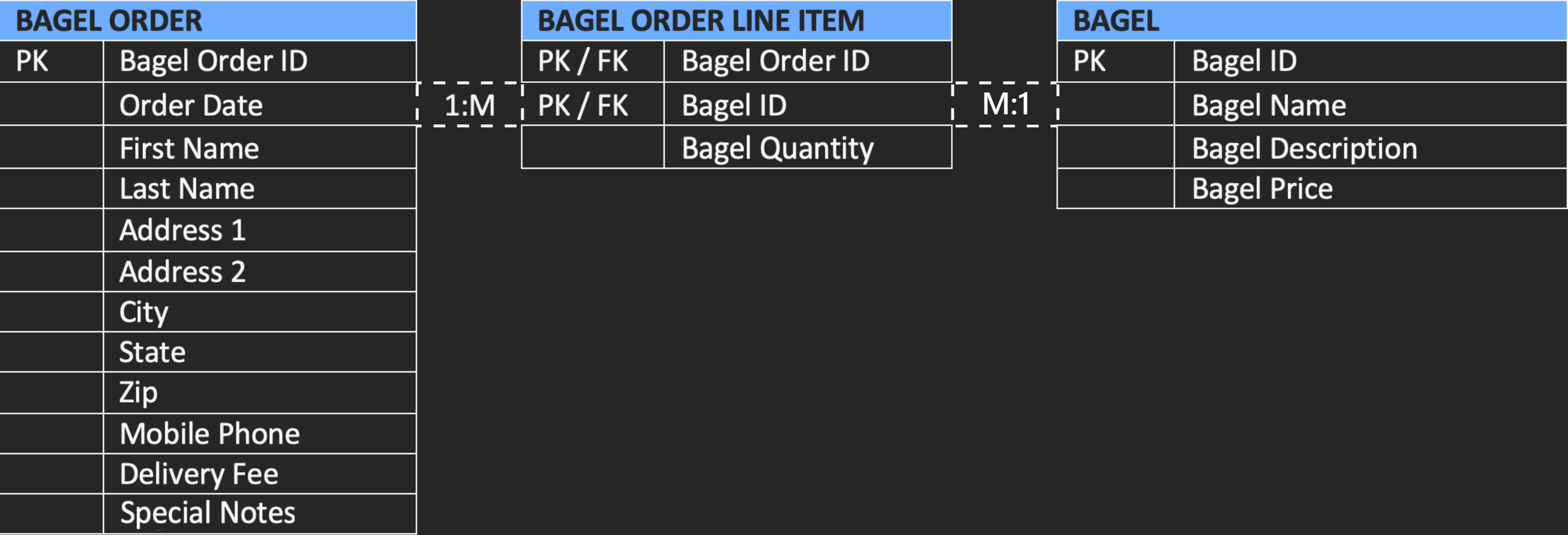


Nora’s Bagel Bin Database Blueprints

Second Normal Form (2NF)



Explanation of Attributes and Cardinality (2NF)

I added the attributes based on their relevance to the tables. Bagel Order would be the first table, with all the fields relevant to an order, such as who ordered it, what they ordered, and how they will receive it. Bagel Order Line Item will contain the bagel id and the order id because it’s the table that connects the bagel table to the order table. Bagel of course is information about the bagel.

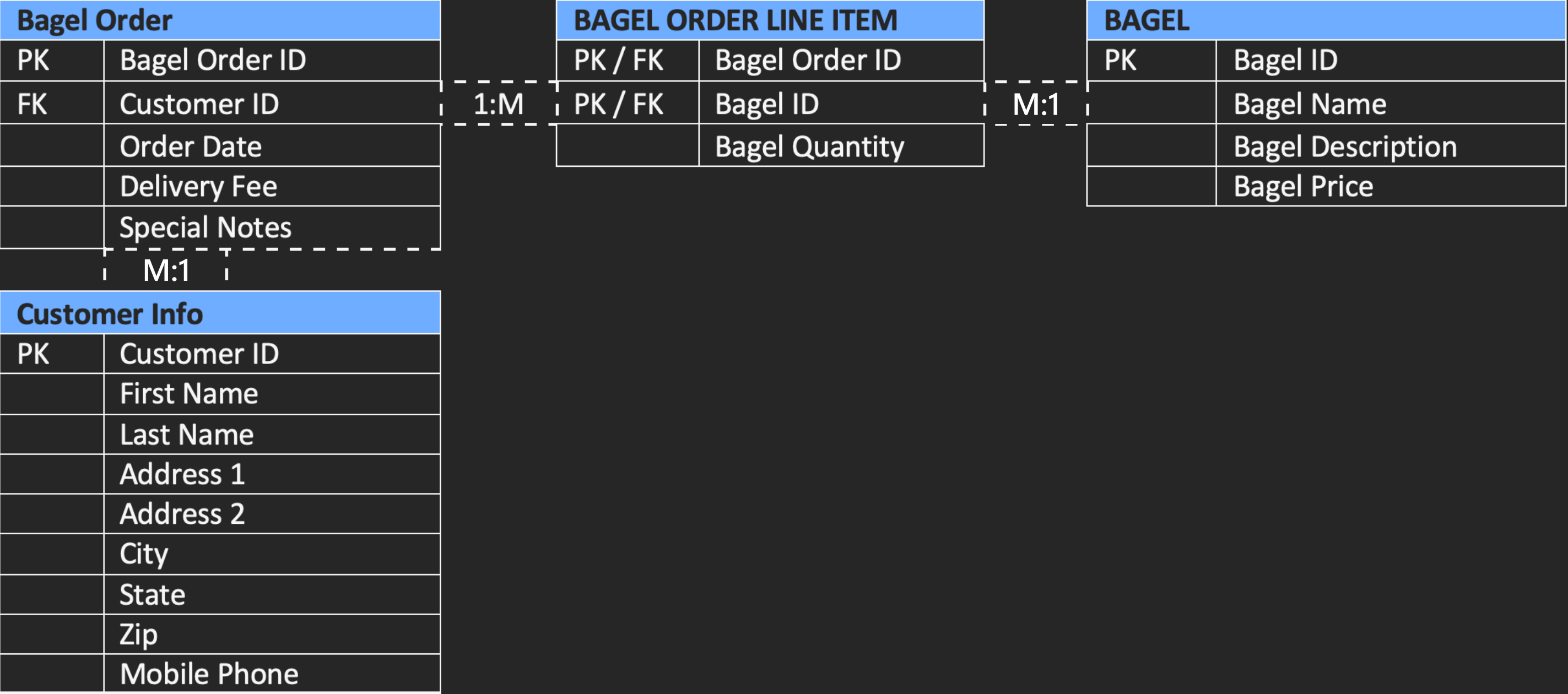
The cardinality was decided based on the structure of the data.

Bagel Order | 1:M | Bagel Order Line Item - This is due to line items being an infinite variable. A person can have many line items on an order, but those same line items can’t exist on another order.

Bagel Order Line Item | M:1 | Bagel - This is because a customer can order a blueberry bagel a hundred times, but there is still only one blueberry bagel to order.

Nora’s Bagel Bin Database Blueprints

Third Normal Form (3NF)



Explanation of Attributes and Cardinality (3NF)

I added the attributes based on their relevance to the tables. This form takes the same structure from before, but breaks out the customer data into it’s table. This is the table that all information about the customer is entered into, so that the order table can call the customer data with a foreign key.

The cardinality hasn’t changed for the two original table links, but the addition of the customer table has added an M:1 relationship between the order and the customer. This is because a customer can have many orders, but an order can only have one customer.

Nora’s Bagel Bin Database Blueprints

Final Physical Database Model

