

# Day-2 : Furniro - Furniture E-Commerce Marketplace

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## Slide 1: Introduction

- **Welcome to Furniro - A Modern Furniture E-Commerce Marketplace**
  - **Goal: A seamless platform for browsing, ordering, and tracking furniture in real-time**
  - **Built with cutting-edge technology for scalability, security, and user experience**
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## Slide 2: Tech Stack

- **Frontend:**
    - **Next.js:** Responsive and fast user interfaces
    - **Tailwind CSS:** Utility-first styling for a sleek design
    - **Shadcn UI:** Customizable UI components for consistency
  - **Backend:**
    - **Sanity CMS:** Manages product data, orders, and customer details efficiently
  - **Third-Party APIs:**
    - **Payment Gateways:** 2Checkout, PayFast, QuickPay
    - **Shipment Tracking:** ShipEngine API for real-time updates
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## Slide 3: Key Features

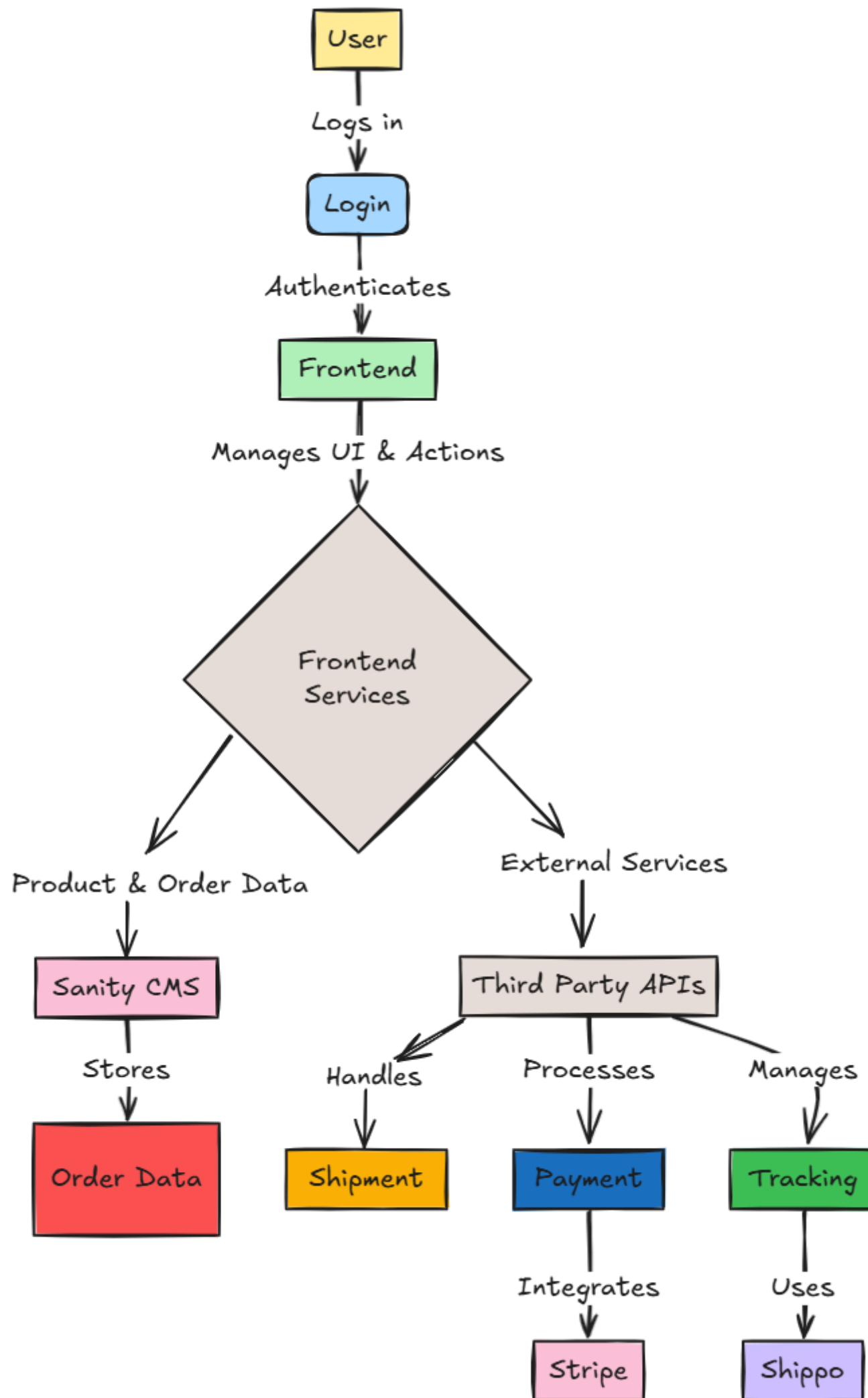
1. **Category-Based Browsing** – Filter products easily
  2. **Real-Time Shipment Tracking** – Check order status live
  3. **Secure Payment Gateways** – Multiple safe payment options
  4. **Customizable Furniture** – Choose colors, materials, sizes
  5. **Mobile-Optimized Design** – Seamless experience on all devices
  6. **Order History** – Track past orders and shipment statuses
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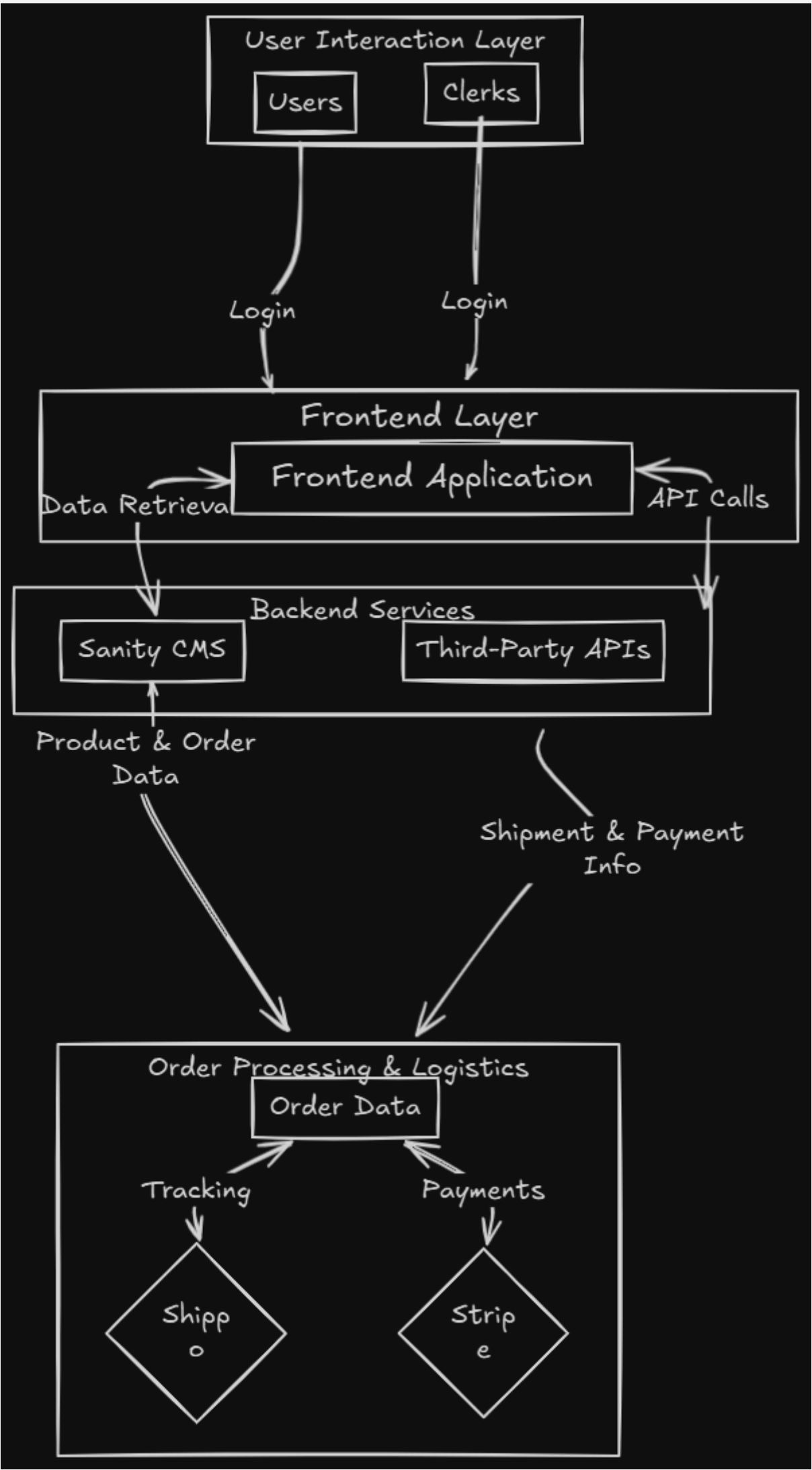
## Slide 4: System Architecture (Workflow Overview)

1. **User Registration** – Data stored in Sanity CMS with confirmation
  2. **Browsing & Ordering** – Fetch categories/products, add to cart, place order
  3. **Payment Processing** – Secure transaction via payment gateways
  4. **Shipment Tracking** – Order status fetched via ShipEngine API
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## Slide 5: Essential Pages

1. **Home Page** – Featured products, deals, categories
  2. **Product Listing** – Filter by category, view all products
  3. **Product Details** – Price, description, stock, images
  4. **Cart & Checkout** – Modify items, enter details, confirm payment
  5. **Order Confirmation** – Order summary and success message
  6. **User Dashboard** – Login, registration, order history
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**Key Features of the Marketplace:**

- 1. **Category-Based Browsing:**
  - Users can filter products by categories (e.g., Living Room, Bedroom).
- 2. **Real-Time Shipment Tracking:**
  - Users can check their order status, fetched through ShipEngine API.
- 3. **Secure Payment Gateways:**
  - Multiple payment gateways ensure secure transactions (2Checkout, PayFast, QuickPay).
- 4. **Customizable Furniture Options:**
  - Certain products allow users to choose colors, materials, and sizes.
- 5. **Mobile-Optimized Design:**

- Responsive layouts ensure a seamless experience on both desktop and mobile devices.
6. Order History:
- Users can view and track their past orders along with statuses.

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## API Specifications:

### 1. User Registration:

- Endpoint: **/register**
- Method: **POST**
- Description: Saves user data in Sanity CMS and sends a confirmation response.

Payload Example:

```
{
  "name": "Ali Khan",
  "email": "ali.khan@example.com",
  "password": "securepassword"
}
```

Response Example:

```
{
  "message": "Registration successful",
  "userId": "12345"
}
```

### 2. Fetch Categories:

- Endpoint: **/categories**
- Method: **GET**
- Description: Retrieves all product categories stored in Sanity CMS.

Response Example:

```
[
  { "id": "1", "name": "Living Room" },
  { "id": "2", "name": "Bedroom" }
]
```

### 3. Fetch Products by Category:

- Endpoint: **/products?category={categoryId}**
- Method: **GET**
- Description: Fetches all products under a specific category. If no category is specified, all products are returned.

Response Example:

```
[
  { "id": "101", "name": "Sofa", "price": 500, "stock": 10 },
  { "id": "102", "name": "Dining Table", "price": 800, "stock": 5 }
]
```

### 4. Place Order:

- Endpoint: **/orders**
- Method: **POST**
- Description: Saves the user's order details and items in Sanity CMS.

Payload Example:

```
{
  "userId": "12345",
  "orderItems": [
    { "productId": "101", "quantity": 1 },
    { "productId": "102", "quantity": 2 }
  ],
  "totalAmount": 2100
}
```

}

Response Example:

```
{
  "message": "Order placed successfully",
  "orderId": "78901"
}
```

### 5. Track Shipment:

- Endpoint: `/shipment/{orderId}`
- Method: `GET`
- Description: Retrieves shipment tracking details via the ShipEngine API.

Response Example:

```
{
  "shipmentId": "SE123",
  "status": "In Transit",
  "estimatedDelivery": "2025-01-18"
}
```

### 6. Process Payment:

Endpoint: `/payment`

Method: `POST`

Description: Processes payment securely via a payment gateway.

Payload Example:

```
{
  "orderId": "78901",
  "amount": 2100,
  "paymentMethod": "PayFast"
}
```

Response Example:

```
{
  "message": "Payment successful",
  "transactionId": "TX456789"
}
```

## Slide 6: API Integrations

- User Registration API – Handles sign-up, authentication
- Fetch Categories API – Retrieves product categories
- Fetch Products API – Displays products by category
- Order Placement API – Saves order details in Sanity CMS
- Shipment Tracking API – Tracks live order status
- Payment API – Secure transactions through multiple gateways

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## Slide 7: Conclusion & Future Enhancements

- Current Success: Robust and scalable furniture e-commerce platform
- Future Enhancements:
  - AI-powered product recommendations
  - Augmented reality (AR) for virtual furniture placement
  - Loyalty programs & personalized discounts