CET 321 WHOLESALER PROJECT

Veli Kıloğlu
2015100195

Contents

System Request……3
Business Rules……4
5 Main Operations……5
Class Diagram……6
Logical Diagram……7

System Requests

System request: Wholesaler database system

Business need: The wholesaler needs to record its stocks, orders, buying and selling prices on computer. For now, all lists record on paper with hand write. This way gets waste of time and storage problems.

Business requirements:

- **Stock module:** wholesaler may keep product's information, amount and prices.
- **Suppliers module:** wholesaler may keep product suppliers' information
- **Order module:** wholesaler may keep the details of costumers' previous order
- **Bill module:** wholesaler may keep the details of orders
- **Vehicle module:** wholesaler may access the details of company cars
- **Sales representative module:** wholesaler may store its employees' contacts for an emergency
- **Salary module:** wholesaler may keep the detail of payment for its workers
- **Customer module:** wholesaler may keep the detail of customers
- **Customer demography module:** wholesaler may make a discount in popular category
- **Give back module:** customers may give back some products
- **Categories module:** wholesaler may separate the product according to categories
- **Order details module:** wholesaler may observe the detail of an order

Business value:

- Easier stock checking for wholesaler
- Ease of get back at the right price for customers
- Easier bill tracking for wholesaler
- Finding easier the location of products in depot

Business Rules

- Each customer has one sales representative
- Each representative has one or many customers
- One order can be created by only one sales representative
- One sales representative can create one or many order
- One order has only one customer
- One customer has one or many order
- One order has only one bill
- One customer has one or many bill
- One bill has only one customer
- One order has only one vehicle
- One vehicle has one or many order
- One product has one or many suppliers
- Each supplier sells one or many products
- One customer has only one customer demography
- One sales representative can create one or many give back
- One order has only one order detail
- One order detail has only one order
- One category has one or many products
- Each product has only one category
- Each order detail has one or many products
- Each product takes place one ore many order details
- Each salary can include only one sales representative
- One sales representative has one or many salary record
- One stock has one or many give back
- Each give back has one or many order

5 Main Operations

1. /* CategoryID ile kategorideki ürünlerin ismini getiren sorgu */
```
select ProductName from tblStock
where CategoryID = 2 ;
```

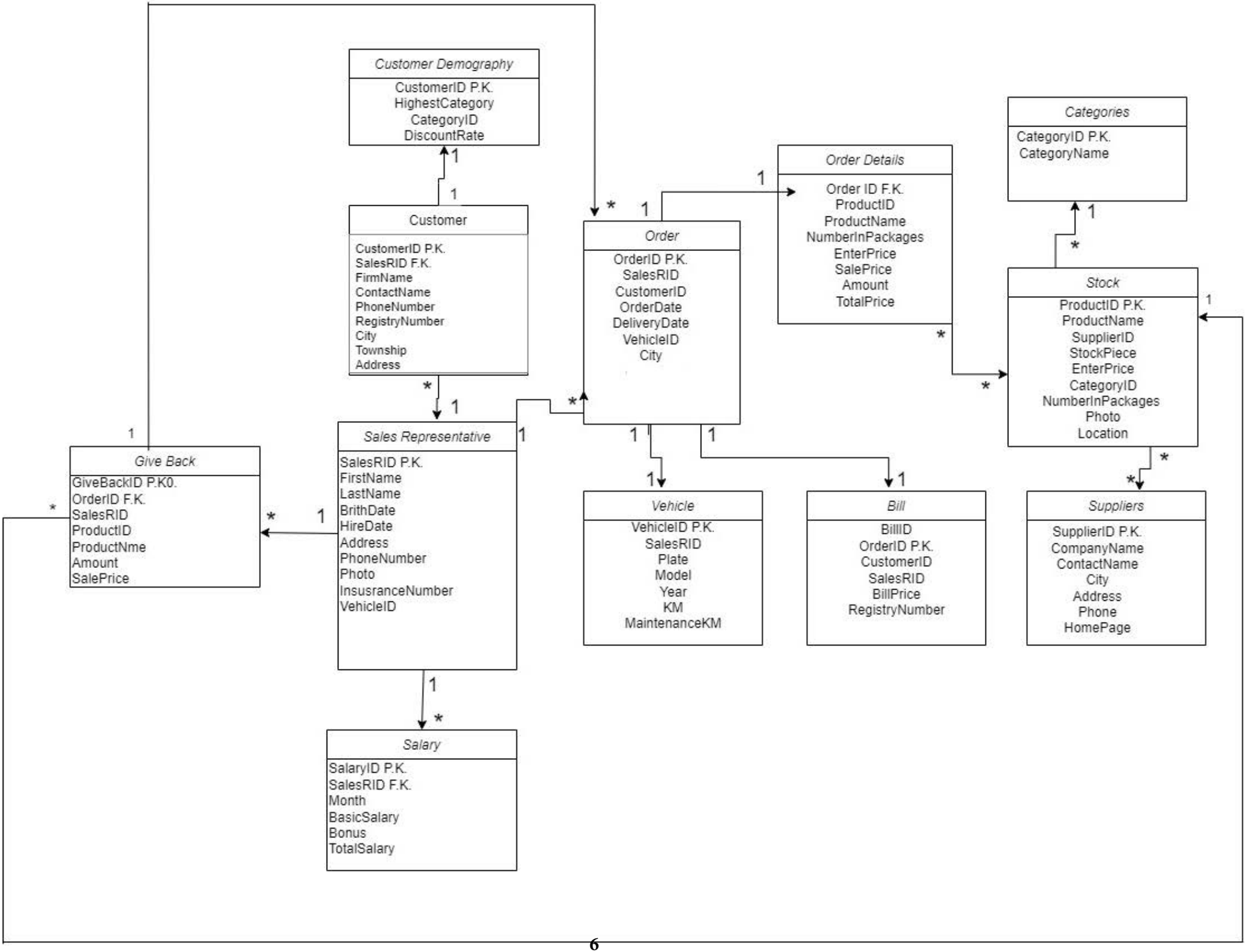
2. /* Ürün adı ile alış fiyatını sağlayan sorgu */
```
select EnterPrice from tblStock
where ProductName = 'İpek Şampuan 600ml' ;
```

3. /* Bakımına 4000 kilometreden az kalan araçların plakasını veren sorgu */
```
select Plate from tblVehicle
where MKM - KM <= 4000;
```

4. /* 2 numaralı aracı kullanan satış temsilcisinin adı ve numarasını getiren sorgu */
```
SELECT tblSalesR.Phone, tblSalesR.FirstName, tblVehicle.VehicleID
From tblSalesR
inner join tblVehicle on tblSalesR.SalesRID = tblVehicle.SalesRID
where tblVehicle.VehicleID = 2;
```

5. /*Stok adedi 200'ün altına inen ürünlerin satıcılarının telefon numrası ve temsilci isimlerini getiren sorgu */
```
select tblSuppliers.Phone, tblSuppliers.ContactName , tblStock.ProductID
from tblSuppliers
inner join tblStock on tblSuppliers.SupplierID = tblStock.SupplierID
where tblStock.StockPiece <= 200;
```

6. /* ProductID ile herhangi bir ürünün stok adedini sorgulamamızı sağlayan sorgu */
```
select StockPiece from tblStock
where ProductID = 1;
```


Customer Demography
CustomerID P.K.
HighestCategory
CategoryID
DiscountRate
Customer
CustomerID P.K.
SalesRID F.K.
FirmName
ContactName
PhoneNumber
RegistryNumber
City
Township
Address
Order
OrderID P.K.
SalesRID
CustomerID
OrderDate
DeliveryDate
VehicleID
City
Order Details
Order ID F.K.
ProductID
ProductName
NumberInPackages
EnterPrice
SalePrice
Amount
TotalPrice
Categories
CategoryID P.K.
CategoryName
Stock
ProductID P.K.
ProductName
SupplierID
StockPiece
EnterPrice
CategoryID
NumberInPackages
Photo
Location
Give Back
GiveBackID P.K0.
OrderID F.K.
SalesRID
ProductID
ProductNme
Amount
SalePrice
Sales Representative
SalesRID P.K.
FirstName
LastName
BrithDate
HireDate
Address
PhoneNumber
Photo
InsusranceNumber
VehicleID
Vehicle
VehicleID P.K.
SalesRID
Plate
Model
Year
KM
MaintenanceKM
Bill
BillID
OrderID P.K.
CustomerID
SalesRID
BillPrice
RegistryNumber
Suppliers
SupplierID P.K.
CompanyName
ContactName
City
Address
Phone
HomePage
Salary
SalaryID P.K.
SalesRID F.K.
Month
BasicSalary
Bonus
TotalSalary

Salary

SalaryID	SalesRID	Month	BasicSalary	Bonus	TotalSalary
1	1	January 2021	2850	1150	4000
2	1	March 2021	2850	1650	4500

Vehicle

VehicleID	SalesRID	Plate	Model	Year	KM	MaintenanceKM
1	1	34EY6059	CADDY	2015	120958	125000
2	2	34EN1177	STAREX	2008	207500	210000

Bill

BillID	OrderID	CustomerID	SalesRID	BillPrice	RegistryNumber
1	1	1	1	2785	112255
2	2	2	2	1198	334477

Give Back

GiveBackID	OrderID	SalesRID	ProductID	ProductName	Amount	SalePrice
1	1	1	1	İpek şampuan 600ml	2	10
2	1	1	2	Nescafe 3in1 48'li	1	51,75

Order

OrderID	SalesRID	CustomerID	OrderDate	DeliveryDate	VehicleID	City
1	1	1	05.01.2022	08.01.2022	1	İstanbul
2	2	2	08.01.2022	12.01.2022	2	bursa

Sales Representatives

SalesRID	FirstName	LastName	BirthDate	HireDate	Address	PhoneNumber	Photo	Insurance Number	VehicleID
1	Ahmet	Kuşçu	1997-11-02	2019-01-01	Küçükçekmece/ist	05321234567		12345	1
2	Mehmet	Kara	1987-12-07	2017-12-05	Nilüfer/bursa	05432154789		12346	2

Order Details

OrderID	ProductID	ProductName	NumberInPackages	EnterPrice	SalePrice	Amount	TotalPrice
1	1	İpek şampuan 600ml	1	8.75	10.0	12	120
1	2	Nescafe 3in1 48'li	48	50.75	51.75	2	103.5

Category

CategoryID	CategoryName
1	Şampuan
2	Kahve

stock

ProductID	ProductName	SupplierID	StockPiece	EnterPrice	CategoryID	NumberInPackages	Photo	Location
1	İpek şampuan 600ml	1	120	8.75	1	1		A2
2	Nescafe 3in1 48li	2	480	50.75	2	48		C8

Customer

CustomerID	FirmName	ContactName	PhoneNumber	RegistryNumber	City	Township	salesRID	Address
1	Güngör gıda	taylan	0532 1112299	112255	İstanbul	Çatalca	1	istiranca mahallesi ali sokak 18/8
2	Alp gıda	Lokman	05421119978	334477	bursa	nilüfer	2	Osman cad. 11/A

Suppliers

SupplierID	CompanyName	HomaPage	ContactName	City	Address	Phone
1	Palmolive	www.palmolive.com	Ahmet	Düzce	Düzce OSB 77	444 1 777
2	Nescafe	www.nescafe.com	Yeliz	Ankara	Ankara OSB 12	444 9 874

Customer demography

CustomerID	HighestCategory	CategoryID	DiscountRate
1	Şampuan	1	%5
2	Kahve	2	%4