Name: Moiz Ansari.

Roll No: 00202478.

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Submission Title:

"Furniture Marketplace Technical Foundation - [Comforty Ecommerce]"

This document describes the user journey flow for an online furniture marketplace, focusing on key steps and their technical implementation. It is tailored for building a robust and user-friendly platform.

Flowchart Overview

Below is the complete user journey flow for an online furniture marketplace:

Home Page:

User lands on the homepage showcasing a curated selection of furniture pieces.

Product Browsing:

- User selects a furniture category or uses the search bar.
- Products are displayed with options to filter by price, style (e.g., modern, traditional, rustic), material (e.g., wood, metal, fabric), brand, or ratings.

Product Details:

- User clicks on a furniture piece to view its details.
- Page includes a detailed product description, high-resolution images from multiple angles, dimensions, price, availability, and customer reviews.

Add to Cart:

- User adds the furniture piece to the cart.
- Cart updates dynamically with quantity and price.

Checkout:

- User proceeds to the checkout page.
- Provides shipping address and selects a delivery option.

Payment:

- User enters payment details.
- Secure payment gateway processes the transaction.

Order Confirmation:

- Order details are displayed and sent via email.
- Order status is updated in the backend.

Shipment Tracking:

- User receives shipment tracking information and can track the delivery of their furniture.

API Endpoints for Furniture Website

Endpoint	Method	Description	Parameters	Response Example
/api/furniture	GET	Fetch all furniture items	None	`{ id: 1, name: "Chair" }`
/api/furniture/id	GET	Fetch a single furniture item	id (Path)	`{ id: 1, name: "Chair" }`
/api/furniture	POST	Add a new furniture item	name, price, category (Body)	`{ success: true, id: 5 }`
/api/furniture/id	PUT	Update a furniture item	id (Path), name, price (Body)	`{ success: true }`
/api/furniture/id	DELETE	Delete a furniture item	id (Path)	`{ success: true }`
/api/categories	GET	Fetch all furniture categories	None	`{ categories: ["Tables"] }`

ER Diagram for Furniture Website

Entities and Relationships:

Customer

- **Customer_ID** (PK)
- Name
- Email
- Address
- Phone

Furniture

- **Furniture ID** (PK)
- Name
- Price
- Description
- Stock Quantity

Order

- **Order ID** (PK)
- Order date
- Total Amount
- Status
- Customer ID (FK)

Order Item

- **Order Item ID** (PK)
- Quantity
- Subtotal
- Furniture ID (FK)
- Order ID (FK)

Payment

- **Payment ID** (PK)
- Amount
- Payment Date
- Status
- Customer ID (FK)

Relationships

1. **Customer - Order Relationship:** One customer can place multiple orders. (1:N)
2. **Order – Order Item Relationship:** One order can contain multiple furniture items.(1:N)
3. **Order Item - Furniture Relationship:** Each order item refers to one furniture product. (N:1)
4. **Customer - Payment Relationship:** One customer can have multiple payments. (1:N)

Design System Architecture

```
[Frontend (Next.js)]

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[Sanity CMS] ---------> [Product Data API]

        |

[Third-Party API] -----> [Shipment Tracking API]

        |

[Payment Gateway]
```
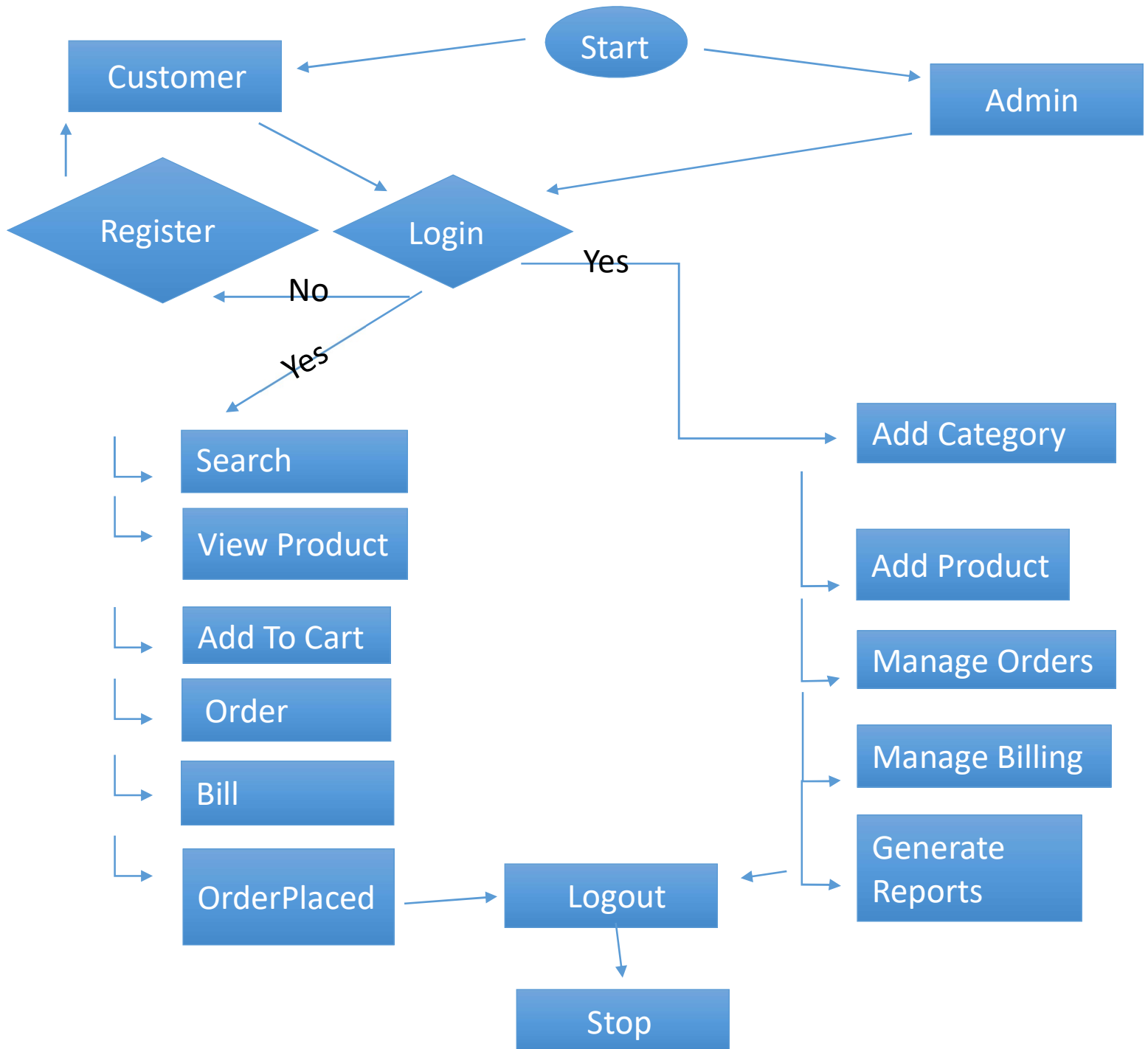
Frontend Requirements: Flow Chart by Moiz Ansari.

Workflow Diagram Visual Representation

Visits Home Page → Browses Products → Views Product Details

Add Product to Cart → Proceeds to Checkout → Completes Profile and

Order Confirmation → Tracks Shipment

Receives Delivery At Home