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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)]  |  [Sanity CMS] ---------> [Product Data API]  |  [Third-Party API] -----> [Shipment Tracking API]  |  [Payment Gateway] |

Frontend Requirements: Flow Chart by Moiz Ansari.

Search Product

View Product

Stop

Logout

Login

Generate Reports

Manage Billing

Manage Orders

Add Category

Yes

Add To Cart

OrderPlaced

Bill

Order

Register

Customer

Admin

Add Product

No

Yes

**Receives Delivery At Home**

**Workflow Diagram Visual Representation**

**Tracks Shipment**

**Order Confirmation**

**Completes Profile and Payment Details**

**Proceeds to Checkout**

**Add Product to Cart**

**Views Product Details page**

**Browses Products**

**Visits Home Page**