**Day 1: Laying the Foundation for My Marketplace Journey**

## **Step 1: Choose Your Marketplace Type**

### **Chosen Marketplace Type: General E-Commerce**

### **Primary Purpose:**

The goal of this marketplace is to sell shoes online, offering a variety of footwear, including sports shoes, casual sneakers, formal shoes, and limited-edition collections. Customers can browse, compare, and purchase shoes from different brands, ensuring a seamless shopping experience.

## **Step 2: Define Your Business Goals**

### **1. What Problem Does My Marketplace Aim to Solve?**

* Many customers find it difficult to access high-quality branded shoes at competitive prices.
* Limited availability of exclusive and limited-edition footwear in local stores.
* Inconvenience of physically visiting multiple stores to find the right shoe.

### **2. Who Is My Target Audience?**

* **Shoe Enthusiasts:** Individuals who actively follow sneaker trends and seek exclusive releases.
* **Athletes & Fitness Enthusiasts:** People looking for high-performance sports footwear.
* **Casual Buyers:** Consumers searching for comfortable and stylish shoes for everyday wear.
* **Professionals:** Individuals needing formal or business shoes for work.

### **3. What Products or Services Will I Offer?**

* **Footwear Categories:**
  + Sports Shoes
  + Running Shoes
  + Sneakers
  + Formal Shoes
  + Sandals & Loafers
  + Limited-Edition Releases
* **Additional Services:**
  + Size Guide & Virtual Try-On
  + Personalized Recommendations
  + Limited-Time Discounts
  + Fast Shipping & Returns

### **4. What Will Set My Marketplace Apart?**

* **Wide Range of Exclusive Footwear** – Featuring limited-edition and premium collections.
* **Fast & Free Shipping** – Ensuring timely delivery with a smooth return process.
* **Affordable Pricing & Discounts** – Offering competitive prices with special discounts.
* **Custom Shoe Recommendations** – AI-powered suggestions based on user preferences.

## **Step 3: Create a Data Schema**

### **1. Identify the Entities in My Marketplace**

#### **Entities and Their Fields:**

**1. Product**

* Product ID (Unique identifier)
* Name (Shoe model and brand)
* Price (Cost per unit)
* Stock (Available quantity)
* Category (Sports, Sneakers, Formal, etc.)
* Size Options (Available sizes)
* Color Options (Different color variations)
* Description (Product details)
* Images (Product photos)

**2. Order**

* Order ID (Unique identifier for each purchase)
* Customer ID (Linked customer account)
* Product ID(s) (Shoes purchased)
* Quantity (Number of units per product)
* Total Price (Final cost)
* Order Status (Pending, Shipped, Delivered)
* Timestamp (Order placement date)

**3. Customer**

* Customer ID (Unique identifier)
* Name (Full name of the customer)
* Email (For order confirmation and communication)
* Contact Info (Phone number)
* Address (Delivery location)
* Order History (Past purchases)

**4. Delivery Zone**

* Zone ID (Unique identifier)
* Zone Name (City/region covered)
* Assigned Couriers (Logistics personnel handling deliveries)
* Coverage Area (Zip codes and locations served)

**5. Shipment**

* Shipment ID (Unique tracking ID)
* Order ID (Linked order for tracking)
* Status (In Transit, Delivered, Returned)
* Estimated Delivery Date (Expected arrival time)
* Courier Service (Delivery provider name)

**6. Payment**

* Payment ID (Unique identifier)
* Order ID (Linked order)
* Payment Method (Credit Card, PayPal, COD, etc.)
* Payment Status (Pending, Completed, Failed)
* Transaction Date (Date of payment)

### **2. Draw Relationships Between Entities**

#### **Schema Relationships:**

* **Products** are linked to **Orders**.
* **Orders** are associated with **Customers**.
* **Shipments** track **Orders** and are connected to **Delivery Zones**.
* **Payments** are tied to **Orders** to record transactions.

**Example Diagram Representation:**

[Product] ------> [Order] ------> [Customer]

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[Stock] [Payment] ------> [Shipment] ------> [Delivery Zone]

