

Project topic: Shop: magazine, products, deliveries, suppliers and payments.

Detailed project description:

Customer: Building shop who sells high-volume building materials i.e. bricks, breeze-blocks

User: Employee of building shop who would finish the order (successfully or unsuccessfully)

Purpose:

- Reduce the amount of unsold inventory in magazine (they require a lot of storage space), in order to allow storing more demanded products which can add up to revenue
- Have demanded products always in stock
- Increase sales revenue
- Increase rotation of products

Usage scenarios:

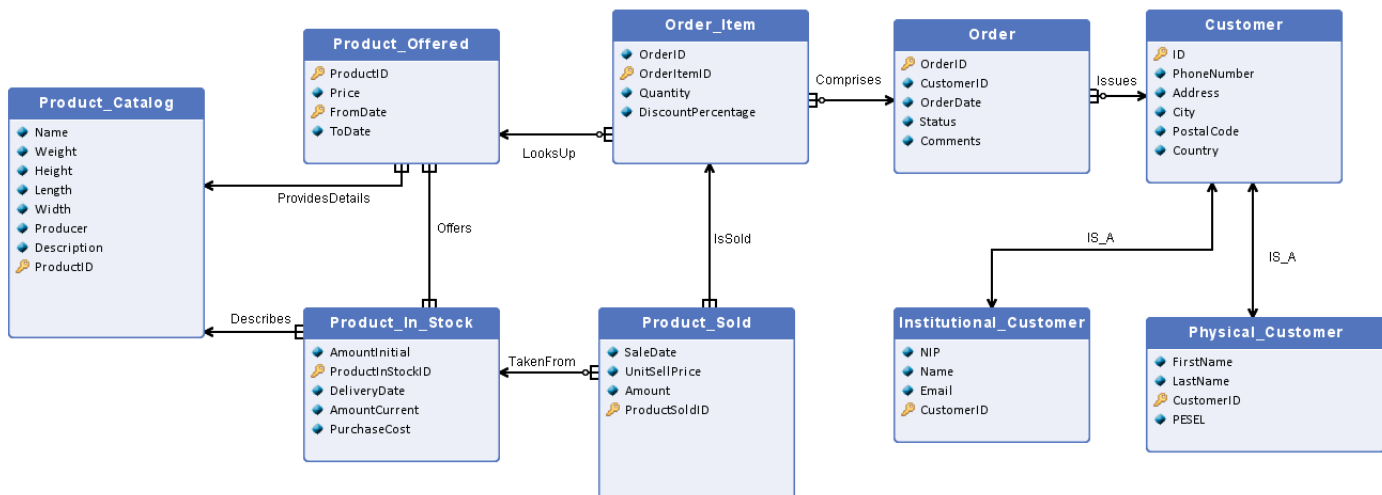
- Check whether a particular product is available for sale
- Track the most profitable products

Assumptions and limitations: Database is compatible with only one stock (there is no possibility to track inventory of two or more magazines)

Inquiries to the database:

- Show orders of particular customer (based on Customer_ID)
- Check whether given Product_ID is in stock
- Check what items have been ordered in particular order

Diagram ERD:



Relational database schema

Institutional_Customer(NIP, Name, Email, CustomerID REF Customer)

Physical_Customer(FirstName, LastName, CustomerID REF Customer, PESEL)

Customer(ID, PhoneNumber, Address, City, PostalCode, Country)

Order(OrderID, CustomerID REF Customer, OrderDate, Status, Comments)

Order_Item(OrderID REF Order, OrderItemID, Quantity, DiscountPercentage,
(ProductID,FromDate) REF Product_Offered)

Product_Sold(SaleDate, UnitSellPrice, Amount, ProductSoldID, OrderItemID REF
Order_Item, ProductInStockID REF Product_In_Stock)

Product_In_Stock(AmountInitial, ProductInStockID, DeliveryDate, AmountCurrent,
PurchaseCost, ProductID REF Product_Catalog)

Offers(ProductInStockID REF Product_In_Stock, (ProductID,FromDate) REF
Product_Offered)

Product_Offered(ProductID REF Product_Catalog, Price, FromDate, ToDate)

Product_Catalog(Name, Weight, Height, Length, Width, Producer, Description,
ProductID)