

RELATIONAL SCHEMA

Customer(CustomerID, Name, Email, Password, ShippingAddress)

Product(ProductID, Name, Price, StockQuantity, Description, Category)

Cart(CartID, CustomerID (FK))

CartItem(CartItemID, CartID (FK), ProductID (FK), Quantity)

Order(OrderID, CustomerID (FK), OrderDate, Status, ShippingAddress, BillingAddress, OrderTotal, PaymentMethod)

OrderItem(OrderItemID, OrderID (FK), ProductID (FK), Quantity, PriceAtOrderTime, Subtotal)

Employee(EmployeeID, Name, Email, Password, AccessLevel)

Shipment(ShipmentID, OrderID (FK), DateShipped, TrackingNum, Notes)

Message(MessageID, EmployeeID(FK), CustomerID(FK), OrderID(FK), MessageText, SentAt, SentBy)

FOREIGN KEY RELATIONSHIPS

Cart(CustomerID) → Customer(CustomerID)

CartItem(CartID) → Cart(CartID)

CartItem(ProductID) → Product(ProductID)

Order(CustomerID) → Customer(CustomerID)

OrderItem(OrderID) → Order(OrderID)

OrderItem(ProductID) → Product(ProductID)

Shipment(OrderID) → Order(OrderID)

Message(EmployeeID) → Employee(EmployeeID)

Message(OrderID) → Order(OrderID)

Message(CustomerID) → Customer(CustomerID)

COMPOSITE KEYS

CartItem: (CartID, ProductID)

OrderItem: (OrderID, ProductID)