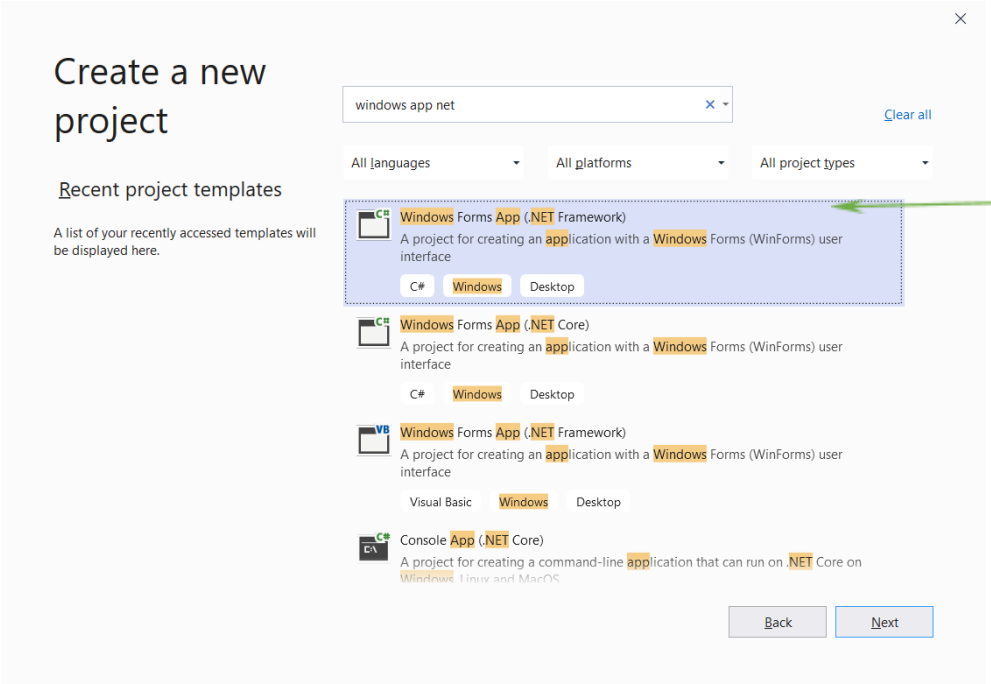
# Windows Forms C#

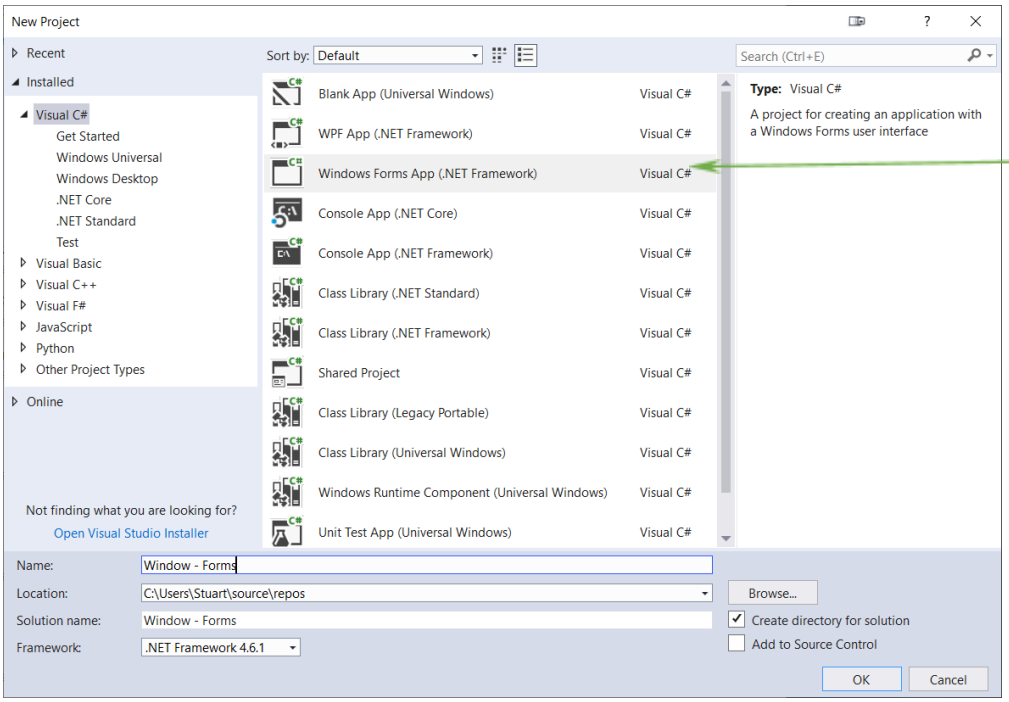
Introduction

## Choosing the Forms Option

The first step is to determine the type of programme you wish to make.  for see sharp we will use Windows Forms App dot NET Framework. Visual Studio 2019




Here is the same step in Legacy Visual Studio 2017



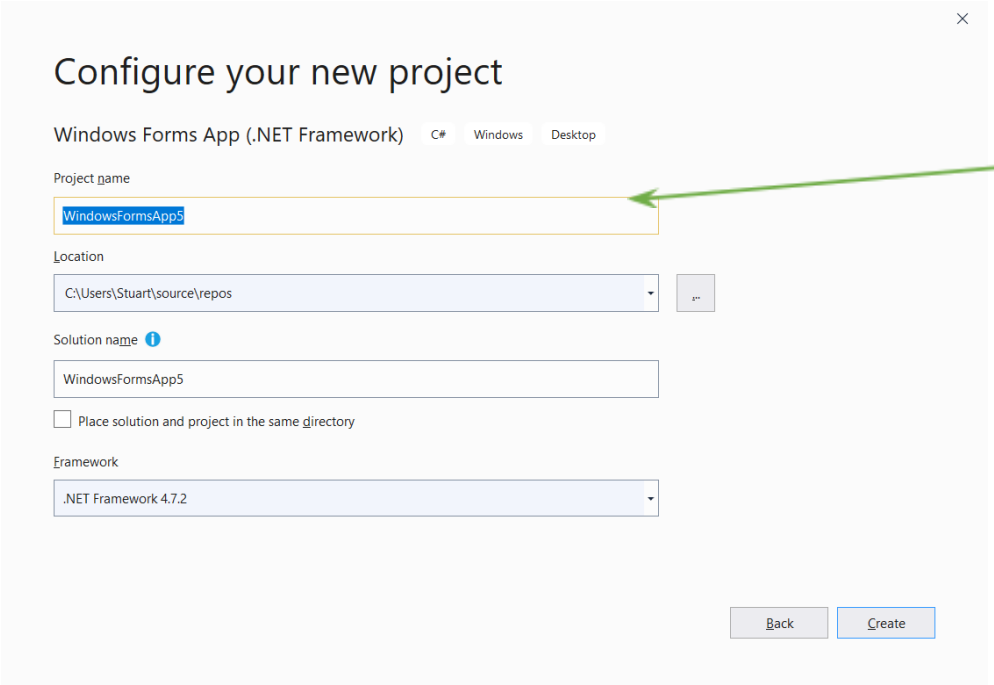

The next step is to name your Programme.

# Naming your program

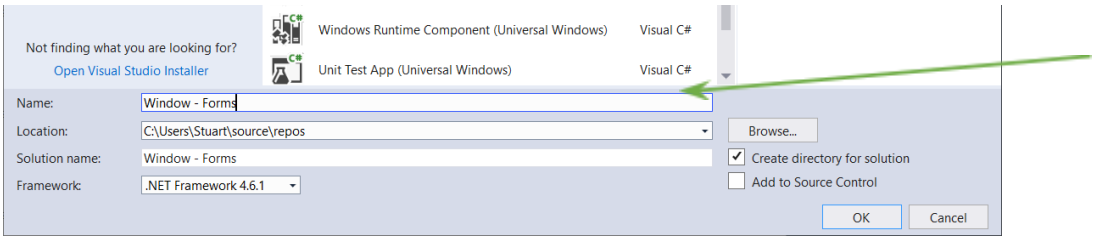
The next stage is to name your program.

## Visual Studio 2019

Give the Program a useful and recognisable name




Legacy 2017

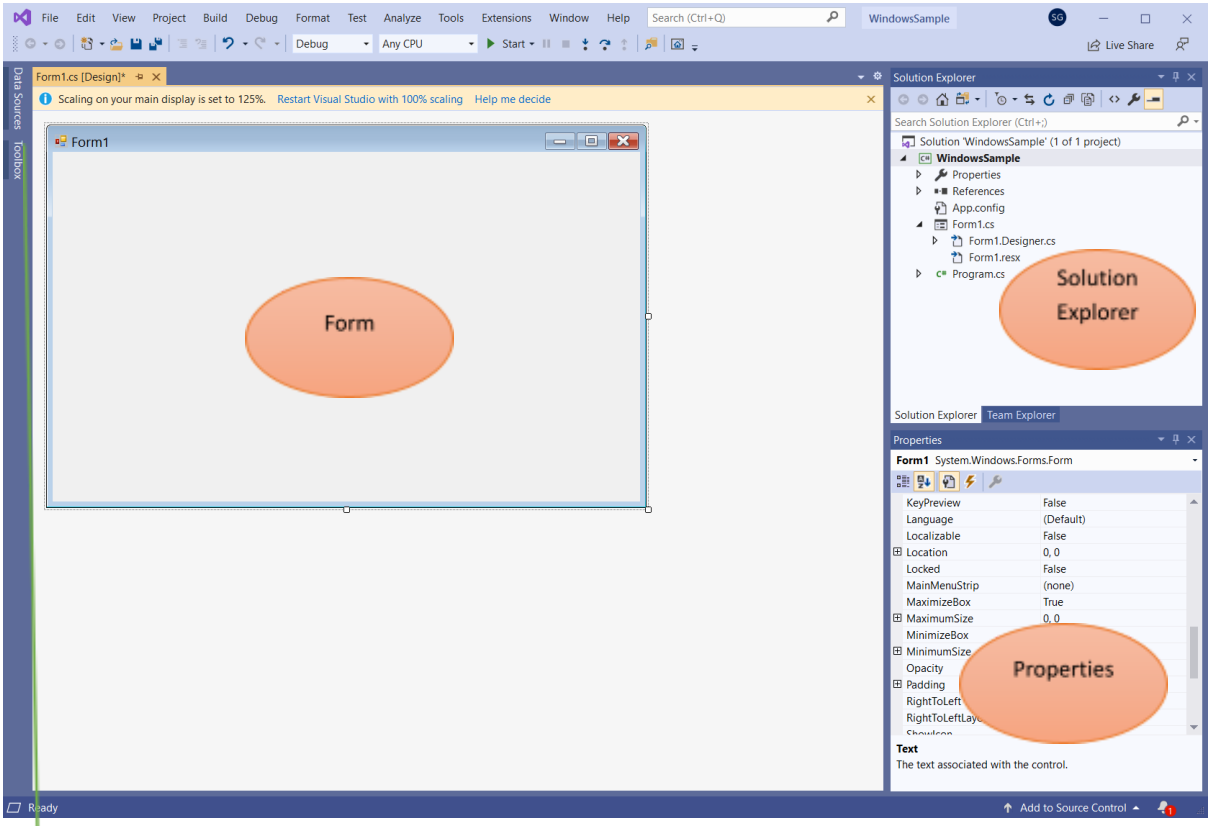


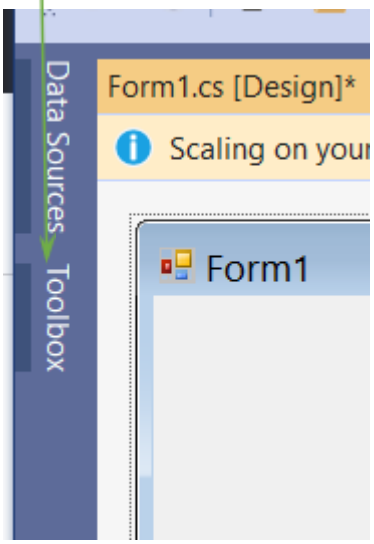

The next step is to look at the Design View.

## Design View

This is the design view. We will examine it in more detail.

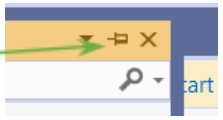
The form is a windows form that you can use to build your application. Top Right is the solution explorer that contains parts of the programme. Note that the Form name ends in '.cs'




A useful part of this view is the Toolbox. Selecting it will Open it.

To keep it Open we pin it with the drawing Pin.



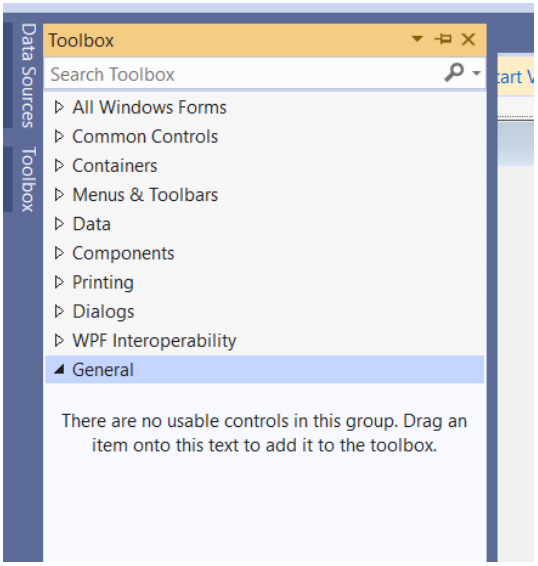
The contents of the Toolbox are shown on the next page.

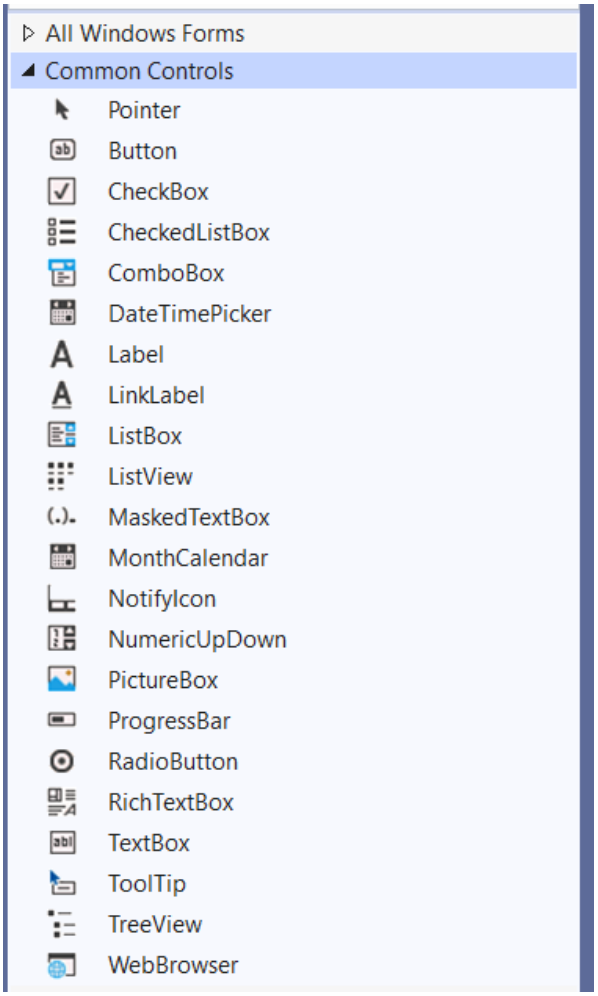
They are divided into a number of categories.

In this demonstration we will mainly use The Common Controls section, though we may dip into other sections later on.

## Toolbox

Here is the Toolbox (Left). Clicking on a section will open it. Here are the common controls (Right).



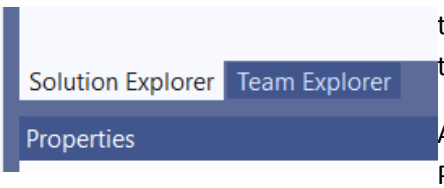




We will not be using all these tools, but we will attempt to cover some of the most common ones include:

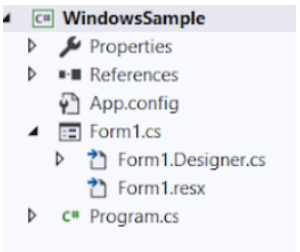
- Button
- CheckBox
- Label
- ListBox
- Radio Button
- PictureBox
- TextBox
- RichTextBox
- ToolTip

## Solution Explorer

Near the top right corner of your screen is the Solution Explorer. The solution explorer shows you the parts of the programme. It shows you both the forms and the classes that make up your programme.

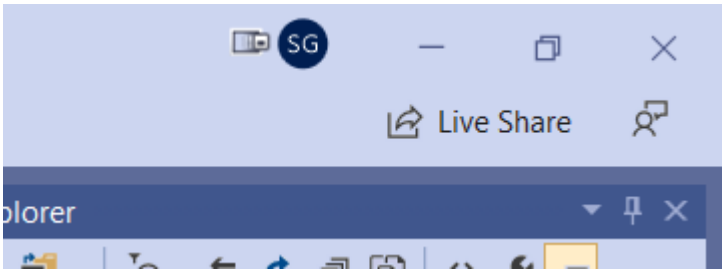



As you can see from the following example. There is Program1.cs and Form1.cs



## Identity

Visual Studio has facilities to store your preferences and to live share.



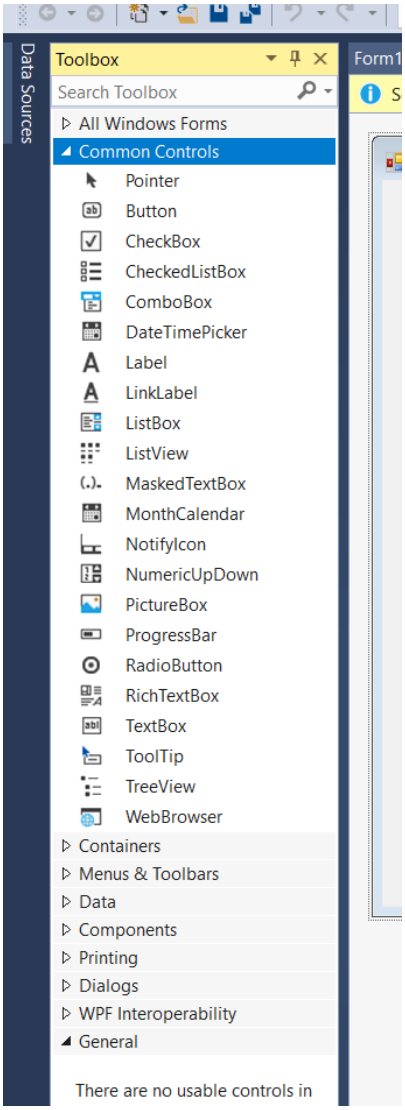
# Sample Program One

On the Form we are going to make a simple sample programme. This programme, will require:

- One TextBox
- One Button
- Two Labels

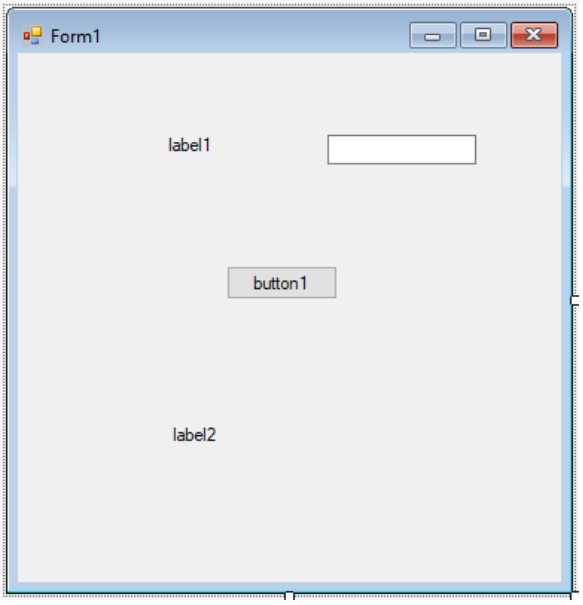
## Step one

Using the Toolbox drag each of the tools onto the Form.




For our first simple program we will need the following:

- One Textbox
- One Button
- Two Labels

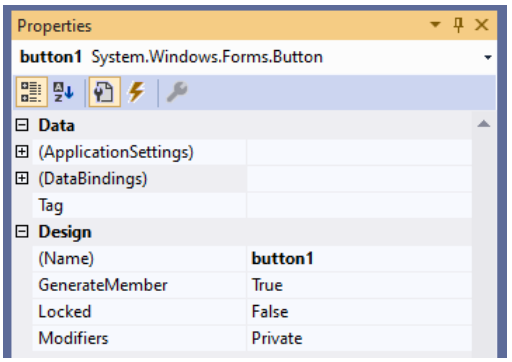



- The layout is as shown above.

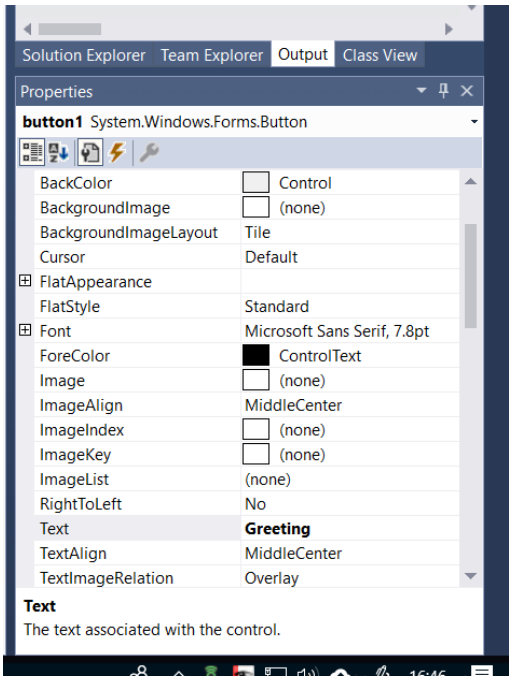
## Step Two

The next stage is to name these Controls.

In the example that follows. I have selected the button, the first Property that needs changing is the Name. In the Category called Design, is the (Name) section. Currently it says **button1**. We will change it to **butGreeting**. This is the name we will refer to in the Code.




Next we need to change the text that will appear on the button. Change this to the word **Greeting** as shown beneath:




We will need to repeat this process for the other Controls. We shouldn't leave the Form called Form1 but for this example it will be easier if we do.

## Step Three

| Old (name) | New (name) | Text | Completed |
|---|---|---|---|
| button1 | butGreeting | Greeting | Yes |
| Label1 | lblAskName | What is your name: | |
| textbox1 | txtInput | blank | |
| Label2 | lblOutput | blank | |
| Form1 | Form1 | Main | |

### Note

Here are two useful keyboard shortcuts

F7 = to the code

Shift F7 = to the Form

## Step Four

Now we have our Form. Next Double click on the Button, to bring up the code window. Type line 27 exactly as shown

```
1   using System;
2   using System.Collections.Generic;
3   using System.ComponentModel;
4   using System.Data;
5   using System.Drawing;
6   using System.Linq;
7   using System.Text;
8   using System.Threading.Tasks;
9   using System.Windows.Forms;
10
11  namespace Window___Forms
12  {
13      public partial class frmIntro : Form
14      {
15          public frmIntro()  //This is the name of the form
16          {
17              InitializeComponent();
18          }
19
20          private void Form1_Load(object sender, EventArgs e)
21          {
22
23          }
24
25          private void butGreet_Click(object sender, EventArgs e)
26          {
27              lblOutput.Text = "Hello " + txtInput.Text;
28          }
29      }
30  }
31
```