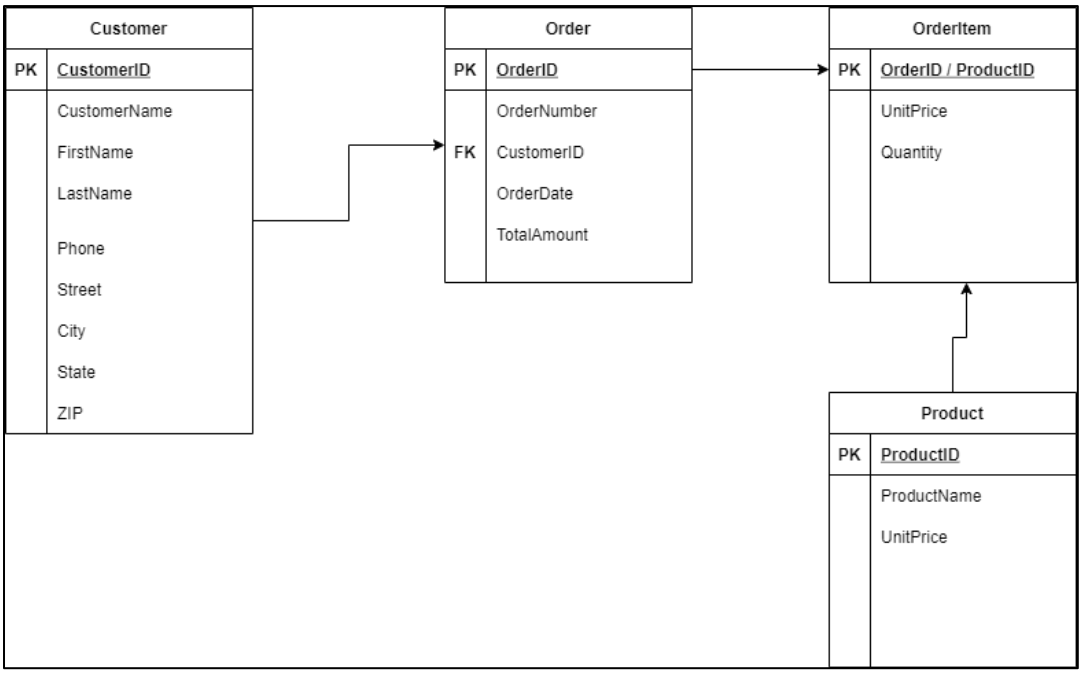
Database Implementation

You have chosen SQL Server as the backend database for your application. You will now be testing deployment of the proposed database model below. Each table must have a primary key and you will create foreign key relationships and other constraints where appropriate. The database and tables can be deployed on AWS or Azure.



Model A

1. Using Management Studio, create a new SQL Server database using the model above.

2. Populate the database so you have at least 5 records in the Customer and Order tables.

3. Create a view that includes the OrderID, OrderNumber, OrderDate and CustomerName columns. Create a stored procedure that shows the same information.

4. Create user accounts for Vickie and Sam. Vickie will have access to the View and Sam will be able to use the stored procedure. Verify that they can use these permissions without having access to the underlying tables.

5. As a group, discuss and write down your answers to these questions:
    - When would it be preferable to use a stored procedure or a view for accessing these records?
    - When would it be preferable to use triggers instead of Foreign Keys?
    - Would you add additional table constraints to this design? If so, which ones?
    - What could you do to improve query performance in this database?