Program Cover Sheet

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| Name: Austin Rippee |
| Assignment: Assignment 8 |
| List any parts of the assignment that do not work/were not completed:  One thing that I didn’t make work was the deletion of records that wasn’t the last record. So for example if I had 10 records and I wanted to delete record 5, it would delete the record but my program would go to that ID number 5 and would just result in nothing in the textboxes. After I remove that record, it can’t go to the last record until I restart the program in which then it can display the last record so the numbers (max record, current record, etc.) get updated. |

|  |
| --- |
| Instructor’s Comments: |
| Grade: |

Program Submission Requirements: (1) all files, zipped and uploaded to Canvas and (2) a completed cover sheet, program execution screenshots and source code printed, **stapled** and turned in during class. Failure to follow the submission requirements will result in points lost on that particular assignment.

Imports System.Data.SqlClient

'------------------------------------------------------------

'- File Name : frmAutos.frm -

'- Part of Project: Main -

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'- Written By: Austin Rippee -

'- Written On: April 3rd, 2022 -

'------------------------------------------------------------

'- File Purpose: -

'- This file is the main class in which holds the

'- entire program.

'------------------------------------------------------------

'- Program Purpose: -

'- -

'- This program takes data in from a previously created

'- database and displays the various information from the

'- database tables and can add, update, and remove rows from

'- the database tables through the application. With that said

'- the program displays an individuals information Name, Address,

'- City, State, and ZipCode and the vehicles that are associated

'- with that owner.

'------------------------------------------------------------

'- Global Variable Dictionary (alphabetically): -

'- DBConn - Sets as the Database connection for the program

'- cmd - The sql command to take in query commands to execute

'- intMaxRecord - Keeps track of the max amount of records created in the owners table

'- intRecordOwner - Keeps track of the current record the user is viewing

'- strCONNECTION - Connection string

'- strDBNAME - The database name

'- strDBPATH - The path of the database

'- strSERVERNAME - The Server name for the database

'------------------------------------------------------------

Public Class frmAutos

'Creates the Connection to the database

Const strDBNAME As String = "Autos"

Const strSERVERNAME As String = "(localdb)\MSSQLLocalDB;"

Dim strDBPATH As String = My.Application.Info.DirectoryPath & "\" & strDBNAME & ".mdf"

Dim strCONNECTION As String = "Data Source=" & strSERVERNAME & "AttachDbFilename=" & strDBPATH & ";Integrated Security=True;Connect Timeout=30"

'Initializes a global variable for first record and last record

Public intRecordOwner As Integer = 1

Public intMaxRecord As Integer = ReturnMaxID()

'Creates the database connection and initlizes the global command

Public DBConn As SqlConnection

Public cmd As SqlCommand = New SqlCommand("", DBConn)

'Checks whether the user clicked Add / UPDATE / DELETE

Public strActions As String = ""

'------------------------------------------------------------

'- Subprogram Name: frmAutos\_Load -

'------------------------------------------------------------

'- Written By: Austin Rippee -

'- Written On: April 3rd, 2022 -

'------------------------------------------------------------

'- Subprogram Purpose: -

'- -

'- This subroutine is called whenever the user loads the

'– initial form of the program.

'------------------------------------------------------------

'- Parameter Dictionary (in parameter order): -

'- sender – Identifies which particular control raised the –

'- click event -

'- e – Holds the EventArgs object sent to the routine -

'------------------------------------------------------------

'- Local Variable Dictionary (alphabetically): -

'- cmd - Takes in query commands to execute

'- DBAdapter - Creates the database adapter

'- DBCommand - Creates the database sql command

'- myDataset - Creates the data set

'- strSQLCmd - Creates the string command

'------------------------------------------------------------

Private Sub frmAutos\_Load(sender As Object, e As EventArgs) Handles MyBase.Load

'-------------------------------------------------------------------

' I AM USING THE VISUAL STUDIO IDE TO CREATE MY DATABASE

'-------------------------------------------------------------------

'Initializes variables based on sql requirements

Dim strSQLCmd As String

Dim DBCommand As New SqlCommand

Dim myDataset As New DataSet

Dim DBAdapter As New SqlDataAdapter

'Creates the connection and opens it

DBConn = New SqlConnection(strCONNECTION)

DBConn.Open()

'Sets the current Owner ID record as the ID number

txtIDnumber.Text = intRecordOwner

'Initlializes cmd to take in a sql command to execute

Dim cmd As SqlCommand = New SqlCommand("", DBConn)

cmd.CommandType = CommandType.Text

'Query to read in the first name and set it as the textbox

cmd.CommandText = "SELECT FirstName FROM Owners WHERE TUID = " & intRecordOwner

txtFirstName.Text = cmd.ExecuteScalar()

'Query to read in the last name and set it as the textbox

cmd.CommandText = "SELECT LastName FROM Owners WHERE TUID = " & intRecordOwner

txtLastName.Text = cmd.ExecuteScalar()

'Query to read in the street address and set it as the textbox

cmd.CommandText = "SELECT StreetAddress FROM Owners WHERE TUID = " & intRecordOwner

txtAddress.Text = cmd.ExecuteScalar()

'Query to read in the city and set it as the textbox

cmd.CommandText = "SELECT City FROM Owners WHERE TUID = " & intRecordOwner

txtCity.Text = cmd.ExecuteScalar()

'Query to read in the state and set it as the textbox

cmd.CommandText = "SELECT State FROM Owners WHERE TUID = " & intRecordOwner

txtState.Text = cmd.ExecuteScalar()

'Query to read in the zip code and set it as the textbox

cmd.CommandText = "SELECT ZipCode FROM Owners WHERE TUID = " & intRecordOwner

txtZipCode.Text = cmd.ExecuteScalar()

'Query to takes the Make, Model, Color, ModelYear, and VIN based on the OwnerID

strSQLCmd = "SELECT Make, Model, Color, ModelYear, VIN FROM Vehicles WHERE OwnerID = " & intRecordOwner

'Sets the command to the database command

DBCommand.CommandText = strSQLCmd

'Initializes the adapter for the command

DBAdapter = New SqlDataAdapter(strSQLCmd, DBConn)

'Fills the datagridview with the dataset

DBAdapter.Fill(myDataset, "Owners")

'Adds the fill to the datasource

dgvVehicles.DataSource = myDataset.Tables("Owners")

End Sub

'------------------------------------------------------------

'- Subprogram Name: btnFirst\_Click -

'------------------------------------------------------------

'- Written By: Austin Rippee -

'- Written On: April 3rd, 2022 -

'------------------------------------------------------------

'- Subprogram Purpose: -

'- -

'- This subroutine is called whenever the user clicks the -

'- first button. It takes the user to the first record. –

'------------------------------------------------------------

'- Parameter Dictionary (in parameter order): -

'- sender – Identifies which particular control raised the –

'- click event -

'- e – Holds the EventArgs object sent to the routine -

'------------------------------------------------------------

'- Local Variable Dictionary (alphabetically): -

'- cmd - Takes in query commands to execute

'- DBAdapter - Creates the database adapter

'- DBCommand - Creates the database sql command

'- DBConn - Creates the sql connection for the database

'- myDataset - Creates the data set

'- strSQLCmd - Creates the string command

'------------------------------------------------------------

Private Sub btnFirst\_Click(sender As Object, e As EventArgs) Handles btnFirst.Click

'Checks if the user is at the first record

If txtIDnumber.Text = 1 Then

MsgBox("You are already at the first record")

Else

intRecordOwner = 1

txtIDnumber.Text = intRecordOwner

'Initializes variables based on sql requirements

Dim DBConn As SqlConnection

Dim strSQLCmd As String

Dim DBCommand As New SqlCommand

Dim myDataset As New DataSet

Dim DBAdapter As New SqlDataAdapter

'Creates the connection and opens it

DBConn = New SqlConnection(strCONNECTION)

DBConn.Open()

'Initlializes cmd to take in a sql command to execute

Dim cmd As SqlCommand = New SqlCommand("", DBConn)

cmd.CommandType = CommandType.Text

'Query to read in the first name and set it as the textbox

cmd.CommandText = "SELECT FirstName FROM Owners WHERE TUID = " & intRecordOwner

txtFirstName.Text = cmd.ExecuteScalar()

'Query to read in the last name and set it as the textbox

cmd.CommandText = "SELECT LastName FROM Owners WHERE TUID = " & intRecordOwner

txtLastName.Text = cmd.ExecuteScalar()

'Query to read in the street address and set it as the textbox

cmd.CommandText = "SELECT StreetAddress FROM Owners WHERE TUID = " & intRecordOwner

txtAddress.Text = cmd.ExecuteScalar()

'Query to read in the city and set it as the textbox

cmd.CommandText = "SELECT City FROM Owners WHERE TUID = " & intRecordOwner

txtCity.Text = cmd.ExecuteScalar()

'Query to read in the state and set it as the textbox

cmd.CommandText = "SELECT State FROM Owners WHERE TUID = " & intRecordOwner

txtState.Text = cmd.ExecuteScalar()

'Query to read in the zip code and set it as the textbox

cmd.CommandText = "SELECT ZipCode FROM Owners WHERE TUID = " & intRecordOwner

txtZipCode.Text = cmd.ExecuteScalar()

'Query to takes the Make, Model, Color, ModelYear, and VIN based on the OwnerID

strSQLCmd = "SELECT Make, Model, Color, ModelYear, VIN FROM Vehicles WHERE OwnerID = " & intRecordOwner

'Sets the command to the database command

DBCommand.CommandText = strSQLCmd

'Initializes the adapter for the command

DBAdapter = New SqlDataAdapter(strSQLCmd, DBConn)

'Fills the datagridview with the dataset

DBAdapter.Fill(myDataset, "Owners")

'Adds the fill to the datasource

dgvVehicles.DataSource = myDataset.Tables("Owners")

End If

End Sub

'------------------------------------------------------------

'- Subprogram Name: btnPrevious\_Click -

'------------------------------------------------------------

'- Written By: Austin Rippee -

'- Written On: April 3rd, 2022 -

'------------------------------------------------------------

'- Subprogram Purpose: -

'- -

'- This subroutine is called whenever the user clicks the -

'- previous button. It takes the user back 1 record. –

'------------------------------------------------------------

'- Parameter Dictionary (in parameter order): -

'- sender – Identifies which particular control raised the –

'- click event -

'- e – Holds the EventArgs object sent to the routine -

'------------------------------------------------------------

'- Local Variable Dictionary (alphabetically): -

'- cmd - Takes in query commands to execute

'- DBAdapter - Creates the database adapter

'- DBCommand - Creates the database sql command

'- DBConn - Creates the sql connection for the database

'- myDataset - Creates the data set

'- strSQLCmd - Creates the string command

'------------------------------------------------------------

Private Sub btnPrevious\_Click(sender As Object, e As EventArgs) Handles btnPrevious.Click

'Checks if the user is at the first record

If txtIDnumber.Text = 1 Then

MsgBox("You are already at the first record")

Else

'Subtracts 1 from the current record

intRecordOwner -= 1

txtIDnumber.Text = intRecordOwner

'Initializes variables based on sql requirements

Dim DBConn As SqlConnection

Dim strSQLCmd As String

Dim DBCommand As New SqlCommand

Dim myDataset As New DataSet

Dim DBAdapter As New SqlDataAdapter

'Creates the connection and opens it

DBConn = New SqlConnection(strCONNECTION)

DBConn.Open()

'Initlializes cmd to take in a sql command to execute

Dim cmd As SqlCommand = New SqlCommand("", DBConn)

cmd.CommandType = CommandType.Text

'Query to read in the first name and set it as the textbox

cmd.CommandText = "SELECT FirstName FROM Owners WHERE TUID = " & intRecordOwner

txtFirstName.Text = cmd.ExecuteScalar()

'Query to read in the last name and set it as the textbox

cmd.CommandText = "SELECT LastName FROM Owners WHERE TUID = " & intRecordOwner

txtLastName.Text = cmd.ExecuteScalar()

'Query to read in the street address and set it as the textbox

cmd.CommandText = "SELECT StreetAddress FROM Owners WHERE TUID = " & intRecordOwner

txtAddress.Text = cmd.ExecuteScalar()

'Query to read in the city and set it as the textbox

cmd.CommandText = "SELECT City FROM Owners WHERE TUID = " & intRecordOwner

txtCity.Text = cmd.ExecuteScalar()

'Query to read in the state and set it as the textbox

cmd.CommandText = "SELECT State FROM Owners WHERE TUID = " & intRecordOwner

txtState.Text = cmd.ExecuteScalar()

'Query to read in the zip code and set it as the textbox

cmd.CommandText = "SELECT ZipCode FROM Owners WHERE TUID = " & intRecordOwner

txtZipCode.Text = cmd.ExecuteScalar()

'Query to takes the Make, Model, Color, ModelYear, and VIN based on the OwnerID

strSQLCmd = "SELECT Make, Model, Color, ModelYear, VIN FROM Vehicles WHERE OwnerID = " & intRecordOwner

'Sets the command to the database command

DBCommand.CommandText = strSQLCmd

'Initializes the adapter for the command

DBAdapter = New SqlDataAdapter(strSQLCmd, DBConn)

'Fills the datagridview with the dataset

DBAdapter.Fill(myDataset, "Owners")

'Adds the fill to the datasource

dgvVehicles.DataSource = myDataset.Tables("Owners")

End If

End Sub

'------------------------------------------------------------

'- Subprogram Name: btnNext\_Click -

'------------------------------------------------------------

'- Written By: Austin Rippee -

'- Written On: April 3rd, 2022 -

'------------------------------------------------------------

'- Subprogram Purpose: -

'- -

'- This subroutine is called whenever the user clicks the -

'- next button. It takes the user forward 1 button. –

'------------------------------------------------------------

'- Parameter Dictionary (in parameter order): -

'- sender – Identifies which particular control raised the –

'- click event -

'- e – Holds the EventArgs object sent to the routine -

'------------------------------------------------------------

'- Local Variable Dictionary (alphabetically): -

'- cmd - Takes in query commands to execute

'- DBAdapter - Creates the database adapter

'- DBCommand - Creates the database sql command

'- DBConn - Creates the sql connection for the database

'- myDataset - Creates the data set

'- strSQLCmd - Creates the string command

'------------------------------------------------------------

Private Sub btnNext\_Click(sender As Object, e As EventArgs) Handles btnNext.Click

'Initializes variables based on sql requirements

Dim DBConn As SqlConnection

Dim strSQLCmd As String

Dim DBCommand As New SqlCommand

Dim myDataset As New DataSet

Dim DBAdapter As New SqlDataAdapter

'Creates the connection and opens it

DBConn = New SqlConnection(strCONNECTION)

DBConn.Open()

'Initlializes cmd to take in a sql command to execute

Dim cmd As SqlCommand = New SqlCommand("", DBConn)

cmd.CommandType = CommandType.Text

'Checks if the current ID is the max ID

If txtIDnumber.Text = intMaxRecord Then

MsgBox("You are already at the last record")

Else

'Adds 1 to the current record

intRecordOwner += 1

txtIDnumber.Text = intRecordOwner

'Creates the connection and opens it

DBConn = New SqlConnection(strCONNECTION)

DBConn.Open()

'Initlializes cmd to take in a sql command to execute

cmd = New SqlCommand("", DBConn)

cmd.CommandType = CommandType.Text

'Query to read in the first name and set it as the textbox

cmd.CommandText = "SELECT FirstName FROM Owners WHERE TUID = " & intRecordOwner

txtFirstName.Text = cmd.ExecuteScalar()

'Query to read in the last name and set it as the textbox

cmd.CommandText = "SELECT LastName FROM Owners WHERE TUID = " & intRecordOwner

txtLastName.Text = cmd.ExecuteScalar()

'Query to read in the street address and set it as the textbox

cmd.CommandText = "SELECT StreetAddress FROM Owners WHERE TUID = " & intRecordOwner

txtAddress.Text = cmd.ExecuteScalar()

'Query to read in the city and set it as the textbox

cmd.CommandText = "SELECT City FROM Owners WHERE TUID = " & intRecordOwner

txtCity.Text = cmd.ExecuteScalar()

'Query to read in the state and set it as the textbox

cmd.CommandText = "SELECT State FROM Owners WHERE TUID = " & intRecordOwner

txtState.Text = cmd.ExecuteScalar()

'Query to read in the zip code and set it as the textbox

cmd.CommandText = "SELECT ZipCode FROM Owners WHERE TUID = " & intRecordOwner

txtZipCode.Text = cmd.ExecuteScalar()

'Query to takes the Make, Model, Color, ModelYear, and VIN based on the OwnerID

strSQLCmd = "SELECT Make, Model, Color, ModelYear, VIN FROM Vehicles WHERE OwnerID = " & intRecordOwner

'Sets the command to the database command

DBCommand.CommandText = strSQLCmd

'Initializes the adapter for the command

DBAdapter = New SqlDataAdapter(strSQLCmd, DBConn)

'Fills the datagridview with the dataset

DBAdapter.Fill(myDataset, "Owners")

'Adds the fill to the datasource

dgvVehicles.DataSource = myDataset.Tables("Owners")

End If

End Sub

'------------------------------------------------------------

'- Subprogram Name: btnLast\_Click -

'------------------------------------------------------------

'- Written By: Austin Rippee -

'- Written On: April 3rd, 2022 -

'------------------------------------------------------------

'- Subprogram Purpose: -

'- -

'- This subroutine is called whenever the user clicks the -

'- last button. It takes the user to the last record. –

'------------------------------------------------------------

'- Parameter Dictionary (in parameter order): -

'- sender – Identifies which particular control raised the –

'- click event -

'- e – Holds the EventArgs object sent to the routine -

'------------------------------------------------------------

'- Local Variable Dictionary (alphabetically): -

'- cmd - Takes in query commands to execute

'- DBAdapter - Creates the database adapter

'- DBCommand - Creates the database sql command

'- DBConn - Creates the sql connection for the database

'- myDataset - Creates the data set

'- strSQLCmd - Creates the string command

'------------------------------------------------------------

Private Sub btnLast\_Click(sender As Object, e As EventArgs) Handles btnLast.Click

'Initializes variables based on sql requirements

Dim DBConn As SqlConnection

Dim strSQLCmd As String

Dim DBCommand As New SqlCommand

Dim myDataset As New DataSet

Dim DBAdapter As New SqlDataAdapter

'Creates the connection and opens it

DBConn = New SqlConnection(strCONNECTION)

DBConn.Open()

''Initlializes cmd to take in a sql command to execute

Dim cmd As SqlCommand = New SqlCommand("", DBConn)

cmd.CommandType = CommandType.Text

'Checks if the record is at the last possible record

If txtIDnumber.Text = intMaxRecord Then

MsgBox("You are already at the last ID number")

Else

'Sets the current record to the max record

intRecordOwner = intMaxRecord

txtIDnumber.Text = intMaxRecord

'Creates the connection and opens it

DBConn = New SqlConnection(strCONNECTION)

DBConn.Open()

'Initlializes cmd to take in a sql command to execute

cmd = New SqlCommand("", DBConn)

cmd.CommandType = CommandType.Text

'Query to read in the first name and set it as the textbox

cmd.CommandText = "SELECT FirstName FROM Owners WHERE TUID = " & intRecordOwner

txtFirstName.Text = cmd.ExecuteScalar()

'Query to read in the last name and set it as the textbox

cmd.CommandText = "SELECT LastName FROM Owners WHERE TUID = " & intRecordOwner

txtLastName.Text = cmd.ExecuteScalar()

'Query to read in the street address and set it as the textbox

cmd.CommandText = "SELECT StreetAddress FROM Owners WHERE TUID = " & intRecordOwner

txtAddress.Text = cmd.ExecuteScalar()

'Query to read in the city and set it as the textbox

cmd.CommandText = "SELECT City FROM Owners WHERE TUID = " & intRecordOwner

txtCity.Text = cmd.ExecuteScalar()

'Query to read in the state and set it as the textbox

cmd.CommandText = "SELECT State FROM Owners WHERE TUID = " & intRecordOwner

txtState.Text = cmd.ExecuteScalar()

'Query to read in the zip code and set it as the textbox

cmd.CommandText = "SELECT ZipCode FROM Owners WHERE TUID = " & intRecordOwner

txtZipCode.Text = cmd.ExecuteScalar()

'Query to takes the Make, Model, Color, ModelYear, and VIN based on the OwnerID

strSQLCmd = "SELECT Make, Model, Color, ModelYear, VIN FROM Vehicles WHERE OwnerID = " & intRecordOwner

'Sets the command to the database command

DBCommand.CommandText = strSQLCmd

'Initializes the adapter for the command

DBAdapter = New SqlDataAdapter(strSQLCmd, DBConn)

'Fills the datagridview with the dataset

DBAdapter.Fill(myDataset, "Owners")

'Adds the fill to the datasource

dgvVehicles.DataSource = myDataset.Tables("Owners")

End If

End Sub

'------------------------------------------------------------

'- Subprogram Name: btnAdd\_Click -

'------------------------------------------------------------

'- Written By: Austin Rippee -

'- Written On: April 3rd, 2022 -

'------------------------------------------------------------

'- Subprogram Purpose: -

'- -

'- This subroutine is called whenever the user clicks the -

'- add button. This button sets it up to where a user can enter

'– in data to add it to the record.

'------------------------------------------------------------

'- Parameter Dictionary (in parameter order): -

'- sender – Identifies which particular control raised the –

'- click event -

'- e – Holds the EventArgs object sent to the routine -

'------------------------------------------------------------

'- Local Variable Dictionary (alphabetically): -

'- (None) -

'------------------------------------------------------------

Private Sub btnAdd\_Click(sender As Object, e As EventArgs) Handles btnAdd.Click

'Sets the action as an Add function

strActions = "Add"

'Setting false to various buttons

btnFirst.Enabled = False

btnPrevious.Enabled = False

btnNext.Enabled = False

btnLast.Enabled = False

btnAdd.Visible = False

btnDelete.Visible = False

btnUpdate.Visible = False

'Setting true and enabling textboxes to enter data

btnSave.Visible = True

btnCancel.Visible = True

txtFirstName.Enabled = True

txtFirstName.Text = ""

txtLastName.Enabled = True

txtLastName.Text = ""

txtAddress.Enabled = True

txtAddress.Text = ""

txtCity.Enabled = True

txtCity.Text = ""

txtState.Enabled = True

txtState.Text = ""

txtZipCode.Enabled = True

txtZipCode.Text = ""

'Sets the record 1 higher than the Max ID

intRecordOwner = ReturnMaxID()

intRecordOwner += 1

txtIDnumber.Text = intRecordOwner

End Sub

'------------------------------------------------------------

'- Subprogram Name: btnUpdate\_Click -

'------------------------------------------------------------

'- Written By: Austin Rippee -

'- Written On: April 3rd, 2022 -

'------------------------------------------------------------

'- Subprogram Purpose: -

'- -

'- This subroutine is called whenever the user clicks the -

'- update button. This button sets it up to where a user can

'– update a row of data in the table.

'------------------------------------------------------------

'- Parameter Dictionary (in parameter order): -

'- sender – Identifies which particular control raised the –

'- click event -

'- e – Holds the EventArgs object sent to the routine -

'------------------------------------------------------------

'- Local Variable Dictionary (alphabetically): -

'- (None) -

'------------------------------------------------------------

Private Sub btnUpdate\_Click(sender As Object, e As EventArgs) Handles btnUpdate.Click

'Sets the action as an Add function

strActions = "Update"

'Setting false to various buttons

btnFirst.Enabled = False

btnPrevious.Enabled = False

btnNext.Enabled = False

btnLast.Enabled = False

btnAdd.Visible = False

btnDelete.Visible = False

btnUpdate.Visible = False

'Setting true and enabling textboxes to enter data

btnSave.Visible = True

btnCancel.Visible = True

txtFirstName.Enabled = True

txtLastName.Enabled = True

txtAddress.Enabled = True

txtCity.Enabled = True

txtState.Enabled = True

txtZipCode.Enabled = True

End Sub

'------------------------------------------------------------

'- Subprogram Name: btnDelete\_Click -

'------------------------------------------------------------

'- Written By: Austin Rippee -

'- Written On: April 3rd, 2022 -

'------------------------------------------------------------

'- Subprogram Purpose: -

'- -

'- This subroutine is called whenever the user clicks the -

'- delete button. This button sets it up to where a user can remove

'– a row of data from the table.

'------------------------------------------------------------

'- Parameter Dictionary (in parameter order): -

'- sender – Identifies which particular control raised the –

'- click event -

'- e – Holds the EventArgs object sent to the routine -

'------------------------------------------------------------

'- Local Variable Dictionary (alphabetically): -

'- (None) -

'------------------------------------------------------------

Private Sub btnDelete\_Click(sender As Object, e As EventArgs) Handles btnDelete.Click

'Sets the action as an Add function

strActions = "Delete"

'Setting true and false to various buttons

btnFirst.Enabled = False

btnPrevious.Enabled = False

btnNext.Enabled = False

btnLast.Enabled = False

btnAdd.Visible = False

btnDelete.Visible = False

btnUpdate.Visible = False

btnSave.Visible = True

btnCancel.Visible = True

End Sub

'------------------------------------------------------------

'- Subprogram Name: btnSave\_Click -

'------------------------------------------------------------

'- Written By: Austin Rippee -

'- Written On: April 3rd, 2022 -

'------------------------------------------------------------

'- Subprogram Purpose: -

'- -

'- This subroutine is called whenever the user clicks the -

'- save button. The user's current info will be saved based

'– on if the user pressed Add, UPDATE, or DELETE

'------------------------------------------------------------

'- Parameter Dictionary (in parameter order): -

'- sender – Identifies which particular control raised the –

'- click event -

'- e – Holds the EventArgs object sent to the routine -

'------------------------------------------------------------

'- Local Variable Dictionary (alphabetically): -

'- cmd - Takes in query commands to execute

'------------------------------------------------------------

Private Sub btnSave\_Click(sender As Object, e As EventArgs) Handles btnSave.Click

'Checks if any textbox is empty

If txtFirstName.Text = "" Or txtLastName.Text = "" Or txtAddress.Text = "" Or txtCity.Text = "" Or txtState.Text = "" Or txtZipCode.Text = "" Then

MsgBox("Fill in all textboxes before saving")

ElseIf strActions = "Add" Then

'Initlializes cmd to take in a sql command to execute

Dim cmd As SqlCommand = New SqlCommand("", DBConn)

cmd.CommandType = CommandType.Text

'Query to INSERT INTO the text from the textboxes and adds another row with the info the database table

cmd.CommandText = "INSERT INTO Owners(TUID, FirstName, LastName, StreetAddress, City, State, ZipCode) VALUES('" & txtIDnumber.Text & "' , '" & txtFirstName.Text & "', '" & txtLastName.Text & "', '" & txtAddress.Text & "', '" & txtCity.Text & "', '" & txtState.Text & "', '" & txtZipCode.Text & "')"

cmd.ExecuteScalar()

'Sets various buttons to true

btnFirst.Enabled = True

btnPrevious.Enabled = True

btnNext.Enabled = True

btnLast.Enabled = True

btnAdd.Visible = True

btnDelete.Visible = True

btnUpdate.Visible = True

'Sets various buttons and textboxes to false

btnSave.Visible = False

btnCancel.Visible = False

txtFirstName.Enabled = False

txtLastName.Enabled = False

txtAddress.Enabled = False

txtCity.Enabled = False

txtState.Enabled = False

txtZipCode.Enabled = False

'Adds 1 to the current record number

intRecordOwner += 1

intRecordOwner = txtIDnumber.Text

intMaxRecord += 1

'Initlializes cmd to take in a sql command to execute

cmd.CommandType = CommandType.Text

'Query to read in the first name and set it as the textbox

cmd.CommandText = "SELECT FirstName FROM Owners WHERE TUID = " & intRecordOwner

txtFirstName.Text = cmd.ExecuteScalar()

'Query to read in the last name and set it as the textbox

cmd.CommandText = "SELECT LastName FROM Owners WHERE TUID = " & intRecordOwner

txtLastName.Text = cmd.ExecuteScalar()

'Query to read in the street address and set it as the textbox

cmd.CommandText = "SELECT StreetAddress FROM Owners WHERE TUID = " & intRecordOwner

txtAddress.Text = cmd.ExecuteScalar()

'Query to read in the city and set it as the textbox

cmd.CommandText = "SELECT City FROM Owners WHERE TUID = " & intRecordOwner

txtCity.Text = cmd.ExecuteScalar()

'Query to read in the state and set it as the textbox

cmd.CommandText = "SELECT State FROM Owners WHERE TUID = " & intRecordOwner

txtState.Text = cmd.ExecuteScalar()

'Query to read in the zip code and set it as the textbox

cmd.CommandText = "SELECT ZipCode FROM Owners WHERE TUID = " & intRecordOwner

txtZipCode.Text = cmd.ExecuteScalar()

'Resets Action

strActions = ""

ElseIf strActions = "Delete" Then

'Initlializes cmd to take in a sql command to execute

Dim cmd As SqlCommand = New SqlCommand("", DBConn)

cmd.CommandType = CommandType.Text

'Query to DELETE a record from the table based on the record number

cmd.CommandText = "DELETE FROM Owners WHERE TUID = " & intRecordOwner

cmd.ExecuteScalar()

MsgBox("Entry deleted")

'Sets various buttons to true

btnFirst.Enabled = True

btnPrevious.Enabled = True

btnNext.Enabled = True

btnLast.Enabled = True

btnAdd.Visible = True

btnDelete.Visible = True

btnUpdate.Visible = True

'Sets various buttons and textboxes to false

btnSave.Visible = False

btnCancel.Visible = False

txtFirstName.Enabled = False

txtLastName.Enabled = False

txtAddress.Enabled = False

txtCity.Enabled = False

txtState.Enabled = False

txtZipCode.Enabled = False

'Removes 1 from the current record number

intRecordOwner -= 1

txtIDnumber.Text = intRecordOwner

intMaxRecord -= 1

'Initlializes cmd to take in a sql command to execute

cmd.CommandType = CommandType.Text

'Query to read in the first name and set it as the textbox

cmd.CommandText = "SELECT FirstName FROM Owners WHERE TUID = " & intRecordOwner

txtFirstName.Text = cmd.ExecuteScalar()

'Query to read in the last name and set it as the textbox

cmd.CommandText = "SELECT LastName FROM Owners WHERE TUID = " & intRecordOwner

txtLastName.Text = cmd.ExecuteScalar()

'Query to read in the street address and set it as the textbox

cmd.CommandText = "SELECT StreetAddress FROM Owners WHERE TUID = " & intRecordOwner

txtAddress.Text = cmd.ExecuteScalar()

'Query to read in the city and set it as the textbox

cmd.CommandText = "SELECT City FROM Owners WHERE TUID = " & intRecordOwner

txtCity.Text = cmd.ExecuteScalar()

'Query to read in the state and set it as the textbox

cmd.CommandText = "SELECT State FROM Owners WHERE TUID = " & intRecordOwner

txtState.Text = cmd.ExecuteScalar()

'Query to read in the zip code and set it as the textbox

cmd.CommandText = "SELECT ZipCode FROM Owners WHERE TUID = " & intRecordOwner

txtZipCode.Text = cmd.ExecuteScalar()

'Resets Action

strActions = ""

ElseIf strActions = "Update" Then

'Initlializes cmd to take in a sql command to execute

Dim cmd As SqlCommand = New SqlCommand("", DBConn)

cmd.CommandType = CommandType.Text

'Query to UPDATE a record from the table

cmd.CommandText = "UPDATE Owners SET FirstName = '" & txtFirstName.Text & "', LastName = '" & txtLastName.Text & "', StreetAddress = '" & txtAddress.Text & "', City = '" & txtCity.Text & "', State = '" & txtState.Text & "', ZipCode = '" & txtZipCode.Text & "' WHERE TUID = " & intRecordOwner

cmd.ExecuteScalar()

'Sets various buttons to true

btnFirst.Enabled = True

btnPrevious.Enabled = True

btnNext.Enabled = True

btnLast.Enabled = True

btnAdd.Visible = True

btnDelete.Visible = True

btnUpdate.Visible = True

'Sets various buttons and textboxes to false

btnSave.Visible = False

btnCancel.Visible = False

txtFirstName.Enabled = False

txtLastName.Enabled = False

txtAddress.Enabled = False

txtCity.Enabled = False

txtState.Enabled = False

txtZipCode.Enabled = False

'Initlializes cmd to take in a sql command to execute

cmd.CommandType = CommandType.Text

'Query to read in the first name and set it as the textbox

cmd.CommandText = "SELECT FirstName FROM Owners WHERE TUID = " & intRecordOwner

txtFirstName.Text = cmd.ExecuteScalar()

'Query to read in the last name and set it as the textbox

cmd.CommandText = "SELECT LastName FROM Owners WHERE TUID = " & intRecordOwner

txtLastName.Text = cmd.ExecuteScalar()

'Query to read in the street address and set it as the textbox

cmd.CommandText = "SELECT StreetAddress FROM Owners WHERE TUID = " & intRecordOwner

txtAddress.Text = cmd.ExecuteScalar()

'Query to read in the city and set it as the textbox

cmd.CommandText = "SELECT City FROM Owners WHERE TUID = " & intRecordOwner

txtCity.Text = cmd.ExecuteScalar()

'Query to read in the state and set it as the textbox

cmd.CommandText = "SELECT State FROM Owners WHERE TUID = " & intRecordOwner

txtState.Text = cmd.ExecuteScalar()

'Query to read in the zip code and set it as the textbox

cmd.CommandText = "SELECT ZipCode FROM Owners WHERE TUID = " & intRecordOwner

txtZipCode.Text = cmd.ExecuteScalar()

'Resets Action

strActions = ""

Else

MsgBox("Unknown Function")

End If

End Sub

'------------------------------------------------------------

'- Subprogram Name: btnCancel\_Click -

'------------------------------------------------------------

'- Written By: Austin Rippee -

'- Written On: April 3rd, 2022 -

'------------------------------------------------------------

'- Subprogram Purpose: -

'- -

'- This subroutine is called whenever the user clicks the -

'- cancel button. The process will be cancelled. –

'------------------------------------------------------------

'- Parameter Dictionary (in parameter order): -

'- sender – Identifies which particular control raised the –

'- click event -

'- e – Holds the EventArgs object sent to the routine -

'------------------------------------------------------------

'- Local Variable Dictionary (alphabetically): -

'- cmd - Takes in query commands to execute

'------------------------------------------------------------

Private Sub btnCancel\_Click(sender As Object, e As EventArgs) Handles btnCancel.Click

'Sets various buttons to true

btnFirst.Enabled = True

btnPrevious.Enabled = True

btnNext.Enabled = True

btnLast.Enabled = True

btnAdd.Visible = True

btnDelete.Visible = True

btnUpdate.Visible = True

'Sets various buttons to false

btnSave.Visible = False

btnCancel.Visible = False

txtFirstName.Enabled = False

txtLastName.Enabled = False

txtAddress.Enabled = False

txtCity.Enabled = False

txtState.Enabled = False

txtZipCode.Enabled = False

'Sets the record as 1 to go back to the original record

intRecordOwner = 1

txtIDnumber.Text = intRecordOwner

'Initlializes cmd to take in a sql command to execute

Dim cmd As SqlCommand = New SqlCommand("", DBConn)

cmd.CommandType = CommandType.Text

'Query to read in the first name and set it as the textbox

cmd.CommandText = "SELECT FirstName FROM Owners WHERE TUID = " & intRecordOwner

txtFirstName.Text = cmd.ExecuteScalar()

'Query to read in the last name and set it as the textbox

cmd.CommandText = "SELECT LastName FROM Owners WHERE TUID = " & intRecordOwner

txtLastName.Text = cmd.ExecuteScalar()

'Query to read in the street address and set it as the textbox

cmd.CommandText = "SELECT StreetAddress FROM Owners WHERE TUID = " & intRecordOwner

txtAddress.Text = cmd.ExecuteScalar()

'Query to read in the city and set it as the textbox

cmd.CommandText = "SELECT City FROM Owners WHERE TUID = " & intRecordOwner

txtCity.Text = cmd.ExecuteScalar()

'Query to read in the state and set it as the textbox

cmd.CommandText = "SELECT State FROM Owners WHERE TUID = " & intRecordOwner

txtState.Text = cmd.ExecuteScalar()

'Query to read in the zip code and set it as the textbox

cmd.CommandText = "SELECT ZipCode FROM Owners WHERE TUID = " & intRecordOwner

txtZipCode.Text = cmd.ExecuteScalar()

End Sub

'------------------------------------------------------------

'- Function Name: ReturnMaxID() -

'------------------------------------------------------------

'- Written By: Austin Rippee -

'- Written On: April 3rd, 2022 -

'------------------------------------------------------------

'- Function Purpose: -

'- -

'- This function is called when a user wants to get the max

'– amount of records to get the highest TUID of owners.

'------------------------------------------------------------

'- Parameter Dictionary (in parameter order): -

'- (None)

'------------------------------------------------------------

'- Local Variable Dictionary (alphabetically): -

'- cmd - Takes in query commands to execute

'- DBConn - Creates the sql connection for the database

'- intMaxValue - Int value to store the max TUID value of the owners table

'------------------------------------------------------------

'- Returns: -

'- Integer – telling how many records were found -

'------------------------------------------------------------

Public Function ReturnMaxID() As Integer

'Initializes the database connection

Dim DBConn As SqlConnection

'Creates the connection and opens it

DBConn = New SqlConnection(strCONNECTION)

DBConn.Open()

'Initlializes cmd to take in a sql command to execute

Dim cmd As SqlCommand = New SqlCommand("", DBConn)

cmd.CommandType = CommandType.Text

'Query to get the max TUID number and set it as the max value

cmd.CommandText = "SELECT MAX(TUID) FROM Owners"

Dim intMaxValue As Integer = cmd.ExecuteScalar()

Return intMaxValue

End Function

End Class

Table

Description automatically generatedGraphical user interface, application, Word

Description automatically generatedGraphical user interface, Word

Description automatically generatedGraphical user interface, application, Word

Description automatically generated