

6854 Brandon de Bruyn

PRG521 SA Q4

CODE:

Form Address

```
public partial class Address : Form
{
    int ComplexNumber = 0;

    // Connection String established here for later use
    public string connectionString = @"Data Source=DESKTOP-A9EC70F; Initial
Catalog=DBCtuLogistics;Integrated Security=True";
    SqlCommand formCommand = new SqlCommand();
    SqlDataAdapter adapt;

    public Address()
    {
        InitializeComponent();
        showData();
    }

    // Method to display the data on the data grid view
    private void showData()
    {
        using (SqlConnection connect = new SqlConnection(connectionString))
        {
            connect.Open();

            DataTable Table = new DataTable();
            adapt = new SqlDataAdapter("SELECT * FROM [DBCtuLogistics].[dbo].[Address]",
connect);
            adapt.Fill(Table);
            dataGridView1.DataSource = Table;
            connect.Close();

        }
    }

    // Method to clear the text boxes after it's been used in the create, update or delete button
    private void ClearTextBoxes()
```

```

{
    ComplexNmbrTxtbox.Text = "";
    ComplexNameTxtbox.Text = "";
    StreetTxtbox.Text = "";
    SuburbTxtbox.Text = "";
    CityTxtbox.Text = "";
    ProvinceTxtbox.Text = "";
    CountryTxtbox.Text = "";
    PostalCodeTxtbox.Text = "";
}
// Displays the content to string on data grid view
private void dataGridView1_CellContentClick(object sender, DataGridViewCellEventArgs
e)
{
    ComplexNmbrTxtbox.Text = dataGridView1.Rows[e.RowIndex].Cells[1].Value.ToString();
    ComplexNameTxtbox.Text =
dataGridView1.Rows[e.RowIndex].Cells[2].Value.ToString();
    StreetTxtbox.Text = dataGridView1.Rows[e.RowIndex].Cells[3].Value.ToString();
    SuburbTxtbox.Text = dataGridView1.Rows[e.RowIndex].Cells[4].Value.ToString();
    CityTxtbox.Text = dataGridView1.Rows[e.RowIndex].Cells[5].Value.ToString();
    ProvinceTxtbox.Text = dataGridView1.Rows[e.RowIndex].Cells[6].Value.ToString();
    CountryTxtbox.Text = dataGridView1.Rows[e.RowIndex].Cells[7].Value.ToString();
    PostalCodeTxtbox.Text = dataGridView1.Rows[e.RowIndex].Cells[8].Value.ToString();
}

// Create button created here
private void CreateBtn_Click(object sender, EventArgs e)
{
    SqlConnection connect = new SqlConnection(connectionString);
    connect.Open();

    if (ComplexNmbrTxtbox.Text != "" && ComplexNameTxtbox.Text != "" &&
StreetTxtbox.Text != "" && SuburbTxtbox.Text != "" && CityTxtbox.Text != "" &&
ProvinceTxtbox.Text != "" && CountryTxtbox.Text != "" && PostalCodeTxtbox.Text != "")
    {
        SqlCommand formCommand = new SqlCommand("Insert into Address(CNumber,
CName, Street, Suburb, City, Province, Country, PostalCode) values (@ComplexNumber,
@ComplexName, @Street, @Suburb, @City, @Province, @Country, @PostalCode)", connect);

        formCommand.Connection = connect;

        formCommand.Parameters.AddWithValue("@ComplexNumber",
ComplexNmbrTxtbox.Text);

```

```

        formCommand.Parameters.AddWithValue("@ComplexName",
ComplexNameTxtbox.Text);
        formCommand.Parameters.AddWithValue("@Street", StreetTxtbox.Text);
        formCommand.Parameters.AddWithValue("@Suburb", SuburbTxtbox.Text);
        formCommand.Parameters.AddWithValue("@City", CityTxtbox.Text);
        formCommand.Parameters.AddWithValue("@Province", ProvinceTxtbox.Text);
        formCommand.Parameters.AddWithValue("@Country", CountryTxtbox.Text);
        formCommand.Parameters.AddWithValue("@PostalCode", PostalCodeTxtbox.Text);

        formCommand.ExecuteNonQuery();
        connect.Close();
        MessageBox.Show("Your record has been saved.");

        showData();
        ClearTextBoxes();

    }
    else
    {
        MessageBox.Show("Missing some or all fields. Please fill in all the fields");
    }
}

// Read button created here
private void ReadBtn_Click(object sender, EventArgs e)
{
    SqlConnection connect = new SqlConnection(connectionString);
    formCommand.Connection = connect;

    if (ComplexNmbrTxtbox.Text != "")
    {
        int Find = Convert.ToInt32(ComplexNmbrTxtbox.Text);
        formCommand = new SqlCommand("Select CNumber, CName, Street, Suburb, City,
Province, Country, PostalCode from Address where ComplexNumber =" + Find);
        formCommand.CommandType = CommandType.Text;
        formCommand.Connection = connect;
        connect.Open();

        SqlDataReader reader = formCommand.ExecuteReader();
        reader.Read();

        ComplexNmbrTxtbox.Text = reader["ComplexNumber"].ToString();
        ComplexNameTxtbox.Text = reader["ComplexName"].ToString();
        StreetTxtbox.Text = reader["Street"].ToString();

```

```

        SuburbTxtbox.Text = reader["Suburb"].ToString();
        CityTxtbox.Text = reader["City"].ToString();
        ProvinceTxtbox.Text = reader["Province"].ToString();
        CountryTxtbox.Text = reader["Country"].ToString();
        PostalCodeTxtbox.Text = reader["PostalCode"].ToString();

        connect.Close();
    }
    else
    {
        MessageBox.Show("No Complex Number entered. Please enter Complex Number.");
    }
}

// Update button created
private void UpdateBtn_Click(object sender, EventArgs e)
{
    SqlConnection connect = new SqlConnection(connectionString);
    formCommand.Connection = connect;

    if (ComplexNmbrTxtbox.Text != "" && ComplexNameTxtbox.Text != "" &&
        StreetTxtbox.Text != "" && SuburbTxtbox.Text != "" && CityTxtbox.Text != "" &&
        ProvinceTxtbox.Text != "" && CountryTxtbox.Text != "" && PostalCodeTxtbox.Text != "")
    {
        formCommand = new SqlCommand("update Address set
CNumber=@ComplexNumber, CName=@ComplexName, Street=@Street, Suburb=@Suburb,
City=@City, Province=@Province, Country=@Country, PostalCode=@PostalCode where
ComplexNumber=@ComplexNumber AND ComplexName=@ComplexName", connect);
        formCommand.Connection = connect;
        connect.Open();

        formCommand.Parameters.AddWithValue("@ComplexNumber",
ComplexNmbrTxtbox.Text);
        formCommand.Parameters.AddWithValue("@ComplexName",
ComplexNameTxtbox.Text);
        formCommand.Parameters.AddWithValue("@Street", StreetTxtbox.Text);
        formCommand.Parameters.AddWithValue("@Suburb", SuburbTxtbox.Text);
        formCommand.Parameters.AddWithValue("@City", CityTxtbox.Text);
        formCommand.Parameters.AddWithValue("@Province", ProvinceTxtbox.Text);
        formCommand.Parameters.AddWithValue("@Country", CountryTxtbox.Text);
        formCommand.Parameters.AddWithValue("@PostalCode", PostalCodeTxtbox.Text);
        formCommand.ExecuteNonQuery();
        MessageBox.Show("Your record has been updated");
        connect.Close();
    }
}

```

```

        showData();
        ClearTextBoxes();
    }
    else
    {
        MessageBox.Show("No record selected. Insert a record you wish to update with
Complex Number and Complex Name.");
    }
}

// Delete button created
private void DeleteBtn_Click(object sender, EventArgs e)
{
    SqlConnection connect = new SqlConnection(connectionString);
    formCommand.Connection = connect;

    ComplexNumber = Convert.ToInt32(ComplexNmbrTxtbox.Text);
    if (ComplexNumber != 0)
    {
        formCommand = new SqlCommand("delete Address where CNumber =
@ComplexNumber AND CName=@ComplexName", connect);
        connect.Open();
        formCommand.Parameters.AddWithValue("@ComplexNumber", ComplexNumber);
        formCommand.Parameters.AddWithValue("@ComplexName",
ComplexNameTxtbox.Text);
        formCommand.ExecuteNonQuery();
        connect.Close();
        MessageBox.Show("Record has been deleted.");
        showData();
        ClearTextBoxes();
    }
    else
    {
        MessageBox.Show("No Complex Number or Complex Name filled in. Please fill in a
Complex Number and Complex Name.");
    }
}

// Exit button created here
// Returns user to main menu
private void ExitBtn_Click(object sender, EventArgs e)
{
    this.Hide();
}

```

```

private void Address_Load(object sender, EventArgs e)
{
}
}

```

SCREENSHOTS:

The screenshot shows a Windows application window titled "FrmAddress". The window contains a form for entering address information and a table displaying a list of addresses.

Address Information:

Complex Number: Province:
 Complex Name: Country:
 Street: Postal Code:
 Suburb:
 City:

Buttons: Create Read Update Delete Exit

	id	CNumber	CName	Street	Suburb	City
▶	1	12	LOLZ	Theunissen Cres	Fichardt Park	Bloemfontein
*						

The table has a scrollbar at the bottom, indicating it can display more rows than are currently visible.

FrmAddress

Address Information:

Complex Number:

4

Complex Name:

Question

Street:

Thein

Suburb:

FC

City:

BV

Province:

LOLZ

Country:

XD

Postal Code:

39145

Create

Read

Update

Delete

Exit

	id	CNumber	CName	Street	Suburb	City
▶	1	12	LOLZ	Theunissen Cres	Fichardt Park	Bloemfontein
*						

×

Your record has been saved.

OK

FrmAddress

Address Information:

Complex Number:

Complex Name:

Street:

Suburb:

City:

Province:

Country:

Postal Code:

Create Read Update Delete Exit

	id	CNumber	CName	Street	Suburb	City
	1	12	LOLZ	Theunissen Cres	Fichardt Park	Bloemfontein
▶	2	4	Question	Thein	FC	BV
*						

Record has been deleted.

OK

FrmAddress

Address Information:

Complex Number: Province:

Complex Name: Country:

Street: Postal Code:

Suburb:

City:

Create Read Update Delete Exit

	id	CNumber	CName	Street	Suburb	City
▶	1	12	LOLZ	Theunissen Cres	Fichardt Park	Bloemfontein
*						

< >