Year 12 : Visual Basic Tutorial.

Events
(To give functionality to your program; Button)

HANDS ON

[1]   Add a **Button** to your form and set the following properties:

Property	Value
Name	btnDisplayMessage
BackColor	DarkBlue
ForeColor	White
Location	110, 120
Size	120, 25
Text	Display Message

[2]   Change the following property of the Label **lblMessage**

Property	Value
Visible	False

This will make the 'Hello World' message invisible when the program first runs.

[3]   **Run** the program now. The label should be invisible…but the button will do nothing when you click on it.

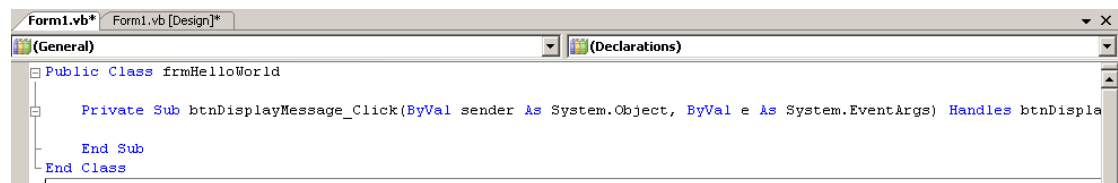The next step is to write the code that causes the label to become visible when the button is clicked….

Stop the program running.

> An **Event** is an action (such as clicking a mouse) that causes a small program called a **subroutine** to run.
>
> This subroutine is often referred to as an **event handler**.

[4]   Double-click on the Button.

The Code Window should open as a tabbed window….

```
Form1.vb*  Form1.vb [Design]*                                                        ▼ ×
(General)                              ▼    (Declarations)                           ▼
  Public Class frmHelloWorld

      Private Sub btnDisplayMessage_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnDispla

      End Sub
  End Class
```

Some program lines have already been added for you. All the subroutines for the
form are grouped into a **Class**…and you can see the start and end statements for
this.

We'll worry about **Public** and **Private** later…
Sub stands for **Subroutine**.

The subroutine is called **btnDisplayMessage_**Click…because it is the event
handler for the Click event of the button btnDisplayMessage.

Other items in the Subroutine header do not concern us at the moment…

[5]   **Type** in the one line of code so the subroutine looks like…
(to keep things simpler, the subroutine heading is not complete)

```
Private Sub btnDisplayMessage_Click
   lblMessage.Visible = True
End Sub
```

Note how Visual Basic tries to help you as you type the code. This is a really,
really, really useful feature and should always be used. If it does not … then you
have made a mistake!

[6]   **Run** the program and click the button…all should be revealed!

```
Hello World                           _ □ ×



    Hello World


      Display Message
```

Summary
- **Subroutines** are small programs that can be called (run) at any time.
- **Event-handlers** are subroutines that are run when an event associated with an object
  occurs.