Instructions: Database Exercise

1. Open SQL Server Management Studio
2. The server name should be displayed (name of your computer). If it does not have something like \SQLEXPRESS on the end, add it. Write this name down. You will need it later.
3. Leave authentication as Windows Authentication
4. Click Connect
5. In the left window, right click Databases, choose New Database, name the new database OrderTracker and click OK.
6. Expand the column below Databases and find your new database. Expand the column below it. You will see a Tables folder. Right click and choose Table.
7. You now need to enter column names and types for this table, then save and name it. The columns will be as follows:
   1. Id nvarchar(50) NOT null (Primary key)
   2. UserName nvarchar(50) NOT null
   3. FirstName nvarchar(50) NOT null
   4. LastName nvarchar(50) NOT null
   5. Address nvarchar(50) NOT null
   6. City nvarchar(50) NOT null
   7. State char(2) NOT null
   8. Zip nvarchar(50) NOT null
   9. Phone nvarchar(50) NOT null
   10. Email nvarchar(50) NOT null
   11. Email2 nvarchar(50) Allow null
8. Save the table and name it Customer.
9. Now create new tables as follows:
   1. Billing
      1. Id int NOT null (Primary key)
      2. CustId int NOT null
      3. Address nvarchar(50) NOT null
      4. City nvarchar(50) NOT null
      5. State char(2) NOT null
      6. Zip nvarchar(50) NOT null
      7. Phone nvarchar(50) NOT null
      8. NameOnCard nvarchar(50) NOT null
      9. CardNumber nvarchar(20) NOT null
   2. OrderItem
      1. Id int NOT null (Primary key)
      2. OrderId int NOT null
      3. ProductId int NOT null
      4. Quantity int NOT null
   3. Order
      1. Id int NOT null (Primary key)
      2. OrderNumber int NOT null
      3. CustId int NOT null
   4. Product
      1. Id int NOT null (Primary key)
      2. Name nvarchar(50) NOT null
      3. Description nvarchar(MAX) NOT null
      4. UnitPrice money NOT null
10. Right click on Database Diagrams and choose New Database Diagram
11. Choose all of your tables and click Add.
12. Set new relationships between the tables. For example, the CustId field in the Orders table should be linked to the Id field in the Customer table. Click on the Id field in the Customer table and drag it to the CustId field in the Orders table. Follow the prompts to save the relationship.
13. Repeat for the following
    1. Customer.Id -> Billing.CustId
    2. Order.Id -> OrderItem.OrderId
    3. Product.Id -> OrderItem.ProductId
14. Save the diagram (keep the default name)
15. Save everything.
16. Open Visual Studio and create a new MVC project called OrderTracker.
17. Open the Server Explorer window (right column, or, if it’s not there, View>Server Explorer)
18. Right click on Data Connections and choose Add Connection
19. Enter your server name (it’s the one you wrote down in step 2)
20. Drop down the arrow box under “Select or enter database name”
21. Choose your new OrderTracker database
22. Click Ok
23. In Solution Explorer, right click on the Models folder, choose Add>ADO.NET Entity Data Model
24. Name it OrderTracker
25. Choose EF Designer from database and click Next
26. Choose your new OrderTracker connection
27. In the text box at the bottom enter OrderTrackerEntities
28. Click Next
29. Open Tables then dbo
30. Click the check boxes next to everything except sysdiagrams
31. Click Finish