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IST659

Project Deliverable1 (Four Seasons Internationals LLC)

Data Problem:

Four Seasons International (FSI) Texas based quilt company specializes in handmade quilts, the company owns manufacturing and selling these quilts to businesses around the country.

FSI participates in Major Trade shows nationwide to advertise and expand their growth displaying new and top selling quilts during these shows.

The Customers are categorized based on their purchase volume agreed with FSI.

Over the years FSI grown rapidly and management decided to maintain Customer information, Sales & Product.

FSI primarily want to maintain the following in a database.

Customer information (Name, Address, Phone, Email, YTD sales, SalesTarget). Customers should be identified by unique value.

Category (Name, Sales Target, Duration,). Category should be identified by unique category code, and determined by sales volume and duration as customer with FSI.

Product – Product Name, Dimension, Unit Price, Qty on Hand, (Product should be identified by unique product code.

Sales - Invoice Number, Customer Name, Date, Item, Quantity ordered, Unit Price, Sale amount.

Gifts – for Qualified customers, based on their category defined above.

FSI expects the database to help address following questions –

- Sales by Customer's category – Monthly, Quarterly & Yearly.
- Top Selling Product by customer to use in regional trade shows
- Annual Gift distributions to top 100 customers based on generated sales.
- Slow moving products – to decide on design improvements OR discontinue product.

Conceptual Model

Based on the above requirement, here is the conceptual model representation for upcoming Logical design and building actual database.
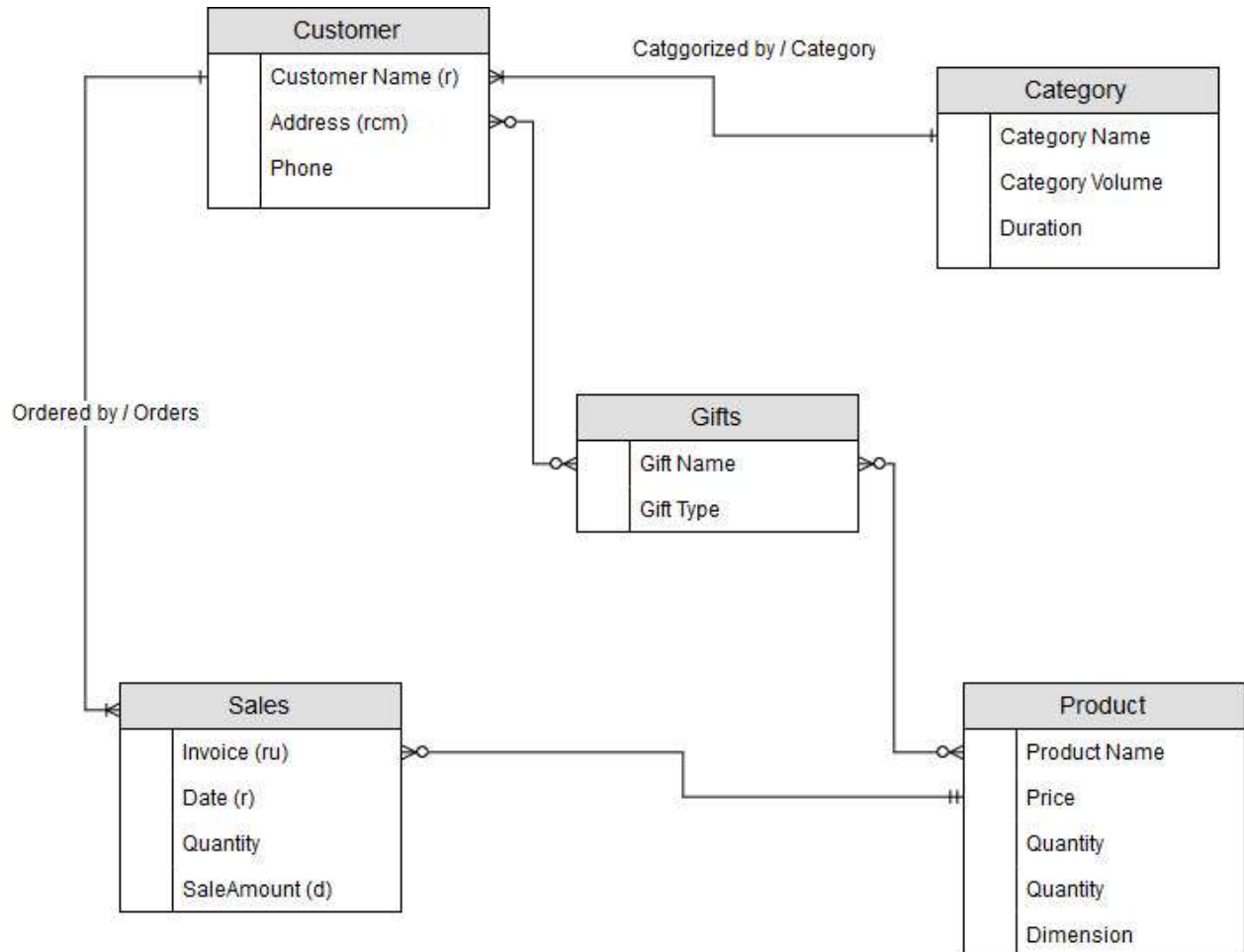
Normalized logical model:

Below is the normalized model of the database which is ready for creation.

Customer
PK	**customerID Int Identity**
	customername char(50)
FK1	categoryID int
FK2	addressID int
	customerphone varchar(15)
	customeremailID varchar(50)

customergifts
PK	**customergiftID**
FK1	customerID
FK2	giftID

gifts
PK	**giftID int**
FK1	productID
FK2	customerID
	giftquantity int (r)

giftproduct
PK	**giftproductID**
FK1	giftID
FK2	productID

address
PK	**addressID**
	address1 varchar(80)
	address2 varchar(80)
	city varchar(30) (r)
	state varchar(30) (r)
	pincode varchar(30) (

Category
PK	**category_ID int Identity**
	categoryname
	caetgorysalestarget money

product
PK	**productID int identity**
	productname varchar(40) (r)
	quantityonhand int (r)
	unitprice money r)
	unitofmeasure char(10)

orderheader
PK	**orderID int identity**
FK1	customerID int (r)
	orderdate datetime (r)
FK2	categoryID int (r)

orderdetail
PK	**orderID + productID**
FK1	salesordernum int (r)
FK2	productID int (r)
	quantity int (r)