E-Commerce Database Design

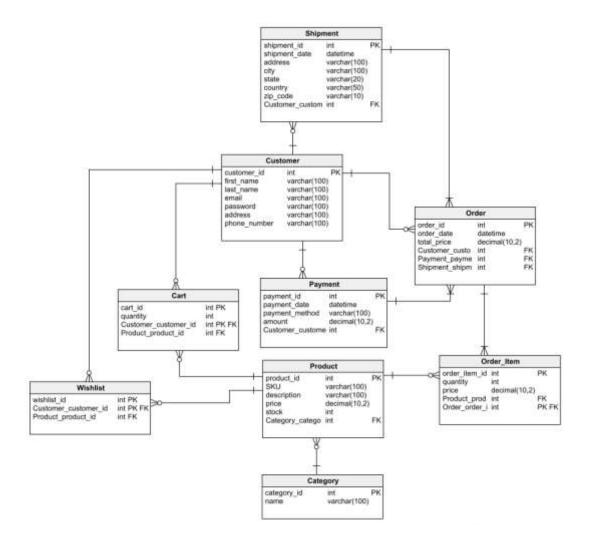
The database must handle **products**, **users**, **orders**, **payments**, **shipping**, **and reviews** efficiently.

1- Entity-Relationship (ERD) Mapping

Below is the **ER model** showing entities and their relationships:

Entities & Relationships

- 1. **User** (Customers & Admins)
 - o A user can place multiple orders.
 - A user can write multiple reviews.
- 2. Product
 - A product belongs to one category.
 - A product can have multiple reviews.
 - o A product can be in multiple orders.
- 3. Category
 - o A category can have multiple products.
- 4. Order
 - o An order belongs to a user.
 - o An order has multiple order items.
- 5. **OrderItem** (Line Items)
 - o An order contains multiple products.
- 6. Payment
 - o An order can have one payment.
- 7. Shipping
 - o An order can have one shipping record.
- 8. Review
 - o A user writes reviews on a product.



ERD Diagram Cust id Cust **Administrator** Nam Customer Comp Name Password Admin Id Cust Login Pass Admin Admin word Generates Login name Adds Bill Bill Admin Date Card **Billing** Type has Card Delivery date Category for contains Quantity Purchase **PRODUCTS** Ctg Price Name Ctg Purchase record ha **Sub-Category** Product Status Discount from Image Cancellation Product Name Subctg Subctg Name Stock Cancellation Status Cancellation Date contain Product Refund Amount **Feedback** Feedback Product id id Customer id Rating