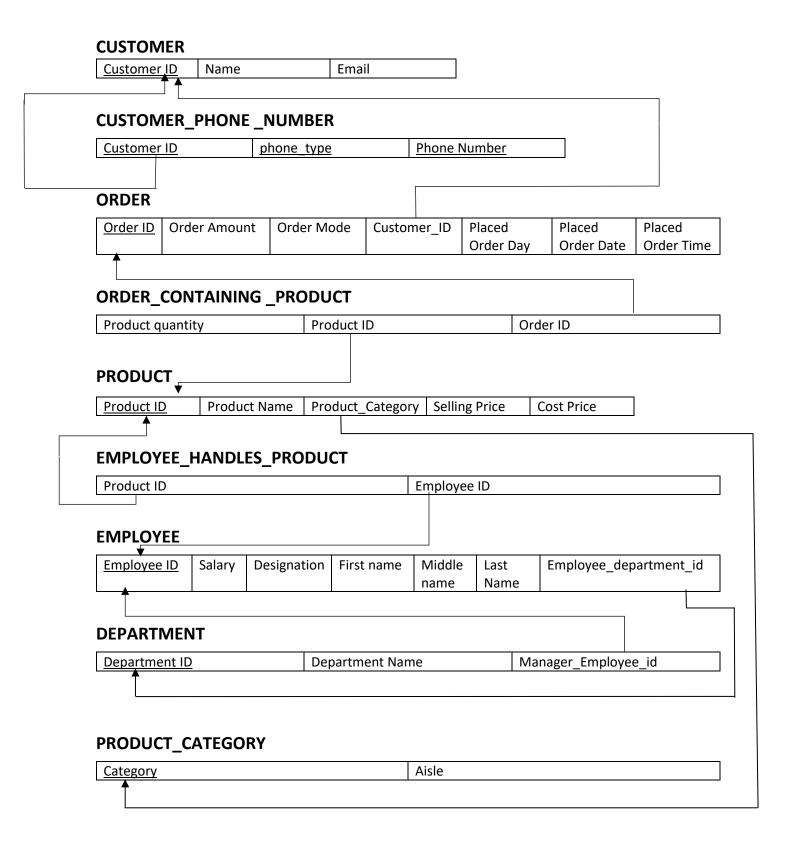
## **Relational Mapping**



# Candidate Keys

### 1. CUSTOMER

- Customer\_ID
- Email

#### 2. ORDER

• Order\_ID

#### 3. PRODUCT

• Product\_ID

#### 4. EMPLOYEE

- Employee\_ID
- First\_Name, Middle\_Name, Last\_Name (Composite Key)

#### **5. DEPARTMENT**

- Department\_ID
- Department\_Name

### 6. PRODUCT\_CATEGORY

Category

## 7. CUSTOMER\_PHONE\_NUMBER

• Customer\_ID, Phone\_Type, Phone\_Number

### 8. ORDER\_CONTAINING\_PRODUCT

- Product\_ID
- Order\_ID

#### 9. EMPLOYEE\_HANDLES\_PRODUCT

- Product ID
- Employee\_ID

## **Functional Dependencies (After BCNF)**

#### 1. CUSTOMER

- Customer\_ID -> Name, Email
- Email -> Customer\_ID, Name

#### 2. ORDER

 Order\_ID -> Order\_Amount, Order\_Mode, Customer\_ID, Placed\_Order\_Day, Placed\_Order\_Date, Placed\_Order\_Time

#### 3. PRODUCT

- Product\_ID -> Product\_Name, Product\_Category, Selling\_Price, Cost\_Price
- Product\_Name -> Selling\_Price, Cost\_Price

#### 4. EMPLOYEE

- Employee\_ID -> Salary, Designation, First\_Name, Middle\_Name, Last\_Name, Employee\_Department\_ID
- {First\_Name, Middle\_Name, Last\_Name} -> Employee\_ID

#### 5. DEPARTMENT

- Department\_ID -> Department\_Name, Manager\_Employee\_ID
- Department\_Name -> Department\_ID, Manager\_Employee\_ID
- Manager\_Employee\_ID -> Department\_ID, Department\_Name

#### 6. PRODUCT\_CATEGORY

• Category -> Aisle

# **Team Details**

**Team Number:** 13

## **Team Members:**

- Vinay Kumar Anant
- Prasanna Sundararajan Muthukumaran
- Hariharan Prakash
- Gayathri Ban Manjunath