

Form Properties

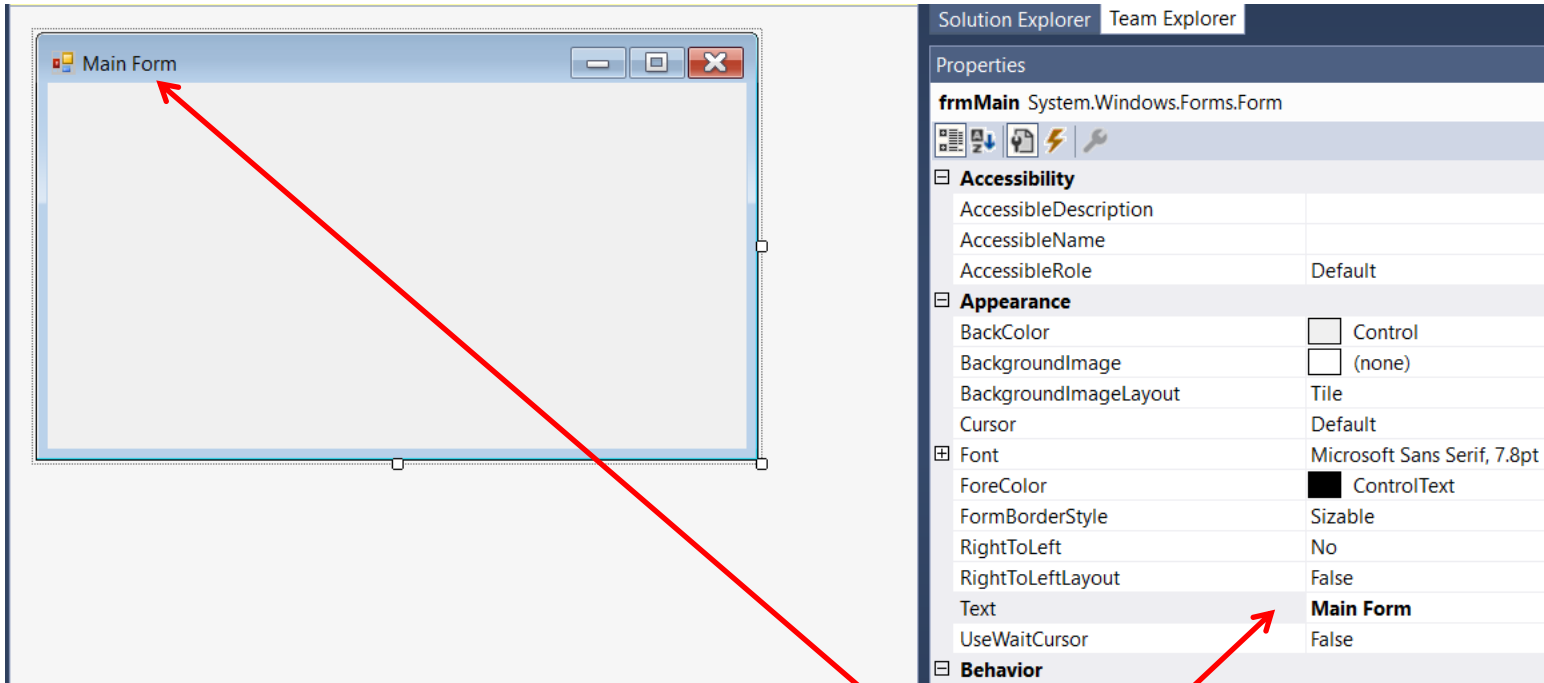
The screenshot displays the Visual Studio IDE with a form in design mode. The form is titled "Form1" and is currently empty. The Properties window on the right shows the properties for the selected form, which is identified as `frmMain` of type `System.Windows.Forms.Form`. The properties are organized into several categories:

- Behavior**
 - UseWaitCursor: False
 - AllowDrop: False
 - AutoValidate: EnablePreventFocusChange
 - ContextMenuStrip: (none)
 - DoubleBuffered: False
 - Enabled: True
 - ImeMode: NoControl
- Data**
 - (ApplicationSettings)
 - (DataBindings)
 - Tag
- Design**
 - (Name): **frmMain**
 - Language: (Default)
 - Localizable: False
 - Locked: False
- Focus**
 - CausesValidation: True

The **(Name)** property is highlighted, and its description is shown below: "Indicates the name used in code to identify the object."

Rename our form, to frmMain

New Title for Form



The image shows a Visual Studio interface. On the left, a form window is titled 'Main Form'. On the right, the Properties window is open, showing the 'Text' property of the form set to 'Main Form'. A red arrow points from the 'Main Form' title in the Properties window to the 'Main Form' title in the form window.

Solution Explorer		Team Explorer	
Properties			
frmMain System.Windows.Forms.Form			
Accessibility			
AccessibleDescription			
AccessibleName			
AccessibleRole			Default
Appearance			
BackColor		<input type="checkbox"/>	Control
BackgroundImage		<input type="checkbox"/>	(none)
BackgroundImageLayout			Tile
Cursor			Default
Font			
ForeColor		<input checked="" type="checkbox"/>	ControlText
FormBorderStyle			Sizable
RightToLeft			No
RightToLeftLayout			False
Text			Main Form
UseWaitCursor			False
Behavior			

Change the title of the form from 'Form1' to 'Main Form'

Variable Scope

The place where a variable is declared is important.

For example, if a variable is declared within a button, it will only exist within that button's code module.

Variable is declared within btnOne Module

```
1  Public Class Form1
2  Private Sub btnOne_Click(sender As Object, e As EventArgs) Handles btnOne.Click
3      Dim strVariable As String
4      strVariable = "Hello"
5      MsgBox(strVariable)
6  End Sub
7
8  Private Sub btnTwo_Click(sender As Object, e As EventArgs) Handles btnTwo.Click
9      MsgBox(strVariable)
10 End Sub
11 End Class
```

When trying to use variable strVariable outside of btnOne module, an error message is displayed.

Printing Money in Europe



In the days before the European Union, each country had its own currency which they printed in their own country.

France had the franc, Germany the deutsche Mark, Italy the lire and so on.

If you travelled from Britain to Sweden, for example, your British pounds would not be as welcome where merchants would be looking to deal in the Kroner.

The Euro



Flash forward to present day and we have a common European currency called the Euro. This currency is printed in and accepted in all European countries.

Now, a Euro earned in Italy is as welcome in Poland or Spain as it is in the country where it was earned.

It is only when one travels outside of the European Union, that one has to worry whether or not the Euro will be accepted.

Subs with Class

```
Public Class Form1
    Dim strVariable As String
    Private Sub btnOne_Click(sender As Object, e As EventArgs) Handles btnOne.Click
        strVariable = "Hello"
        MsgBox(strVariable)
    End Sub
    Private Sub btnTwo_Click(sender As Object, e As EventArgs) Handles btnTwo.Click
        MsgBox(strVariable)
    End Sub
End Class
```

The class Form1 contains Sub btnOne and Sub btnTwo

Think of Form1 as Europe, Sub btnOne as France and Sub btnTwo as Germany. Now look at where the variable strVariable is declared. Just like a Euro can be used anywhere in Europe, including Germany and France, strVariable can be used anywhere within the Form1 class including Subs btnOne and btnTwo.

Our variable was created in Europe(Form1), given a value in France(btnOne) and spent in Germany(btnTwo)

Scope

The area within which a variable has value and can be used is called the variable's scope. The place where a variable is declared determines its scope.

Populate Textfields for Testing

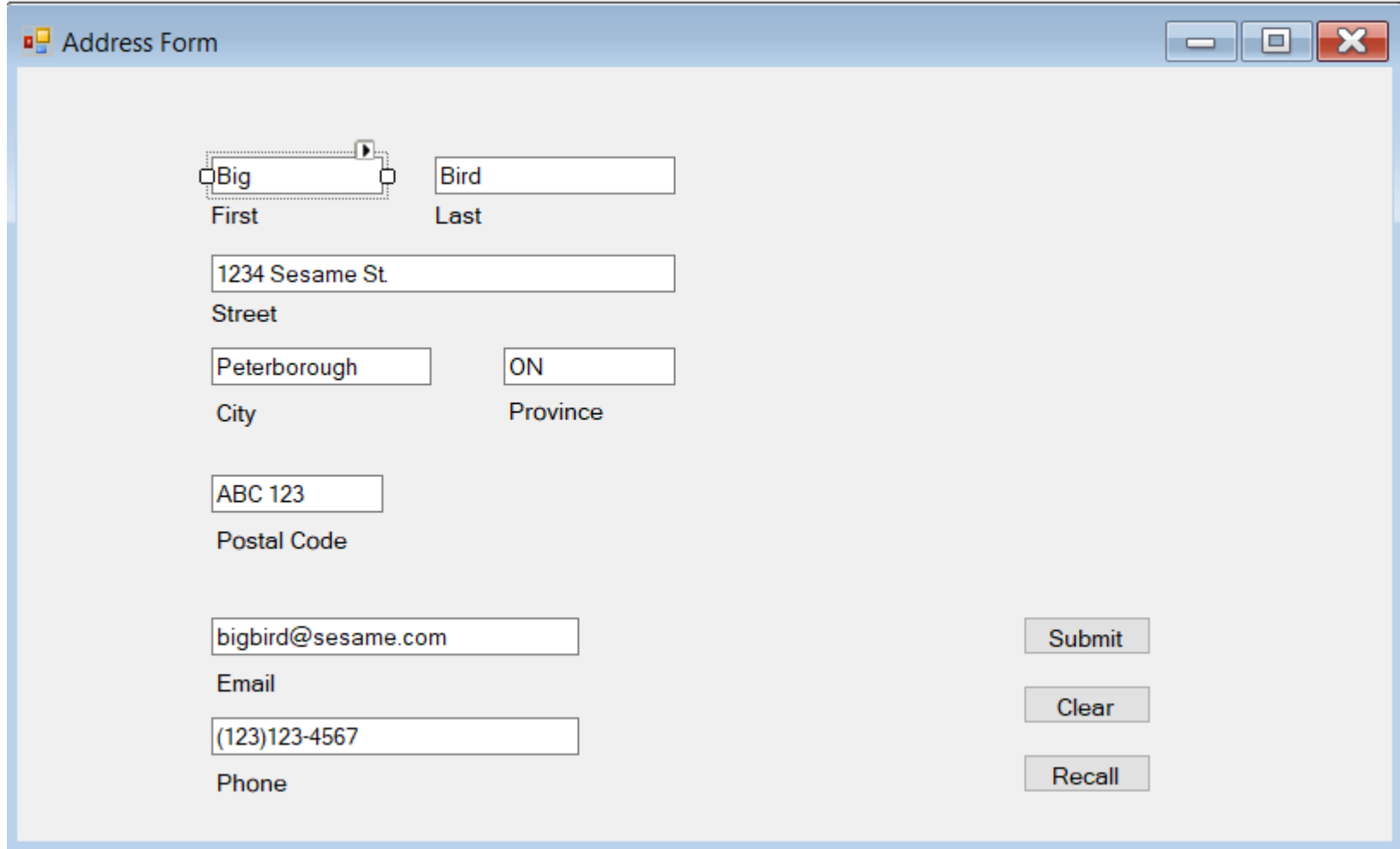
The image shows a Visual Studio IDE with two main windows. On the left is the 'Address Form' window, which contains several text input fields with pre-filled values: 'Big' (First), 'Bird' (Last), '1234 Sesame St.' (Street), 'Peterborough' (City), 'ON' (Province), 'ABC 123' (Postal Code), 'bigbird@sesame.com' (Email), and '(123)123-4567' (Phone). There are also 'Submit', 'Clear', and 'Recall' buttons. A red arrow points from the 'Big' text field to the 'Text' property in the Properties window on the right. The Properties window shows the 'txtFirst' control of type 'System.Windows.Forms.TextBox' with various properties listed, including 'Text' which is set to 'Big'.

Property	Value
HideSelection	True
ImeMode	NoControl
Lines	String[] Array
Location	113, 52
Locked	False
Margin	3, 3, 3, 3
MaximumSize	0, 0
MaxLength	32767
MinimumSize	0, 0
Modifiers	Friend
Multiline	False
PasswordChar	
ReadOnly	False
RightToLeft	No
ScrollBars	None
ShortcutsEnabled	True
Size	100, 22
TabIndex	0
TabStop	True
Tag	
Text	Big
TextAlign	Left
UseSystemPasswordChar	False
UseWaitCursor	False
Visible	True
WordWrap	True

Save yourself a lot of time by populating the text fields so that you don't have to type in values every time you run and test your program.

Challenge

Modify the AddressGUI program so that it can clear the values in the text field using a Clear button and then repopulate the text fields with the previous values when the user clicks the Recall button.



The screenshot shows a window titled "Address Form" with standard Windows window controls (minimize, maximize, close). The form contains the following elements:

- First Name:** A text field containing "Big".
- Last Name:** A text field containing "Bird".
- Street:** A text field containing "1234 Sesame St".
- City:** A text field containing "Peterborough".
- Province:** A text field containing "ON".
- Postal Code:** A text field containing "ABC 123".
- Email:** A text field containing "bigbird@sesame.com".
- Phone:** A text field containing "(123)123-4567".

At the bottom right of the form, there are three buttons: "Submit", "Clear", and "Recall".