## **HACKATHON DAY 01:**

## LAYING THE FOUNDATION FOR OUR MARKETPLACE JOURNEY

## **Marketplace Type: General eCommerce (Furniture Store):**

## **Primary Purpose:**

Our **furniture eCommerce marketplace** is designed to provide a seamless online shopping experience for customers looking to buy furniture for homes, offices, and commercial spaces. The platform will offer a wide range of furniture items from different manufacturers and sellers, ensuring affordability, variety, and convenience.

## **Key Business Objectives:**

- 1. **Wide Product Range:** Offer diverse furniture collections, including home, office, and outdoor furniture.
- 2. **Seamless Shopping Experience:** Provide an intuitive UI/UX for easy browsing, selection, and purchase.
- 3. **Secure Payment Integration:** Support multiple payment methods, ensuring safe transactions.
- 4. **Logistics & Delivery Optimization:** Partner with reliable delivery services for timely and safe deliveries.
- 5. **Customer Reviews & Ratings:** Enable transparency through customer feedback and product ratings.

## 1. What Problem Does Our Marketplace Aim to Solve?

Traditional furniture shopping is often time-consuming, expensive, and inconvenient. Customers struggle with:

- **Limited variety**: Local stores don't always have what they need.
- **High costs**: Custom or premium furniture is often overpriced.
- Uncertainty about fit: Customers can't easily visualize furniture in their space.
- Long delivery times: Many furniture stores take weeks to deliver.

### **Our Solution:**

We are creating a **smart furniture eCommerce platform** that combines **AI recommendations, AR visualization, and express delivery** to make buying furniture easier, faster, and more personalized.

## 2. Who is Our Target Audience?

Our marketplace caters to:

- **Urban homeowners & renters** looking for stylish and functional furniture.
- Young professionals & remote workers in need of home office setups.
- Interior designers & decorators seeking custom or bulk furniture.
- Eco-conscious buyers interested in sustainable furniture options.
- Small businesses & startups looking for affordable office furniture.

## 3. What Products or Services Will We Offer?

We will offer a wide range of furniture and related services, including:

- ✓ Home Furniture (Sofas, Beds, Dining Tables, Storage)
- Office Furniture (Desks, Chairs, Conference Tables)
- Custom Furniture Orders (Customers can request tailor-made pieces)
- Augmented Reality (AR) Try-Before-You-Buy Feature
- Sustainable & Eco-Friendly Furniture

- Fast Delivery & Assembly Services
- Smart Room Planning Tool to help customers choose the right sizes

## 4. What Will Set Our Marketplace Apart?

Our platform stands out through:

- Al-Powered Personalization Smart recommendations based on style preferences
- Augmented Reality (AR) Tryout See furniture in your space before buying
- **Sustainable & Eco-Friendly Section** Verified sellers offering green products
- Fast Delivery & Assembly Express delivery in 24-48 hours
- **☆ Custom Furniture Requests** Direct marketplace for personalized designs
- Smart Size & Space Guide Helps customers choose the right furniture size

# Data Schema for Furniture eCommerce Marketplace Entities and Attributes

#### 1. Products

Represents the furniture items available for sale.

#### **Attributes:**

- id (Unique Identifier)
- name (e.g., Sofa, Office Chair, Dining Table)
- category (e.g., Living Room, Office, Outdoor)
- description
- price
- stock\_quantity (Tracks available inventory)
- material (e.g., Wood, Metal, Fabric)

- dimensions (Height, Width, Depth)
- color\_options (Available color variations)
- customizable (Boolean: True/False)
- rating (Average customer rating)
- images (URLs for product images)
- seller\_id (Link to the vendor selling the product)

#### 2. Orders

Tracks customer purchases.

#### **Attributes:**

- id (Unique Identifier)
- customer id (Link to the customer who placed the order)
- order\_date
- total price
- payment\_status (Pending, Paid, Failed)
- order\_status (Processing, Shipped, Delivered, Cancelled)
- shipment\_id (Link to shipment tracking details)
- delivery zone id (For delivery location and charges)

#### 3. Customers

Represents marketplace users.

#### **Attributes:**

- id (Unique Identifier)
- name

- email
- phone\_number
- address (Shipping address)
- role (Buyer/Seller)
- profile\_picture
- saved\_payment\_methods
- wishlist (List of saved product IDs)
- purchase\_history

#### 4. Delivery Zone

Defines the regions where delivery services are available.

#### **Attributes:**

- id (Unique Identifier)
- zone\_name
- postal\_codes (List of supported postal codes)
- delivery\_fee
- estimated\_delivery\_time

## 5. Shipment

Manages product deliveries.

#### **Attributes:**

- id (Unique Identifier)
- order\_id (Link to the order)
- shipment\_status (Pending, In Transit, Delivered, Returned)

- pickup\_date
- delivery\_date
- tracking\_number
- delivery\_person\_id (Assigned delivery personnel)

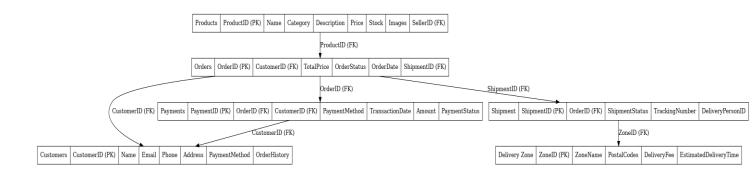
#### 6. Payments

Handles payment transactions within the marketplace.

#### **Attributes:**

- id (Unique Identifier)
- order\_id (Link to the order)
- customer\_id
- payment\_method (Credit Card, PayPal, Crypto Wallet)
- payment\_status (Pending, Completed, Failed)
- transaction\_date
- amount

## **Entity Relationship Diagram For Furniture Ecommerce MarketPlace:**



"FIRST DAY ENDS HERE THANK YOU"