In the project, you will create a customer maintenance application to retreive, insert, update and delete data from the Customer table. Open the CustomerMaintenance zip file that the instructor emails to you. The project contains the Entity Data Model, forms, and starting code the the Customer Maintenance application.

**Review the application and add a class**

|  |  |
| --- | --- |
|  |  |
|  |  |
|  |  |

Add a static class namedd MMABooksEntity to the project. Declare a public variable named BooksEntity within this class and assign an instance of the object context class to it.

**Add code to retreive a customer**

1. Display the code for the Customer Maintenance form.
2. Add a query to the GetCustomer method that retreives the data for the customer with the ID that's entered in the customer ID textbox. If the customer is found, add code to the GetCustomer method that checks if the State object has been loaded and that loads if it hasn't.
3. Test the code. Enter the customer ID, click the Get Customer button. The information will be display on the form.

**Add code to load the combo box on the Add/Modify Customer form**

1. Display the code for the Add/Modify Customer form
2. Add  a query to the LoadComboBox method that retreive the required data from the States tables and sort the results by state name. Then, bind the combo box on the form to the results of the query.
3. Test the code. Retreive data for customer ID 3, and then click the Modify button to display the Modify Customer form. Then, display the list for the State combo box.

**Add code to add a new customer**

1. Add code to the event handler for the Click event of the Accept button that add new customer to the Customer collection of the object context and then updates the database.
2. Test the code. Click the Add button on the Customer Maintenance form to display the Add Customer form.

**Add code to modify a customer**

1. Add a statement to the event handler for the Click event of the Accept button that updates the database when changes are made to a customer.
2. Test the code. Get a customer and click the Modify button to display the Modify Customer form. Make changes to the customer's information, accepts and verifies the changes.

**Add code to delete a customer**

1. Display the code for the Customer Maintenance form.
2. Add code to the event handler for the Click event of the Delete button to mark the selected customer for deletion and to delete the customer from the database.
3. Test the code. Get a customer. Click the Delete button and then click Yes when you're asked to confirm the operation. The data for the customer should be cleared from the form.

**Add code to handle the concurrency conflicts**

1. Add code for handling concurrency conflicts.
2. Test the code