Product:

Attributes: ‘ProductID’, ‘Name’, ‘Description’, ‘Price’, ‘StockLevel’, ‘CategoryID’, ‘SupplierID’

Relationships:

Belongs to Category

Supplied by Supplier

Associated with Order through a many-to-many relationship

Category:

Attributes: ‘CategoryID’, ‘CategoryName’, ‘ParentCategoryID’

Relationships:

Parent-Child relationship with itself for subcategories

Has many Products

Supplier:

Attributes: ‘SupplierID’, ‘Name’, ‘ContactDetails’

Relationships:

Supplies many Products

Customer:

Attributes: ‘CustomerID’, ‘Name’, ‘Email’, ‘PhoneNumber’, ‘Address’

Relationships:

Places many Orders

Order:

Attributes: ‘OrderID’, ‘CustomerID’, ‘OrderDate’, ‘TotalAmount’

Relationships:

Belongs to Customer

Contains many Products through an intermediary OrderDetail entity

OrderDetail (Intermediary for many-to-many relationship between Order and Product):

Attributes: ‘OrderDetailID’, ‘OrderID’, ‘ProductID’, ‘Quantity, Price’

Relationships:

Belongs to Order

References a single Product

Inventory:

Attributes: ‘InventoryID’, ‘ProductID’, ‘StockLevel’, ‘ReplenishmentDate’

Relationships:

Manages Product stock levels

Promotion:

Attributes: ‘PromotionID’, ‘ProductID’, ‘DiscountPercentage’, ‘StartDate’, ‘EndDate’

Relationships:

Associated with Product

Return:

Attributes: ‘ReturnID’, ‘OrderID’, ‘ProductID’, ‘ReturnReason’, ‘RefundAmount’

Relationships:

Belongs to Order

References a single Product