# DAD 220 Project One Template

Complete these steps as you work through the directions for Project One. Replace the bracketed text with your screenshots and brief explanations of the work they capture. Each screenshot and its explanation should be sized to approximately one-quarter of the page with the description written below the screenshot. Follow these rules for each of the prompts and questions below. Review the example document in the Supporting Materials section of the Project One Guidelines and Rubric for assistance.

## Step One: Create a Database

1. In your online IDE (Codio), **create a database schema** called QuantigrationUpdates that will hold tables by using SQL commands.
   1. List out the database name on the screen.
   2. A screenshot of a computer screen

      Description automatically generatedProvide the SQL commands you ran against MySQL to complete this step.

I used the command create database to create the database and then used the command use the database I created.

1. Connect to the QuantigrationUpdates schema. Using the ERD as a reference, **write SQL commands to create** the following **tables** with the appropriate attributes and keys to demonstrate relationships based on the ERD.
   1. A table named Customers to store customer information with a primary key of Customer ID. Provide the SQL commands you ran against MySQL to complete this step.

A screenshot of a computer program

Description automatically generated

I used the command create table to create the customers table. I imputed the names of the columns along with the appropriate data typed. I labeled customer\_ID as a primary key.

* 1. A table named Ordersto store order information with a primary key of Order ID and a foreign key of Customer ID. Provide the SQL commands you ran against MySQL to complete this step.

A screenshot of a computer program

Description automatically generated

I used the create table command to create the Orders table. I imputed the names of the columns along with the appropriate data typed. I labeled Order\_ID as a primary key and labeled Customer\_ID as the foreign key that references the customer\_ID in the customers table.

* 1. A table named RMA to store RMA information with a primary key of RMA ID and a foreign key of Order ID. Provide the SQL commands you ran against MySQL to complete this step.

A screenshot of a computer screen

Description automatically generated

I used the create table command to create the RMA table. I imputed the names of the columns along with the appropriate data typed. I labeled RMA\_ID as a primary key and labeled Order\_ID as the foreign key that references the Order\_ID in the Orders table.

## Step Two: Load and Query the Data

1. **Import** the **data** from each file **into tables.** 
   1. Use the QuantigrationUpdates database, the three tables you created, and the three CSV files preloaded into Codio.
   2. Use the import utility of your database program to load the data from each file into the table of the same name. Perform this step three times, once for each table.
   3. Provide the SQL commands you ran against MySQL to complete this step.

A screenshot of a computer program

Description automatically generated

I used the command load data infile to load the data into the correct tables.

1. **Write basic queries** against the imported tables to organize and analyze the targeted data**.** For each query, replace the bracketed text with a screenshot of the query and its output. Also, include a one- to three-sentence description of the output.
   1. Write a SQL query that returns the count of orders for customers located only in Framingham, Massachusetts.
      1. This query will use a table join between the Customers and Orders tables. The query will also use a WHERE clause.
      2. How many records were returned?

A screenshot of a computer program

Description automatically generated

505 Records were returned. I used a select count command with an inner join on the orders table with the customers table.

* 1. Write a SQL query to select all of the customers located in Massachusetts.
     1. Use a WHERE clause to limit the number of records in the Customers table to only those who are located in Massachusetts.
     2. How many records were returned?

A screenshot of a computer program

Description automatically generated

There are 982 customers located in Massachusetts. I found this by using a query that used the select count from customers. I used the where command to limit the count to only customers who are in Massachusetts.

* 1. Write a SQL query to insert four new records into the Orders and Customers tables using the data below:

**Customers Table**

| **CustomerID** | **FirstName** | **LastName** | **StreetAddress** | **City** | **State** | **ZipCode** | **Telephone** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 100004 | Luke | Skywalker | 15 Maiden Lane | New York | NY | 10222 | 212-555-1234 |
| 100005 | Winston | Smith | 123 Sycamore Street | Greensboro | NC | 27401 | 919-555-6623 |
| 100006 | MaryAnne | Jenkins | 1 Coconut Way | Jupiter | FL | 33458 | 321-555-8907 |
| 100007 | Janet | Williams | 55 Redondo Beach Blvd | Torrence | CA | 90501 | 310-555-5678 |

A screenshot of a computer program

Description automatically generated

I used the command insert into and selected the Customers table. I then entered the correct values for the corresponding columns in the table.

**Orders Table**

| **OrderID** | **CustomerID** | **SKU** | **Description** |
| --- | --- | --- | --- |
| 1204305 | 100004 | ADV-24-10C | Advanced Switch 10GigE Copper 24 port |
| 1204306 | 100005 | ADV-48-10F | Advanced Switch 10 GigE Copper/Fiber 44 port copper 4 port fiber |
| 1204307 | 100006 | ENT-24-10F | Enterprise Switch 10GigE SFP+ 24 Port |
| 1204308 | 100007 | ENT-48-10F | Enterprise Switch 10GigE SFP+ 48 port |

A screenshot of a computer program

Description automatically generated

I used the command insert into and selected the Orders table. I then entered the correct values for the corresponding columns in the table. The description of the second item was too long, so I altered the orders table and modified the column for description to accept more characters.

* 1. In the Customers table, perform a query to count all records where the city is Woonsocket and the state is Rhode Island.
     1. A screenshot of a computer screen

        Description automatically generatedHow many records are in the Customers table where the field "city" equals "Woonsocket"?

I used the command select count to count the records in the customer table where the table was Woonsocket, and the state was Rhode Island. I used the Upper command to take into account case sensitivity. I used the and command to find customers that are in both the city and the state.

* 1. In the RMA database, update a customer's records.
     1. Write a SQL statement to select the current fields of status and step for the record in the RMA table with an OrderID value of "5175".
        1. What are the current status and step?

A screenshot of a computer program

Description automatically generated

I used the select command to find the status and step from the RMA table. I used the where command to specify the record needed.

* + 1. Write a SQL statement to update the **status** and **step** for the **OrderID**, 5175 to **status** = "Complete" and **step** = "Credit Customer Account".
       1. What are the updated **status** and **step** values for this record?

A screenshot of a computer program

Description automatically generated

I used the update command to update the RMA table. I used the set command to change the status to complete and the step to credit customer account. I used the where statement to specify which record needed to be changed.

* 1. Delete RMA records.
     1. Write a SQL statement to delete all records with a reason of "Rejected".
        1. How many records were deleted?

A screenshot of a computer program

Description automatically generated

I used the command delete to delete records from the RMA table. I used the where statement to specify which records needed to be deleted. I used the upper command to change the strings to upper case to take into account case sensitivity.

1. **Update your existing tables** from "Customer" to "Collaborator" using SQL based on this change in requirements. Copy and paste the SQL you write to do the following action:
   1. Rename all instances of "Customer" to "Collaborator".

A screenshot of a computer

Description automatically generated

I used the alter command to alter command to alter the table customers and used the rename command to change the name to collaborators. I used the alter command to alter the collaborators table to change customer\_ID to collaborator\_ID. I used the alter command to alter the orders table to change the customer\_ID to collaborator\_ID.

1. **Create** an **output file** of the required query results. Write a SQL statement to list the contents of the **Orders** table and send the output to a file that has a CSV extension.

A screenshot of a computer

Description automatically generated

I used the command select to select all records in the Orders table. I then selected the output file and location, and specified the requirements for the file.