CSE 581

**Lab 2: Design Lab**

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**Purpose:**

Create a sample ER diagram for database design.

*Create a sample DB design for a small bakery. The bakery is interested in keeping track of its customers, suppliers, products, ingredients and sales. Bakery sells their products to the customers. Bakery uses the ingredients to create their products. Suppliers provide the ingredients to the bakery.*

Solution: The solution or er diagram proposed has the following fields and attributes:

|  |  |  |  |
| --- | --- | --- | --- |
| **Table Name** | **Primary key** | **Foreign Key** | **Required feilds** |
| Customer | Customer\_ID | - | Name |
| Product | Product\_ID | - | Product\_Name  Cost |
| Ingredients | Ingredient\_ID | - | Ingredient \_Name  Cost\_per\_unit |
| Supplier | Supplier\_ID | - | Company\_Name  Contact\_deatails |
| Recipe\_of\_Product (Linking Table) | Product\_ID  Ingredient\_ID | Product\_ID  Ingredient\_ID | Product\_ID  Ingredient\_ID |
| Ingredients\_by\_Supplier  (Linking table) | Ingredient\_ID  Supplier\_ID | Ingredient\_ID  Supplier\_ID | Ingredient\_ID  Supplier\_ID |
| Product\_in\_sales | Product\_ID  Customer\_ID | Product\_ID  Customer\_ID  Bill\_ID | Product\_ID  Customer\_ID  Bill\_ID |
| Bill/sold | Bill\_ID | Product\_ID  Customer\_ID | Product\_ID  Customer\_ID |