Assignment 2 design reasoning

Design reasoning

Much of the design of this database, was done from the statements in the interviews. My goal was to stay as true to the structure of the database as possible. Making sure to jot down what entities as they popped up in the interview. As well as making sure that every entity has purpose.

I will describe the ER diagram going from left to right:

Packet is created from **Order**. This describes that only one **packet** can include a single **order.** This choice was done to simplify things. It would be possible to create another entity called *dispatch sheet*, which had many **packets**.

Order contains many **Order Items**. This **Order Item** entity was made, to give the functionality of quantity. A quantity attribute wouldn't make sense in the **Baked Goods** entity. This also gives the possibility to add items that are not only **Baked goods** to the **order**

Order Item has 1 **baked good**. As described before.

Baked Good consists of 1 **recipe**. This one to one relationship was made to give the possibility of seeing how a **baked good** is made. This also constrains a **baked good** to having only one **recipe**

Many **Recipes** consists of Many **ingredients**. This link is crucial, since it gives the possibility to expand the **Ingredient** entity, without having to change the **Recipe** entity.

Batch depends on **Baked good** and is created from **Order**. In my design, any one **batch** can only contain one type of **baked good**. **Order** to **batch** is many to one, since any one **batch** could contain information from many **orders**.

Stock ensures availability to many **batches**. This link is made so the **batch** entity has the information about the **stock**, and can make sure that everything is there.