# Day 2: Technical Planning for Clothing E-commerce Website

# 1. Frontend Requirements

- 1. **Next.js**: Server-side rendering aur static site generation ke liye.
- 2. Tailwind CSS: Responsive aur modern UI design ke liye.
- 3. **Pages**:
  - 1. Home Page
  - 2. Product Listing Page
  - 3. Product Details Page
  - 4. Cart Page
  - 5. Checkout Page
  - 6. User Profile / Account Page
  - 7. Sign In / Sign Up Page

# 2. Backend (Sanity CMS as Headless CMS)

## Data Schema Examples:

# 1. Category Schema:

o Title aur slug fields define karni hain jo category ko identify karein.

### 2. Product Schema:

 Product ka title, description, price, category reference, images aur slug fields define karni hain.

#### 3. User Schema:

o User ka name, email aur password fields define karni hain.

# 3. API Setup

In sab endpoints ke liye API ka use hoga, jo frontend aur backend ke beech communication ke liye zaruri hai.

## 1. Product Endpoints:

## 1. Get All Products:

Method: GET

■ Endpoint: api/products

Description: Sare products fetch karne ke liye.

## 2. Order Endpoints:

#### 1. Create Order:

■ Method: POST

■ Endpoint: api/orders

Description: Naya order create karne ke liye.

## 3. Shipment Endpoints:

## 1. Create Shipment:

■ Method: POST

■ Endpoint: api/shipment

Description: Naya shipment create karne ke liye.

# 4. Dynamic Routing

1. Product Page: product/[slug]

2. Category Page: category/[slug]

3. **Reason**: Dynamic routing ka use isliye hota hai takay har product aur category ke liye unique URL generate ho sake, jo SEO friendly ho aur better user experience provide kare.

## 5. Payment Method

## 1. Stripe Checkout Flow:

- 1. Frontend pe product details bhejni hain backend ko API ka use karte hue.
- 2. Backend payment intent create karega.
- 3. User ko Stripe Payment Page par redirect karega.

#### 6. User Authentication

Authentication ke liye NextAuth.js ka use:

#### 1. Features:

- 1. Sign In (API ka use hoga).
  - Sign In functionality implement karne ke liye ek simple form design karein.
- 2. Only simple Sign-in has been read.

#### 7. Workflow

#### 1. Frontend:

- 1. Layout (Navbar, Footer, etc.)
- 2. Home page UI design
- 3. API integrate karke dynamic product listing

## 2. Backend:

- 1. Sanity CMS setup
- 2. Categories, products, aur users ke schemas define krna hai
- 3. API endpoints test

## 3. **Integration**:

- 1. Frontend ko sanity se connect kr k API ko sanity ke sath connect krna hai (For more data fetch into Api)
- 2. Dynamic routing ki testing

# 4. Payment & Authentication:

- 1. Payment gateway integrate.
- 2. Sign-in functionality add krna (API ka use karte hue).

# **Entity Relationship Diagram**:

| Frontend        | Backend         | API Endpoints   |
|-----------------|-----------------|-----------------|
|                 |                 |                 |
| Pages           | Sanity CMS      | Product API     |
| Components      | Schemas         | Order API       |
| Dynamic Routing | Data Management | Shipment API    |
| I               | l               | ·               |
| I               | I               | I               |
| V               | V               | V               |
| Authentication  | Database        | Payment Gateway |
|                 |                 |                 |
|                 |                 |                 |
| Sign In         | Products Table  | Stripe API      |
| User Sessions   | Orders Table    | Payment Intents |

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