TUGAS 1

SISTEM MANAJEMEN BASIS DATA
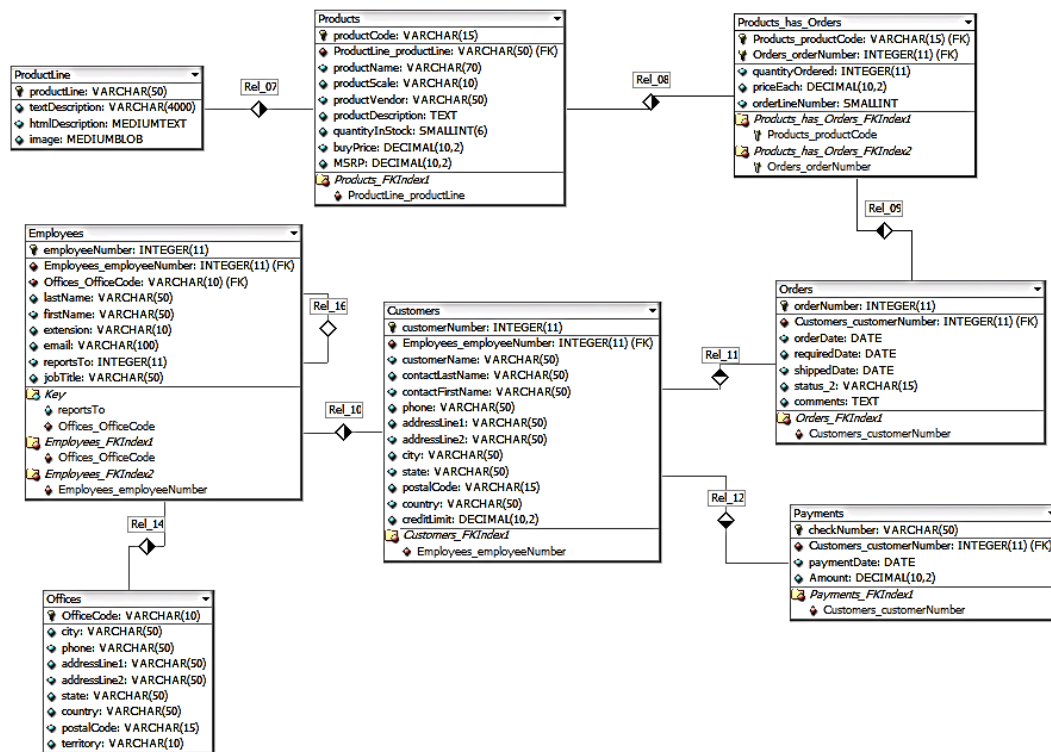
Rentangan database Retail

OLEH:

Ika mei harti

L200150067

ProductLine
- productLine: VARCHAR(50)
- textDescription: VARCHAR(4000)
- htmlDescription: MEDIUMTEXT
- image: MEDIUMBLOB

Rel_07

Products
- productCode: VARCHAR(15)
- ProductLine_productLine: VARCHAR(50) (FK)
- productName: VARCHAR(70)
- productScale: VARCHAR(10)
- productVendor: VARCHAR(50)
- productDescription: TEXT
- quantityInStock: SMALLINT(6)
- buyPrice: DECIMAL(10,2)
- MSRP: DECIMAL(10,2)
- Products_FKIndex1
  - ProductLine_productLine

Rel_08

Products_has_Orders
- Products_productCode: VARCHAR(15) (FK)
- Orders_orderNumber: INTEGER(11) (FK)
- quantityOrdered: INTEGER(11)
- priceEach: DECIMAL(10,2)
- orderLineNumber: SMALLINT
- Products_has_Orders_FKIndex1
  - Products_productCode
- Products_has_Orders_FKIndex2
  - Orders_orderNumber

Rel_05

Employees
- employeeNumber: INTEGER(11)
- Employees_employeeNumber: INTEGER(11) (FK)
- Offices_OfficeCode: VARCHAR(10) (FK)
- lastName: VARCHAR(50)
- firstName: VARCHAR(50)
- extension: VARCHAR(10)
- email: VARCHAR(100)
- reportsTo: INTEGER(11)
- jobTitle: VARCHAR(50)
- Key
  - reportsTo
  - Offices_OfficeCode
- Employees_FKIndex1
  - Offices_OfficeCode
- Employees_FKIndex2
  - Employees_employeeNumber

Rel_16

Customers
- customerNumber: INTEGER(11)
- Employees_employeeNumber: INTEGER(11) (FK)
- customerName: VARCHAR(50)
- contactLastName: VARCHAR(50)
- contactFirstName: VARCHAR(50)
- phone: VARCHAR(50)
- addressLine1: VARCHAR(50)
- addressLine2: VARCHAR(50)
- city: VARCHAR(50)
- state: VARCHAR(50)
- postalCode: VARCHAR(15)
- country: VARCHAR(50)
- creditLimit: DECIMAL(10,2)
- Customers_FKIndex1
  - Employees_employeeNumber

Rel_11

Orders
- orderNumber: INTEGER(11)
- Customers_customerNumber: INTEGER(11) (FK)
- orderDate: DATE
- requiredDate: DATE
- shippedDate: DATE
- status_2: VARCHAR(15)
- comments: TEXT
- Orders_FKIndex1
  - Customers_customerNumber

Rel_10

Rel_12

Payments
- checkNumber: VARCHAR(50)
- Customers_customerNumber: INTEGER(11) (FK)
- paymentDate: DATE
- Amount: DECIMAL(10,2)
- Payments_FKIndex1
  - Customers_customerNumber

Rel_14

Offices
- OfficeCode: VARCHAR(10)
- city: VARCHAR(50)
- phone: VARCHAR(50)
- addressLine1: VARCHAR(50)
- addressLine2: VARCHAR(50)
- state: VARCHAR(50)
- country: VARCHAR(50)
- postalCode: VARCHAR(15)
- territory: VARCHAR(10)

Keterangan Gambar:

1. Menentukan Entities yang diperlukan dalam database Classicmodels:
   a. Customers
   b. Employees
   c. Products
   d. Productlines
   e. Payment
   f. Orderdetails
   g. Order
   h. Offices

2. Menentukan Atribut dari tiap entities:
   a. Customers
      - CustomerNumber (Integer(11) PK)
      - SalesRepEmployeeNumber (Integer (11) FK)
      - CustomerName (Varchar (50))
      - Contactlastname (Varchar (50))

- Contactfirstname (Varchar (50))
- Phone (Varchar (50))
- Addressline1 (Varchar (50))
- Addressline2 (Varchar (50))
- City (Varchar (50))
- State (Varchar (50))
- Postalcode (Varchar (50))
- Country (Varchar (50))
- Creditlimit (Decimal (10,2))

b. Employees
- EmployeeNumber (Integer (11) PK)
- OfficeCode (Varchar (10) FK)
- ReportsTo (Integer (11) FK)
- LastName (Varchar (50))
- FirstName (Varchar (50))
- Extension (Varchar (10))
- Email (Varchar (100))
- Jobtitle (Varchar (50))

c. Products
- ProductCode (Varchar (15) PK)
- Productline (Varchar (50) FK)
- ProductName (Varchar (170))
- ProductScale (Varchar (10))
- ProductVendor (Varchar (50))
- ProductDescription (TEXT)
- QuantityInStock (SmallInt(6))
- BuyPrice (Decimal (10,2))
- MSRP (Decimal (10,2))

d. Productlines
- Productline (Varchar (50) PK)
- textDescription (Varchar (4000))
- htmlDescription (MEDIUM TEXT)
- image (MediumBlob)

e. Payment
- CustomerNumber (Integer (11) FK)

- CheckNumber (Varchar (50) PK)
- PaymentDate (DATE)
- amount (Decimal (10,2))

f. Orderdetails
- Productcode (Varchar (15) FK)
- OrderNumber (Integer (11) FK)
- QuantityOrdered (Integer (11))
- PriceEach (Decimal (10,2))
- OrderlineNumber (SmallInt (6))

g. Order
- OrderNumber (Integer (11) PK)
- CustomerNumber (Integer (11) FK)
- orderDate (DATE)
- requiredDate (DATE)
- shippedDate (DATE)
- status_2 (Varchar (15))
- comments (TEXT)

h. Offices
- OfficeCode (Varchar (10))
- City (Varchar (50))
- Phone (Varchar (50))
- AddressLine1 (Varchar (50))
- Address Line2 (Varchar (50))
- Country (Varchar (50))
- State (Varchar (50))
- PostalCode (Varchar (15))
- Territory (Varchar (10))

3. Menentukan hubungan
   a. Customer membayar Payments
      Hubungan : One to Many
      - Atribut penghubung : CustomerNumber (Integer (11) FK) berada di table Payments.

   b. Customer membeli / memesan Orders
      Hubungan: One to Many

- Atribut penghubung : CustomerNumber (Integer (11) FK) berada di table Orders.

c. Employees melayani Customers
   Hubungan: One to Many
   - Atribut penghubung : SalesRepEmployeeNumber (Integer (11) FK) yang berada di table Customers.

d. Employees mengamati / memimpin Employees
   Hubungan: One to Many
   - Atribut penghubung : ReportsTo (Integer (11) FK) yang berada di table Employees itu sendiri.

e. Employees menempati Offices
   Hubungan: Many to One
   - Atribut penghubung : OfficeCode (Varchar (10) FK) yang berada di table Offices.

f. Orders memiliki Order Details
   Hubungan: Many to many
   - Atribut penghubung: Productcode (Varchar (15) FK), OrderNumber (Integer (11) FK) yang berada di table Order Details.

g. Product memiliki Order Details
   Hubungan: Many to many
   - Atribut penghubung: Productcode (Varchar (15) FK), OrderNumber (Integer (11) FK) yang berada di table Order Details.

h. Productlines mengklasifikasi Product
   Hubungan: One to many
   - Atribut penghubung : Productline (Varchar (50) FK) yang berada di table Product