CECS 323 LAB: PIZZA INGREDIENTS

OBJECTIVE: Give you some experience with a many to many.

INTRODUCTION: The many to many is a simple concept once you get the hang of it. This lab has two simple many to many associations.

The business rules are:

- Each pizza is a signature dish. We make a given pizza, such as the "Carnivore's Challenge" with the same ingredients every time.
- Each pizza comes on a particular crust. For instance, the "vegetarian delight" comes on a New York style crust, while the "Carnivore's Challenge" pizza comes on deep dish.
- A given ingredient, like pepperoni, will show up on several different pizzas.
- All of our pizzas have at least one ingredient, and many pizzas have several.
- In addition, our pizzas come in several sizes. Rather than have a separate cost column in Pizza for each possible size, think of a better way to do this, one that will easily allow you to add new sizes and new pizzas.
    - Each size is uniquely identified by the name. Example names are "individual", "small", "medium", "large", and "wow!".
    - Each size has a corresponding diameter in inches. They would be 5", 10", 15", 20" and 30" respectively.
    - Remember, one pizza comes in several sizes, and a given size will have many pizzas.
    - The cost of the pizza cannot be determined unless you know both which pizza you're talking about as well as the size.

PROCEDURE: Perform the following:

1. Model the above in UML.
2. Model it in relation scheme diagram.
3. Build the tables.
4. Insert sample data into your tables (you should have five tables when your design is done).
5. Write a query that will show all the pizzas, the sizes that they come in, and the diameter of each of those sizes. You will have to output one row for each pizza/size combination.
6. Write another query that lists each ingredient, the name of the pizza that uses that ingredient, and the crust type of the pizza that uses that ingredient. You will have to output one row for each pizza/ingredient combination.

WHAT TO TURN IN:

- The UML model.
- The relation scheme model.

- The DDL to create the tables.
- The DML to perform your inserts.
- The DML for the queries mentioned above.
- Your team's filled out collaboration document. You can find a template for that here.