Diagram

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Based on 1NF, I was able to distinguish between what each bagel table and order table needed. I mainly used the Bagel Order Form to give me clues as to how the data was being used in the bagel shop. And since 2 PK/FK’s were given, I was able to determine what values had to be PKs for the other 2 tables. Which would make the 2 initial entities in ‘Bagel Order Line Item’ FK’s. From then, I sectioned out the customer info and other bagel order information from the simple bagel table. For the cardinality I did a basic situation in my head and determined it based on that. So if the shop will have an order and each bagel order might have multiple items ordered. And each order line will contain information for 1 bagel.

Diagram

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Based on 2NF’s structure, I kept ‘Bagel Order Line Item’ and ‘Bagel’ as is. Then modified ‘Bagel Order’ into 2 different tables, ‘BAGEL ORDER DETAILS’ and ‘Customer’. I placed all the customer information under ‘Customer’ and placed the remaining bagel entities under ‘Bagel Order Details’. I decided to create a new attribute called ‘Customer’ because there was a list of customer entities. Doing this would be able to separate customer info from any bagel related information. For the cardinality, I kept it the same between ‘Bagel Order Line Item’ and ‘Bagel’, along with ‘Bagel Order Line Item’ and ‘Bagel Order’ from 2NF. When adding ‘customer’ I set it to M:M because there will be many customers and many orders that every customer can make.

Graphical user interface, text

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