

## Day 1: Laying the Foundation for Your Furniture E-Commerce Marketplace

### *Step 1: Choose Marketplace Type*

- **Choice:** General E-Commerce
- **Primary Purpose:**

The primary purpose of a general e-commerce marketplace for furniture is to provide customers with an easy-to-navigate platform to buy various types of furniture for their home and office. It focuses on offering a wide selection of furniture products, from living room sets to office desks, with a convenient online shopping experience that includes home delivery and setup.

### *Step 2: Define Business Goals*

- **What problem does my marketplace aim to solve?**

The marketplace addresses the difficulty people face in finding quality furniture that fits their style, space, and budget, especially when shopping in physical stores. It also solves the inconvenience of lengthy delivery times by providing timely delivery services and setup.

- **Who is my target audience?**

The target audience consists of homeowners, renters, office managers, and businesses who need to furnish spaces quickly and affordably. It also caters to interior designers and individuals looking to customize their furniture selections.

- **What products or services will my offer?**

The marketplace will offer a wide variety of furniture, including living room, bedroom, office furniture, and home decor accessories. Services will include home delivery, assembly, and customer support.

- **What will set my marketplace apart?**
  - **Customization Options:** Customers can personalize certain aspects of the furniture (e.g., size, fabric, color).
  - **Affordable Pricing:** Competitive pricing with occasional sales, bundles, or discounts.
  - **Timely Delivery and Assembly:** Quick and reliable delivery with the option of assembly at the customer's home.
  - **AR Tools:** Augmented reality tools that let customers visualize how furniture will look in their space.

### *Step 3: Data Schema*

#### **1. Identify the entities in my marketplace:**

- Products:** Furniture items available for purchase (e.g., sofas, tables, chairs).
- Orders:** Transactions made by customers.
- Customers:** Users who make purchases.
- Payments:** Payment details for each order.
- Inventory:** The current stock of each product.
- Shipping:** Delivery details related to orders (addresses, shipping status).
- Categories:** Furniture categories (living room, office, bedroom, etc.).
- Reviews:** Customer reviews and ratings for products.

#### **2. Relationships:**

- Products ↔ Orders:** A product can appear in multiple orders, and an order can contain multiple products (Many-to-Many).
- Orders ↔ Customers:** A customer can place multiple orders, but each order is linked to one customer (One-to-Many).
- Orders ↔ Payments:** Each order has one payment associated (One-to-One).

- d. **Products ↔ Inventory:** Each product is linked to a stock level (One-to-One).
- e. **Orders ↔ Shipping:** Each order has an associated shipping address and status (One-to-One).
- f. **Products ↔ Reviews:** Products can have many reviews from customers (One-to-Many).

### 3. Key Fields for Each Entity:

#### a. **Products:**

- i. ID
- ii. Name
- iii. Price
- iv. Stock
- v. Category
- vi. Dimensions/Materials

#### b. **Orders:**

- i. Order ID
- ii. Customer ID
- iii. Order Details (Product IDs, Quantity)
- iv. Status (Pending, Shipped, Delivered)
- v. Date

#### c. **Customers:**

- i. Customer ID
- ii. Name
- iii. Contact Info
- iv. Address

#### d. **Payments:**

- i. Payment ID
- ii. Order ID
- iii. Payment Method
- iv. Amount
- v. Status (Completed, Pending)

#### e. **Shipping:**

- i. Shipping ID
  - ii. Order ID
  - iii. Delivery Address
  - iv. Shipping Status
- f. **Categories:**
  - i. Category ID
  - ii. Name (Living Room, Office, etc.)
- g. **Reviews:**
  - i. Review ID
  - ii. Product ID
  - iii. Customer ID
  - iv. Rating
  - v. Review Text

#### *Data Schema Diagram :*

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+-----+          +-----+          +-----+
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|  Products      |<----->|  Orders  |<----->|
Customers |
+-----+          +-----+          +-----+
--+
| ID              |          | Order ID  |          | Customer
ID|
| Name            |          | Customer ID|          | Name
|
| Price           |          | Product ID |          | Contact
Info|
| Stock           |          | Quantity   |          | Address
|

```

