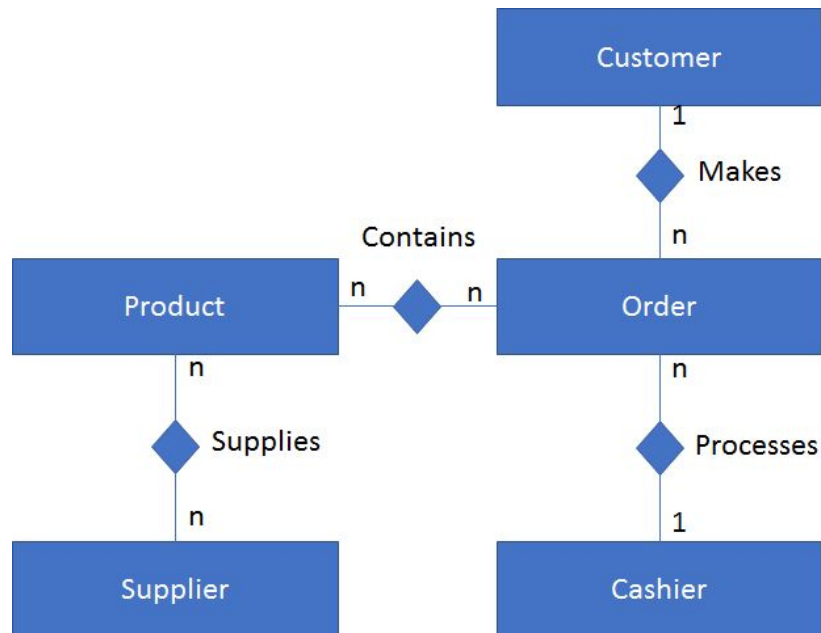
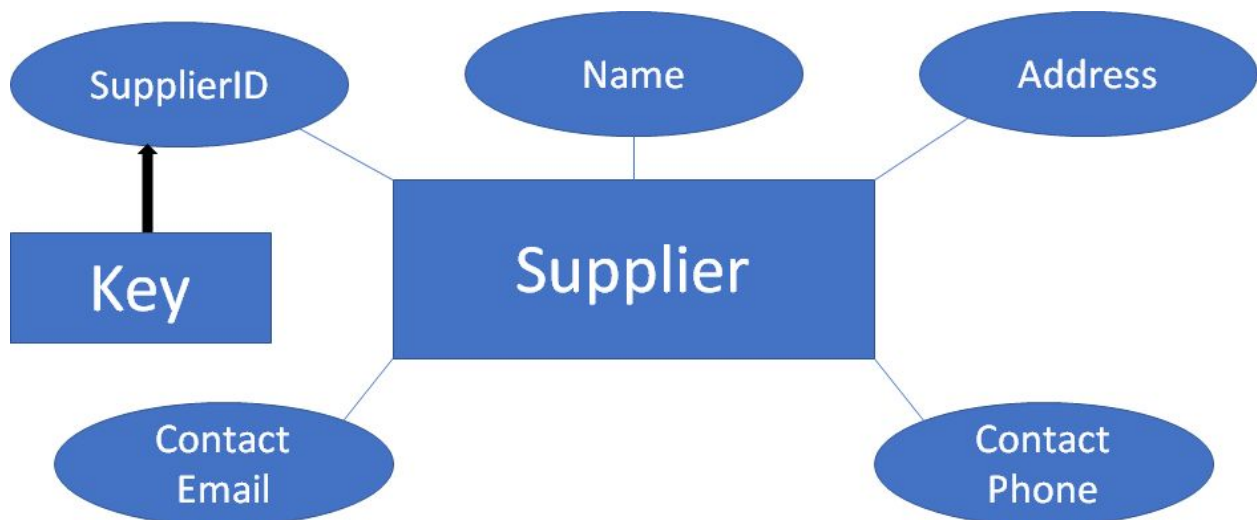


With the two user stories selected for Iteration 2, it has only three main data concepts: Product, Customer, and Order.

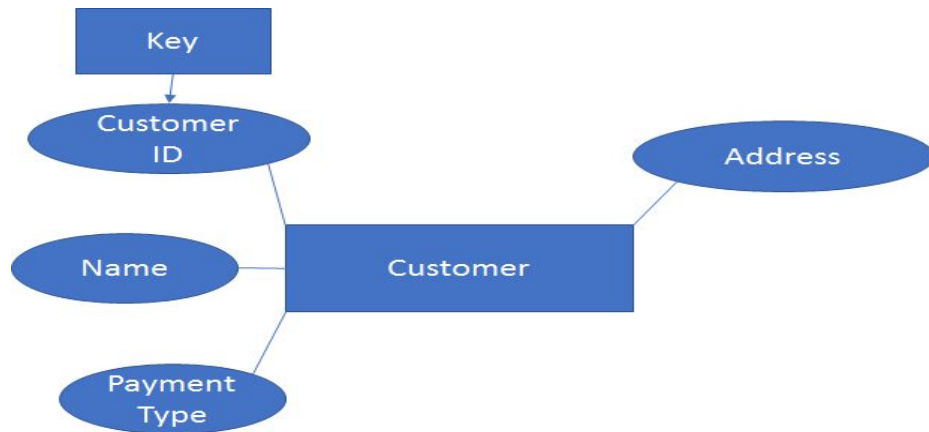
1. Conceptual Design: Draw the Entity-Relationship Diagram for this iteration. You need to identify all potential attributes for each entity and select its key.



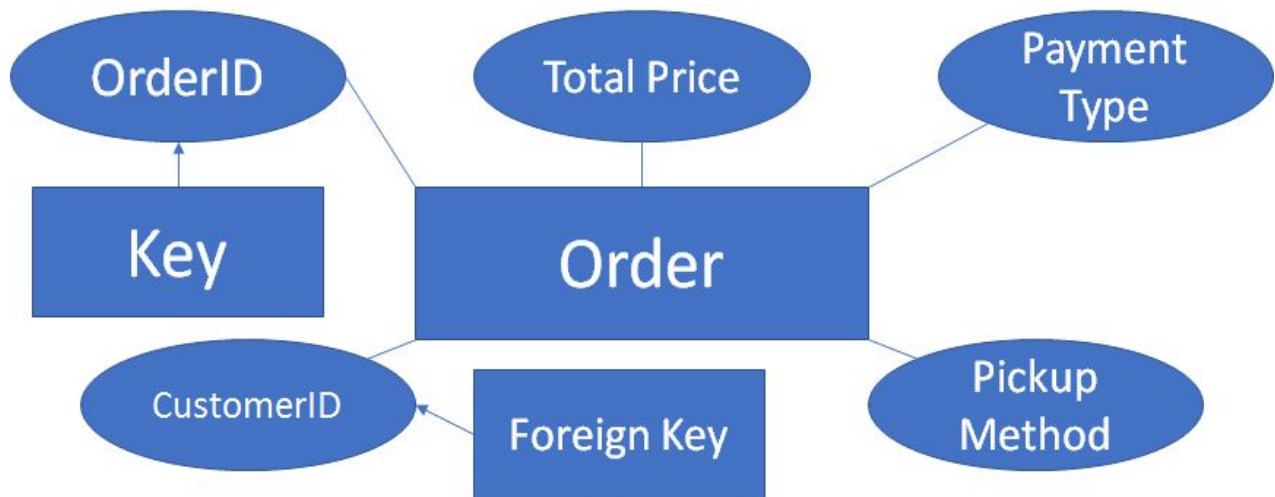
Product ER Diagram



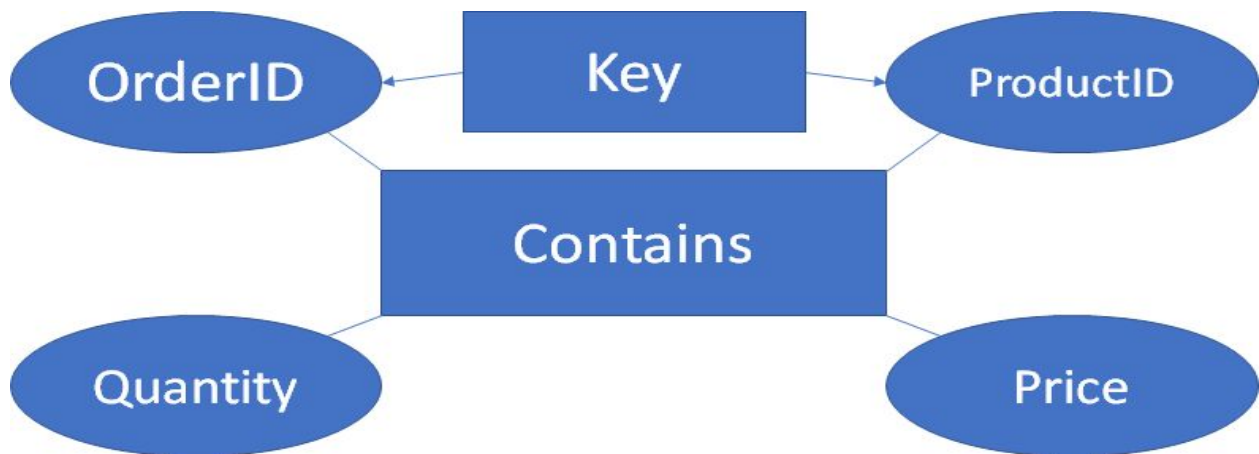
Supplier ER Diagram



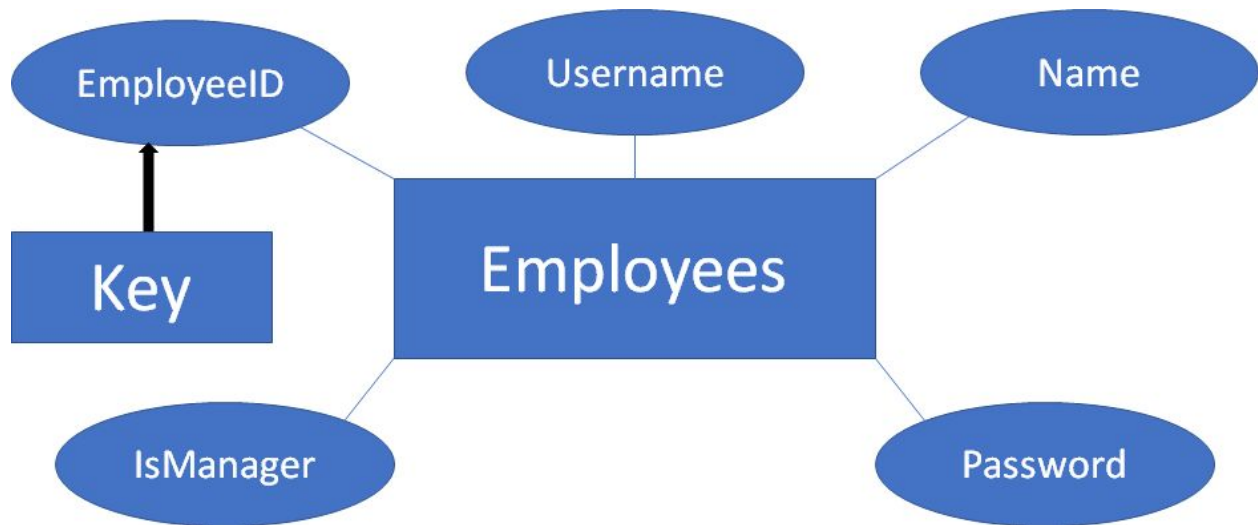
Customer ER Diagram



Order ER Diagram



Contains ER Diagram



Employee ER Diagram

2. Logical Design: From that ER Diagram, design all relations of this relation. Identify the keys for those relations.

Table Name (Primary Key value)

Product Table (ProductID)

Orders Table (OrderID)

Customers Table (CustomerID)

Contains Table (OrderID, ProductID)

Employees Table (EmployeeID)

3. Physical Design: Write SQL statements to create all tables for those relations.

```
CREATE TABLE Products (  
    ProductID int, <--PRIMARY KEY  
    Description varchar(255),  
    SupplierID int, <--FOREIGN KEY  
    Price double,  
    Quantity int,  
    ExpDate date  
);
```

```
CREATE TABLE Suppliers (  
    SupplierID int, <--PRIMARY KEY
```

```
    Name varchar(255),  
    Address varchar(255)  
);
```

```
CREATE TABLE Orders (  
    OrderID int, <--PRIMARY KEY  
    CustomerID, <--FOREIGN KEY  
    PaymentType varchar(10),  
    TotalPrice double,  
);
```

```
CREATE TABLE Customers (  
    CustomerID int, <--PRIMARY KEY  
    FirstName varchar(255),  
    LastName varchar(255),  
    Address varchar(255),  
    PaymentType varchar(10)  
);
```

```
CREATE TABLE Contains (  
    OrderID int, <--PRIMARY KEY  
    ProductID int, <--PRIMARY KEY  
    Quantity int,  
    Price float  
);
```

```
CREATE TABLE Employees (  
    EmployeeID int, <--PRIMARY KEY  
    Username varchar(255),  
    Name varchar(255),  
    Password varchar(255),  
    IsManager bool  
);
```