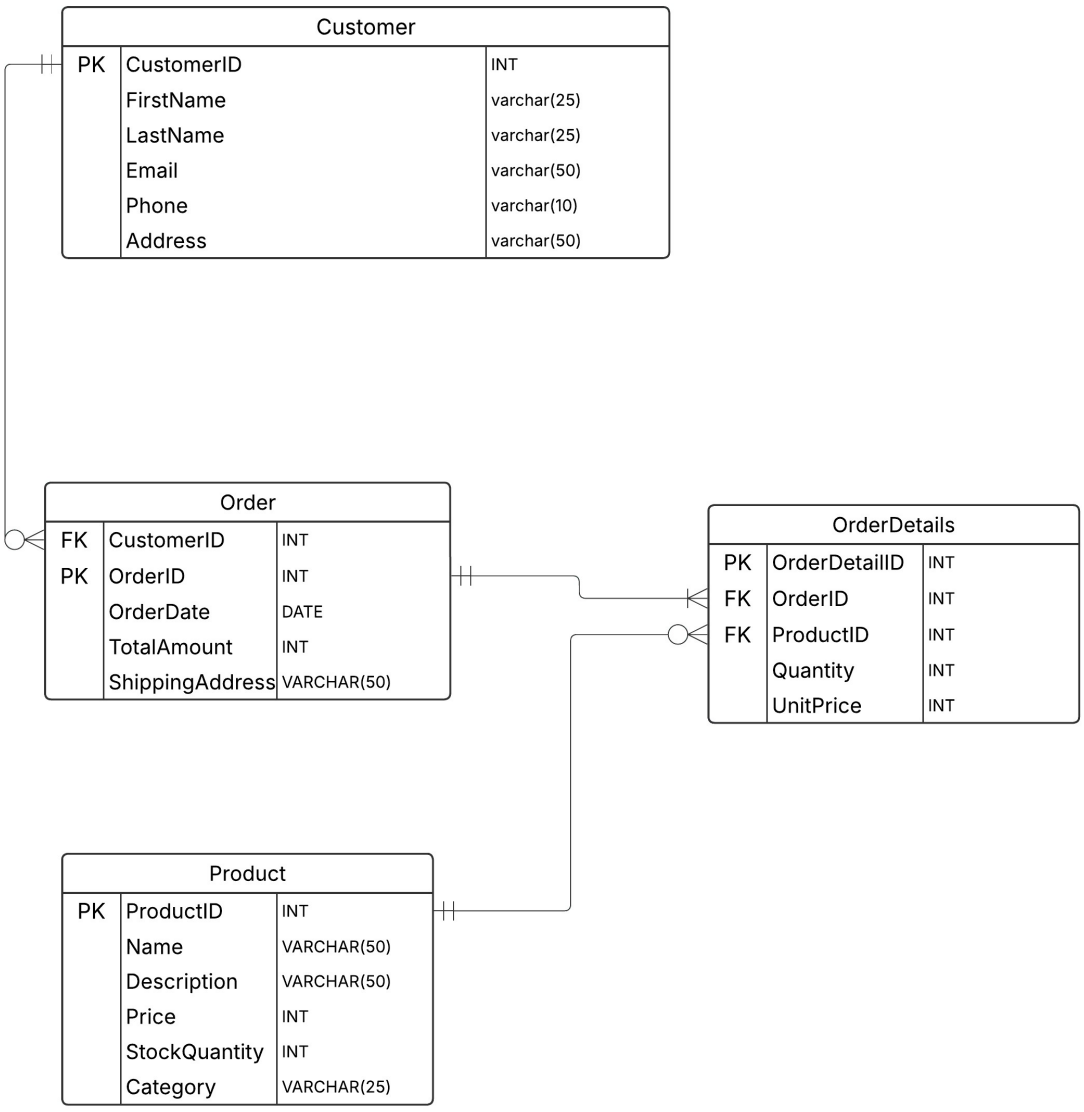


database schema is in 3rd Normal Form (3NF).1st Normal Form (1NF)

1. tables don't have repeating groups (i.e., each column contains only atomic values, and there are no sets or arrays).

Unique identifiers: Each table has a primary key (e.g., CustomerID for Customer, ProductID for Product, OrderID for Orders, OrderDetailID for OrderDetails).

Thus, the database is in 1NF.

2nd Normal Form (2NF):

Eliminate partial dependency: For a table to be in 2NF, it must already be in 1NF, and every non-key column must depend on the entire primary key, not just part of it.

In OrderDetails table, the composite key is (OrderID, ProductID):

Quantity and UnitPrice depend on both OrderID and ProductID, which is correct, meaning there are no partial dependencies.

Thus, the database is in 2NF.

3rd Normal Form (3NF):

Eliminate transitive dependency:  table is in 3NF if it is in 2NF, and all non-key attributes are not transitively dependent on the primary key (i.e., no column depends on another non-key column).

In  schema:

In the Customer table, the attributes FirstName, LastName, Email, Phone, and Address are directly dependent on the primary key CustomerID and are not dependent on any other non-key attribute.

In the Product table, Name, Description, Price, StockQuantity, and Category are directly dependent on ProductID and not on any other attribute.

In the Order table, OrderDate, TotalAmount, and ShippingAddress are directly dependent on OrderID and not on any other attribute.

In the OrderDetails table, Quantity and UnitPrice are directly dependent on the combination of OrderID and ProductID.

There are no transitive dependencies in  schema.

Thus, the database is in 3NF.