

2021

PRG521 Summative

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Question 4:



Question 4

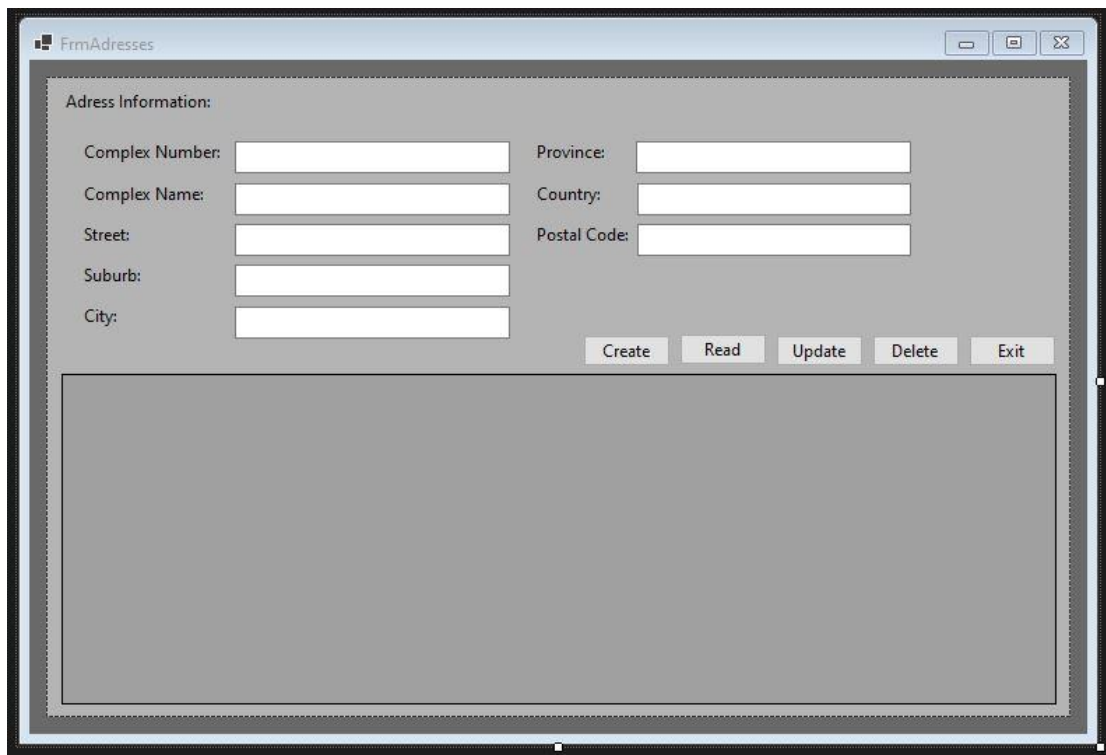
10 pts

Form Address-Functionality

- Ensure that this form is connected to the DBCTuLogistics created in **question 2**. The Create button will insert new data into the Database, the read button will retrieve data from the database and display it on the form, Update button will update a record into the database using complex number and complex name, and the delete button will delete a record into the database using complex number and complex name.

You will have to provide screenshots and the full program showcasing how the program function.

Screen shots:



```
FrmAddresses.cs | FrmAddresses.cs [Design] | FrmCustomers.cs [Design] | FrmFreight.cs [Design] | FrmDriver.cs [Design] | FrmStatus.cs [Design]
PRG521Summative6955 - PRG521Summative6955.FrmAddresses - FrmAddresses_Load(object sender, EventArgs e)

1 //6955 Laikin Barnard
2 using System;
3 using System.Collections.Generic;
4 using System.ComponentModel;
5 using System.Data;
6 using System.Drawing;
7 using System.Linq;
8 using System.Text;
9 using System.Threading.Tasks;
10 using System.Windows.Forms;
11 using System.Data.SqlClient;
12
13
14
15 namespace PRG521Summative6955
16 {
17     //6955 Laikin Barnard
18     4 references
19     public partial class FrmAddresses : Form
20     {
21         1 reference
22         public FrmAddresses()
23         {
24             InitializeComponent();
25         }
26
27         SqlConnection connection = new SqlConnection("Data Source=DESKTOP-2AAMSH7\\SQLEXPRESS;Initial Catalog=ORCtuLogistics;Integrated Security=True");
28         SqlCommand cmd = new SqlCommand();
29         int AddressID;
30
31         1 reference
32         private void btnCreate_Click(object sender, EventArgs e)
33         {
34             connection.Open();
35
36             cmd = new SqlCommand("INSERT INTO frmAddress (ComplexNumber,ComplexName,Street,Suburb,City,Province,Country,PostalCode)" +
37                 " VALUES ('" + txtComplexNumber.Text + "', '" + txtComplexName.Text + "', '" + txtStreet.Text + "', '" + txtSub.Text + "', '" + txtCity.Text + "', '" + txtProvince.Text + "', '" + txtCountry.Text + "', '" + txtPostalCode.Text + "')", connection);
38             cmd.ExecuteNonQuery();
39             MessageBox.Show("Details Saved Successfully");
40             connection.Close();
41
42             displaydata();
43             TextBoxClear();
44         }
45
46         4 references
47         public void displaydata()
48         {
49             SqlDataAdapter SQLAdapt;
50             DataTable dattbl;
51             connection.Open();
52             SQLAdapt = new SqlDataAdapter("Select * From frmAddress", connection);
53             dattbl = new DataTable();
54             SQLAdapt.Fill(dattbl);
55         }
56     }
57 }
```

```
FrmAddresses.cs x FrmAddresses.cs [Design] FrmCustomers.cs [Design] FrmFreight.cs [Design] FrmDriver.cs [Design] FrmStatus.cs [Design]
PRGS21Summitive6955 PRGS21Summitive6955.FrmAddresses FrmAddresses_Load(object sender, EventArgs e)
49 SQLAdapt = new SqlDataAdapter("Select * From frmAddress", connection);
50 DataTable = new DataTable();
51 SQLAdapt.Fill(DataTable);
52 dtGridAddress.DataSource = DataTable;
53 connection.Close();
54 }
55
56 1 reference
57 public void TextBoxClear()
58 {
59     txtCompNumber.Clear();
60     txtCompName.Clear();
61     txtStreet.Clear();
62     txtCity.Clear();
63     txtCountry.Clear();
64     txtPostalCode.Clear();
65     txtProvince.Clear();
66     txtSub.Clear();
67     txtCompNumber.Focus();
68 }
69
70 1 reference
71 private void FrmAddresses_Load(object sender, EventArgs e)
72 {
73     txtCompNumber.Focus();
74 }
75
76 1 reference
77 private void btnRead_Click(object sender, EventArgs e)
78 {
79     displaydata();
80 }
81
82 1 reference
83 private void btnUpdate_Click(object sender, EventArgs e)
84 {
85     try
86     {
87         connection.Open();
88         cmd = new SqlCommand("Update frmAddress set ComplexNumber= " + txtCompNumber.Text + ",ComplexName= " + txtCompName.Text + ",Street= " + txtStreet.Text + ",Suburb= " + txtSub.Text + ",City= " + txtCity.Text + ",Country= " + txtCountry.Text + ",PostalCode= " + txtPostalCode.Text + ",Province= " + txtProvince.Text + ",ID= " + txtID.Text, connection);
89         cmd.ExecuteNonQuery();
90         MessageBox.Show("Updated");
91         connection.Close();
92         displaydata();
93     }
94     catch (Exception ex)
95     {
96         MessageBox.Show(ex.Message, "Error", MessageBoxButtons.OK, MessageBoxIcon.Error);
97     }
98 }
99
100 1 reference
101 private void btnDelete_Click(object sender, EventArgs e)
102 {
103     connection.Open();
104     cmd = new SqlCommand("delete from frmAddress where ID = " + AddressID, connection);
105     cmd.ExecuteNonQuery();
106     MessageBox.Show("Deleted");
107     connection.Close();
108     displaydata();
109 }
110
111 1 reference
112 private void btnExit_Click(object sender, EventArgs e)
113 {
114     Application.Exit();
115 }
116
117 1 reference
118 private void dtGridAddress_CellClick(object sender, DataGridViewCellEventArgs e)
119 {
120     AddressID = Convert.ToInt32(dtGridAddress.Rows[e.RowIndex].Cells[0].Value.ToString());
121     txtCompNumber.Text = dtGridAddress.Rows[e.RowIndex].Cells[1].Value.ToString();
122     txtCompName.Text = dtGridAddress.Rows[e.RowIndex].Cells[2].Value.ToString();
123     txtStreet.Text = dtGridAddress.Rows[e.RowIndex].Cells[3].Value.ToString();
124     txtCity.Text = dtGridAddress.Rows[e.RowIndex].Cells[4].Value.ToString();
125     txtCountry.Text = dtGridAddress.Rows[e.RowIndex].Cells[5].Value.ToString();
126     txtProvince.Text = dtGridAddress.Rows[e.RowIndex].Cells[6].Value.ToString();
127     txtPostalCode.Text = dtGridAddress.Rows[e.RowIndex].Cells[7].Value.ToString();
128     txtSub.Text = dtGridAddress.Rows[e.RowIndex].Cells[8].Value.ToString();
129 }
```

```
FrmAddresses.cs x FrmAddresses.cs [Design] FrmCustomers.cs [Design] FrmFreight.cs [Design] FrmDriver.cs [Design] FrmStatus.cs [Design]
PRGS21Summitive6955 PRGS21Summitive6955.FrmAddresses FrmAddresses_Load(object sender, EventArgs e)
129 }
130
131 1 reference
132 private void btnDelete_Click(object sender, EventArgs e)
133 {
134     connection.Open();
135     cmd = new SqlCommand("delete from frmAddress where ID = " + AddressID, connection);
136     cmd.ExecuteNonQuery();
137     MessageBox.Show("Deleted");
138     connection.Close();
139     displaydata();
140 }
141
142 1 reference
143 private void btnExit_Click(object sender, EventArgs e)
144 {
145     Application.Exit();
146 }
147
148 1 reference
149 private void dtGridAddress_CellClick(object sender, DataGridViewCellEventArgs e)
150 {
151     AddressID = Convert.ToInt32(dtGridAddress.Rows[e.RowIndex].Cells[0].Value.ToString());
152     txtCompNumber.Text = dtGridAddress.Rows[e.RowIndex].Cells[1].Value.ToString();
153     txtCompName.Text = dtGridAddress.Rows[e.RowIndex].Cells[2].Value.ToString();
154     txtStreet.Text = dtGridAddress.Rows[e.RowIndex].Cells[3].Value.ToString();
155     txtCity.Text = dtGridAddress.Rows[e.RowIndex].Cells[4].Value.ToString();
156     txtCountry.Text = dtGridAddress.Rows[e.RowIndex].Cells[5].Value.ToString();
157     txtProvince.Text = dtGridAddress.Rows[e.RowIndex].Cells[6].Value.ToString();
158     txtPostalCode.Text = dtGridAddress.Rows[e.RowIndex].Cells[7].Value.ToString();
159     txtSub.Text = dtGridAddress.Rows[e.RowIndex].Cells[8].Value.ToString();
160 }
161
162 //6955 Laikin Barnard
163
164 }
```

Code:

```
//6955 Laikin Barnard
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
using System.Data.SqlClient;

namespace PRG521Summitive6955
{
    //6955 Laikin Barnard
    public partial class FrmAddresses : Form
    {
        public FrmAddresses()
        {
            InitializeComponent();

            SqlConnection connection = new SqlConnection("Data Source=DESKTOP-2AAM5H7\\SQLEXPRESS;Initial Catalog=DBCtuLogistics;Integrated Security=True");
            SqlCommand cmd = new SqlCommand();
            int AddressID;

            private void btnCreate_Click(object sender, EventArgs e)
            {
                connection.Open();

                cmd = new SqlCommand("INSERT INTO frmAddress (ComplexNumber,ComplexName,Street,Suburb,City,Province,Country,PostalCode)" +
                    " VALUES ('" + txtCompNumber.Text + "', '" + txtCompName.Text + "', '" +
                    + txtStreet.Text + "', '" + txtSub.Text + "', '" + txtCity.Text + "', '" +
                    txtProvince.Text + "', '" + txtCountry.Text + "', '" + txtPostalCode.Text + ")",
                    connection);
                cmd.ExecuteNonQuery();
                MessageBox.Show("Details Saved Successfully");
                connection.Close();

                displaydata();
                TextboxClear();
            }

            public void displaydata()
            {
                SqlDataAdapter SQLAddapt;
                DataTable dattbl;
                connection.Open();
                SQLAddapt = new SqlDataAdapter("Select * From frmAddress", connection);
                dattbl = new DataTable();
                SQLAddapt.Fill(dattbl);
                dtGridAdress.DataSource = dattbl;
                connection.Close();
            }

            public void TextboxClear()
```

```

{
    txtCompNumber.Clear();
    txtCompName.Clear();
    txtStreet.Clear();
    txtCity.Clear();
    txtCountry.Clear();
    txtPostalCode.Clear();
    txtProvince.Clear();
    txtSub.Clear();
    txtCompNumber.Focus();
}

private void FrmAddresses_Load(object sender, EventArgs e)
{
    txtCompNumber.Focus();
}

private void btnRead_Click(object sender, EventArgs e)
{
    displaydata();
}

private void btnUpdate_Click(object sender, EventArgs e)
{
    try
    {
        connection.Open();
        cmd = new SqlCommand("Update frmAddress set ComplexNumber= '" +
txtCompNumber.Text + "',ComplexName= '" + txtCompName.Text + "',Street= '" +
txtStreet.Text + "',Suburb= '" + txtSub.Text + "',City= '" + txtCity.Text +
"',Provice= '" + txtProvince.Text + "',Country= '" + txtCountry.Text + "',PostalCode=
'" + txtPostalCode.Text + "' where ID = '" + AdressID + "'", connection);
        cmd.ExecuteNonQuery();
        MessageBox.Show("Updated");
        connection.Close();
        displaydata();
    }
    catch (Exception ex)
    {
        MessageBox.Show(ex.Message, "Error", MessageBoxButtons.OK,
MessageBoxIcon.Error);
    }
}

private void btnDelete_Click(object sender, EventArgs e)
{
    connection.Open();
    cmd = new SqlCommand("delete from frmAddress where ID = "+ AdressID,
connection);
    cmd.ExecuteNonQuery();
    MessageBox.Show("Deleted");
    connection.Close();
    displaydata();
}

private void btnExit_Click(object sender, EventArgs e)
{
    Application.Exit();
}

```

```

        private void dtGridAddress_CellClick(object sender, DataGridViewCellEventArgs
e)
        {
            AdressID =
Convert.ToInt32(dtGridAddress.Rows[e.RowIndex].Cells[0].Value.ToString());
            txtCompNumber.Text =
dtGridAddress.Rows[e.RowIndex].Cells[1].Value.ToString();
            txtStreet.Text = dtGridAddress.Rows[e.RowIndex].Cells[3].Value.ToString();
            txtCity.Text = dtGridAddress.Rows[e.RowIndex].Cells[5].Value.ToString();
            txtCountry.Text = dtGridAddress.Rows[e.RowIndex].Cells[7].Value.ToString();
            txtProvince.Text =
dtGridAddress.Rows[e.RowIndex].Cells[6].Value.ToString();
            txtSub.Text = dtGridAddress.Rows[e.RowIndex].Cells[4].Value.ToString();
            txtCompName.Text =
dtGridAddress.Rows[e.RowIndex].Cells[2].Value.ToString();
            txtPostalCode.Text =
dtGridAddress.Rows[e.RowIndex].Cells[8].Value.ToString();
        }
    }
}
//6955 Laikin Barnard

```


Results:

The screenshot shows the Visual Studio IDE with the `FrmAddresses.cs` file open. The code defines a `Form` class for managing addresses. The `btnCreate_Click` method is highlighted, showing the logic to insert a new address into the database. The `FrmAddresses` form is also visible, displaying the address information and a table of addresses. A message box shows "Details Saved Successfully".

```

1 //6955 Laikin Barnard
2 using System;
3 using System.Collections.Generic;
4 using System.ComponentModel;
5 using System.Data;
6 using System.Drawing;
7 using System.Linq;
8 using System.Text;
9 using System.Threading.Tasks;
10 using System.Windows.Forms;
11 using System.Data.SqlClient;
12
13 namespace PRGS21Summive6955
14 {
15     //6955 Laikin Barnard
16     public partial class FrmAddresses : Form
17     {
18         1 reference
19         public FrmAddresses()
20         {
21             InitializeComponent();
22         }
23
24         SqlConnection connection = new SqlConnection("Data Source=
25         SqlCommand cmd = new SqlCommand();
26         int AddressID;
27
28         1 reference
29         private void btnCreate_Click(object sender, EventArgs e)
30         {
31             connection.Open();
32
33             cmd = new SqlCommand("INSERT INTO frmAddress (ComplexNumber,ComplexName,Street,Suburb,City,Province,PostalCode)" +
34             " VALUES ('" + txtCompNumber.Text + "', '" + txtCompName.Text + "', '" + txtStreet.Text + "', '" + txtSub.Text + "', '" + txtCity.Text + "', '" + txtProvince.Text + "', '" + txtC
35             cmd.ExecuteNonQuery();
36             MessageBox.Show("Details Saved Successfully");
37         }
38     }

```

The screenshot shows the Visual Studio IDE with the `FrmAddresses.cs` file open. The code defines a `Form` class for managing addresses. The `btnCreate_Click` method is highlighted, showing the logic to insert a new address into the database. The `FrmAddresses` form is also visible, displaying the address information and a table of addresses. The "Read" button is highlighted.

```

1 //6955 Laikin Barnard
2 using System;
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33             cmd = new SqlCommand("INSERT INTO frmAddress (ComplexNumber,ComplexName,Street,Suburb,City,Province,PostalCode)" +
34             " VALUES ('" + txtCompNumber.Text + "', '" + txtCompName.Text + "', '" + txtStreet.Text + "', '" + txtSub.Text + "', '" + txtCity.Text + "', '" + txtProvince.Text + "', '" + txtCountry.Text +
35             cmd.ExecuteNonQuery();
36             MessageBox.Show("Details Saved Successfully");
37             connection.Close();
38         }
39     }

```

The screenshot shows the Visual Studio IDE with the `FrmAddresses.cs` file open. The code defines a `Form` class for managing addresses. The `btnCreate_Click` method is highlighted, showing the logic to insert a new address into the database. The `FrmAddresses` form is also visible, displaying the address information and a table of addresses. The "Read" button is highlighted.

```

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2 using System;
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8 using System.Text;
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10 using System.Windows.Forms;
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12
13 namespace PRGS21Summive6955
14 {
15     //6955 Laikin Barnard
16     public partial class FrmAddresses : Form
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19         public FrmAddresses()
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33             cmd = new SqlCommand("INSERT INTO frmAddress (ComplexNumber,ComplexName,Street,Suburb,City,Province,PostalCode)" +
34             " VALUES ('" + txtCompNumber.Text + "', '" + txtCompName.Text + "', '" + txtStreet.Text + "', '" + txtSub.Text + "', '" + txtCity.Text + "', '" + txtProvince.Text + "', '" + txtCountry.Text +
35             cmd.ExecuteNonQuery();
36             MessageBox.Show("Details Saved Successfully");
37             connection.Close();
38         }
39     }

```

