

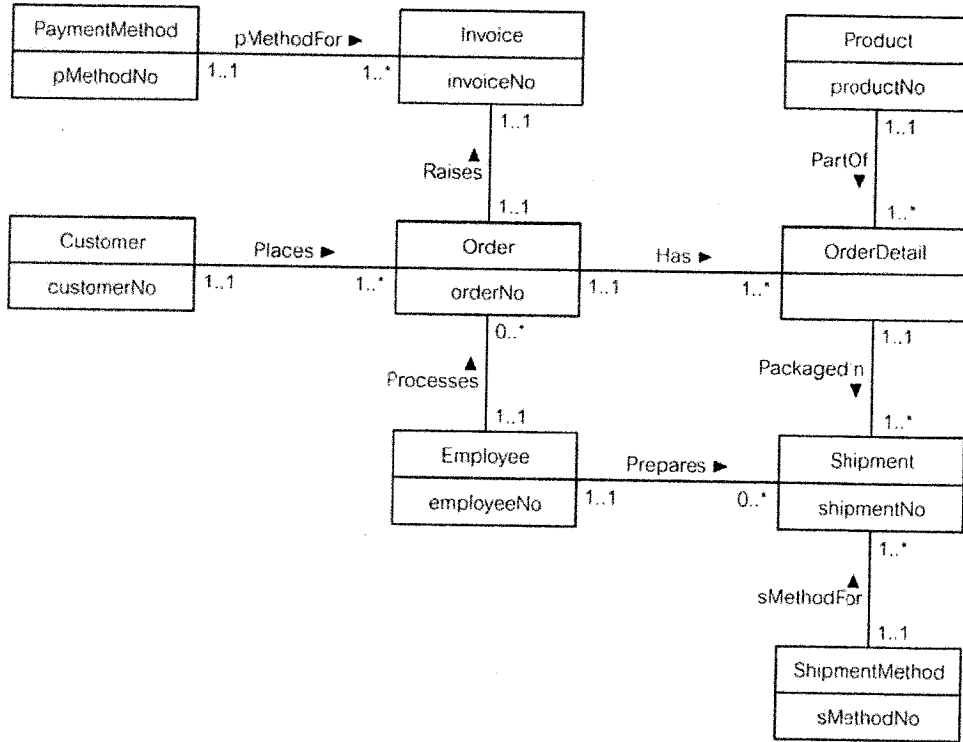
Sharon Perelman
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Homework # 2

Relational Model

PaymentMethod Primary Key pMethodNo
Customer Primary Key customerNo
Employee Primary Key employeeNo
Products Primary Key productNo
Invoice Primary Key invoiceNo Foreign Key pMethodNo references PaymentMethod (pMethodNo) Foreign Key orderNo references Order (orderNo)
Order Primary Key orderNo Foreign Key customerNo references Customer (customerNo) Foreign Key employeeNo references Employee (employeeNo)
Shipment Primary Key shipmentNo Foreign Key sMethodNo references ShipmentMethod (sMethodNo) Foreign Key employeeNo references Employee (employeeNo)
Shipment Method Primary Key sMethodNo
Order Detail Primary Key orderNo productNo Foreign Key productNo references Product (productNo) Foreign Key orderNo references Order (orderNo) Foreign Key shipmentNo references Shipment (shipmentNo)

Homework #2 model

Derive relations for the following conceptual data model:



homework #2
solution

ANSWERS

Customer (customerNo, customerName, customerStreet, customerCity,
customerState, customerZipCode, custTelNo, custFaxNo, DOB,
maritalStatus, creditRating)

Primary Key customerNo

Alternate Key custTelNo

Alternate Key custFaxNo

Employee (employeeNo, title, firstName, middleName, lastName, address, workTelExt,
homeTelNo, empEmailAddress, socialSecurityNumber, DOB, position, sex, salary,
dateStarted)

Primary Key employeeNo

Alternate Key socialSecurityNumber

Invoice (invoiceNo, dateRaised, datePaid, creditCardNo, holdersName, expiryDate,
orderNo, pMethodNo)

Primary Key invoiceNo

Foreign Key orderNo references Order(orderNo)

Foreign Key pMethodNo references PaymentMethod(pMethodNo)

Order (orderNo, orderDate, billingStreet, billingCity, billingState, billingZipCode, promisedDate,
status, customerNo, employeeNo)

Primary Key orderNo

Foreign Key customerNo references Customer(customerNo)

Foreign Key employeeNo references Employee(employeeNo)

OrderDetail (orderNo, productNo, quantityOrdered)

Primary Key orderNo, productNo

Foreign Key orderNo references Order(orderNo)

Foreign Key productNo references Product(ProductNo)

PaymentMethod (pMethodNo, paymentMethod)

Primary Key pMethodNo

Product (productNo, productName, serialNo, unitPrice, quantityOnHand, ~~re~~orderLevel,
reorderQuantity, reorderLeadTime)

Primary Key productNo

Alternate Key serialNo

Shipment (shipmentNo, quantity, shipmentDate, completeStatus, orderNo, productNo,
employeeNo, sMethodNo)

Primary Key shipmentNo

Foreign Key orderNo, productNo references OrderDetail(orderNo, productNo)

Foreign Key employeeNo references Employee(employeeNo)

Foreign Key sMethodNo references ShipmentMethod(sMethodNo)

ShipmentMethod (sMethodNo, shipmentMethod)

Primary Key sMethodNo