Day #02

Technical foundation
Planning Architecture
Diagram:.

Component	Technology	Purpose
① Frontend	Next Js	Handles UI and user interactions.
② Backend (cms)	Sanity	Manages Products, orders and user data.
③ Third-Party APIs	-Shipment Item Tracking API	Tracks Products movements from ware house to delivery
	-Payment Gateway API	Process on line Payments

Frontend Development:-

We are building the frontend using Next.Js where all the UI component will be implement. The frontend focuses on the design, layout and user experience of the website.

Key Page & Features:-

Home Page:-

① The main landing page of the web-application.

② First Page users see when they visit the website via a Search Engine.

③ Acts as an entry Point and Provides an overview of the website.

Product Page:-

Display a list all available function Products

Product Detail Page:-

- Shows complete details of a selected Products including Price, images, and description
- includes "Add to cart" and "Add to wishlist" buttons.

Cart Pages:

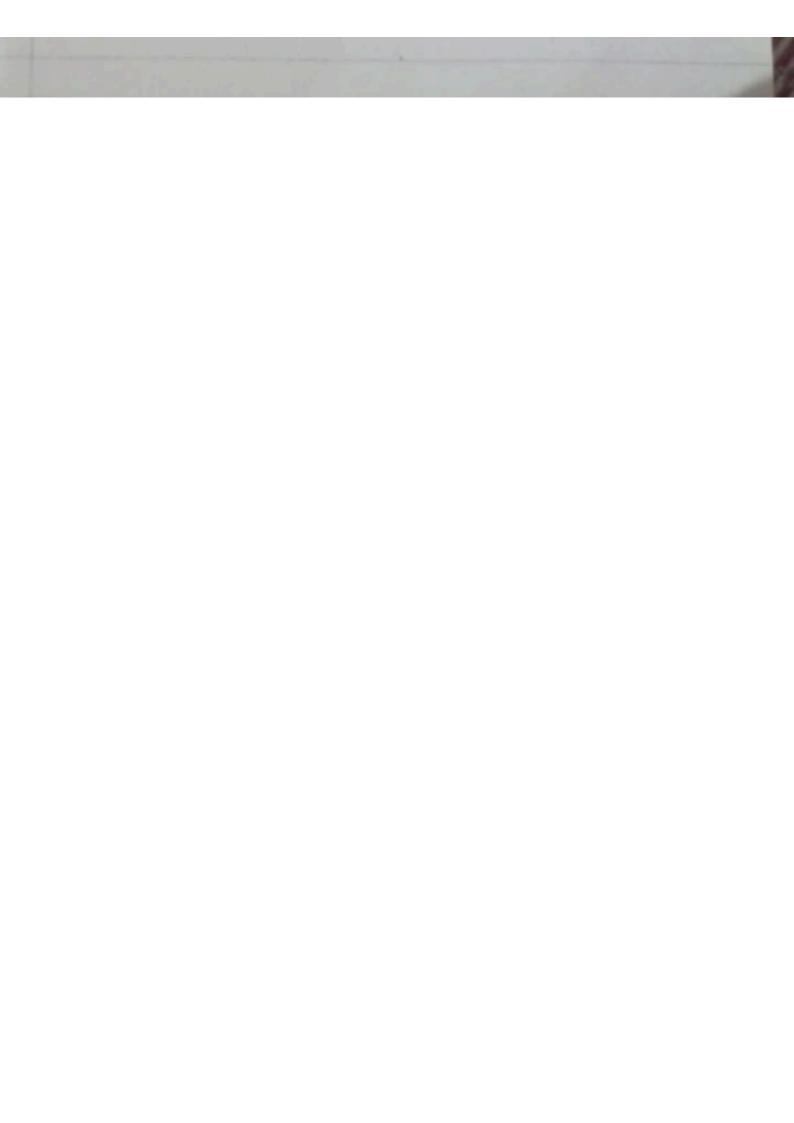Displays all Products the user has added to the cart for Purchase.

Wishlist Page:

- Allow users to save Products for later Purchase.

checkout Page:-

Where users make Payments for their selected Product.

Shipment Tracking Page:

Allow users to track their order from warehouse to delivery.

Login/Signup Page:

- Just like entering a supermarket user must log in or Sign up to buy Products.
- The website recognizes logged-in users, Similar to a Security camera tracking visitors in a Store.

SanityCMS: THE Backend Solution

Products — Stores Product details Such id, name, images, price, etc.

Orders — Stores order details When a user Places an order.

User Managment — Stores user information and their order history.

Third-Party APIS

We are integrating third-Party APIs to handle Shipment tracking and Payment Processing.

1. ShipEngine (Shipment Tracking API).

   , Used for real-time tracking of Product deliveries

   Fetches the current Status of Shipments from the warehouse to the customer.

2. Stripe (Payment Gateway API)

   , Securely Processes online Payment for customer order.

   Supports multiple payment methods like credit/debit cards, digital wallet and bank transfer.

API Requirement & Design:-

End Point	Method	Description	Request Body	Response
ⓘ /Products	GET	Fetch all furniture Products from Sanity CMS	None	List of Product
② order	POST	Create a new order in Sanity CMS.	order details	order confirmation
③ Shipment	GET	Fetch the real-time order Status from ShipEngine	order ID	Shipment Status