure alignment with business objectives.

This structured approach ensures a scalable and user-friendly e-commerce solution, leveraging tools like Sanity CMS and third-party APIs for efficient backend management and dynamic frontend functionality.

Technical Requirements

Frontend
Next.js

Sanity
CMS

Third Party API
ShipEngine

Payment
Gateway
Stripe

API Endpoint

Name: /products
Method: GET
Description: Fetch all product details.
```
 {
 "id": 1,
 "name": "T-Shirt",
"price": 1500,
"size": "M",
"stock":1,
"Image": "http://url",
 "color": "Black"
"rate": 4.5
 }
```

Endpoint Name: /categories
Method: GET
Description: Fetch all product categories.
```
 {
"id": 1,
"name": "Men's Wear"
}
```

Endpoint Name: /orders
Method: POST
Description: Create a new order.
```
{
 "customerId": 1,
"products": [{"id": 1, "qty": 2}] }
"Sale Price":1500,
"Order Date": 2025-02-14,
}
```

Endpoint Name: /Customer
Method: GET
Description: Customer Information.
```
{
```

"CustomerId": 1, "customer
Name": "xyz", "contact#":
202524562 "Address": "abc
plot"
"Email": 123@gmail.com
}

Endpoint Name: /payment Method:
GET
Description: take payment from cutomer.
{
"orderId": 1,
"paymentId": 1,
"totalAmount": 1500
"paymentMethod": ["online", Cash] "payment
Date": 2025-02-14
}

Endpoint Name: /shipment
Method: GET
Description: Track order status via third-party API.
{
 "shipmentId": 123,
"status": "In Transit",
"Delivery Date": 2025-02-24
"Extended Date": 2025-02-30
"Customer #": 0245789625
}

Endpoint Name: /Delivery Zone
Method: GET
Description: Track order status.
{
 "ZoneId": 123,
"zoneName": "abc",
"zoneDestination": "123"
"assignDriver": "cnd"
}

System Architecture Documents/Work Flow

```
                    ┌──────────────┐
                    │   Frontend   │
                    │    NextJs    │
                    └──────────────┘
                       ↑      ↓
        ┌──────────────────────────┐        ┌──────────┐
        │          Sanity          │ ←───── │   API    │
        └──────────────────────────┘        └──────────┘
                       ↓
                ┌──────────────┐
                │   HomePage   │
                └──────────────┘
                       ↓
                ┌──────────────┐
                │   Products   │
                └──────────────┘
                       ↓                        ┌─────────┐
                                            ──→ │   Men   │
                ┌──────────────┐                └─────────┘
                │  categories  │ ──────────→    ┌─────────┐
                └──────────────┘                │  Wome   │
                       ↓                        │    n    │
                                                └─────────┘
                                            ──→ ┌─────────┐
                ┌──────────────┐                │  Kids   │
                │ Product Details │             └─────────┘
                └──────────────┘
                  ↓          ↓
        ┌────────────┐   ┌──────────────┐   ┌──────────────┐
        │ Add to cart│   │ Order Details│ → │   Shipment   │
        └────────────┘   └──────────────┘   └──────────────┘
              ↓                 ↓              ↓        ↓
        ┌────────────┐   ┌──────────────┐  ┌─────────┐ ┌──────────┐
        │ User Detail│   │   Payment    │  │ Order   │ │ Delivery │
        └────────────┘   └──────────────┘  │ Confirm │ │   Zone   │
                                           └─────────┘ └──────────┘
```