

Requirements

A multi-vendor e-commerce platform with a focus on personalized user experiences should be developed.

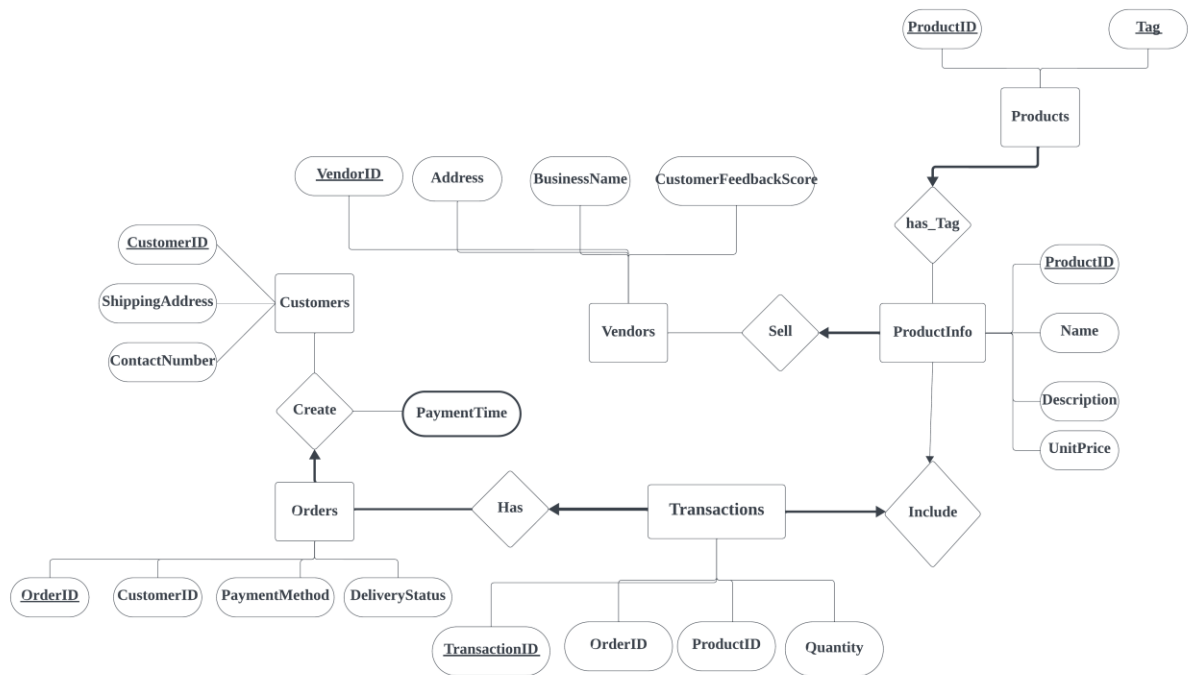
Database Requirement

- Vendor Portfolios: Each vendor on the platform will maintain a unique profile that includes a vendor ID, business name, customer feedback score, geographical presence, and an inventory of products. Products are identified by a unique product ID, have a name, listed price, and up to three tags that encapsulate the product's nature, which are set by the vendor.
- Customer Profiles: A comprehensive database must be maintained for customers, which includes a customer ID, contact number, shipping details, and order history.
- Transaction Records: Every purchase transaction is linked to a customer profile and must detail the acquisition of at least one product from a vendor's catalog. Transactions can span multiple vendors within the same order.

Platform Requirement

- Vendor Administration: The platform should enable functionality to 1) display a listing of all vendors, 2) onboard new vendors onto the marketplace.
- Product Catalog Management: Users should have the ability to 1) browse all products offered by a specific vendor, 2) introduce new products to a vendor's catalog.
- Product Discovery: The system must facilitate a search feature that allows users to discover products using tags. The search should return products where the tag matches any part of the product's name or its associated tags.
- Product Purchase: You should support product purchase. Record in database which customer purchases which product.
- Order Modification: Users must have the option to modify their orders, including the removal of specific products or the cancellation of the entire order before it enters the shipping process.

Entity Relationship Diagram



Schemas (logical design where relations are in third normal form)

