Lesson 3-6: Understand the Page object

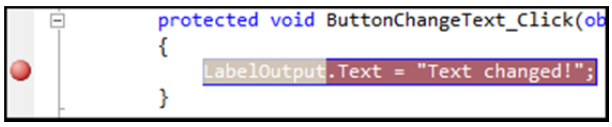
Every *.aspx* page has an object behind it called the *Page* object which contains a lot of useful properties about the status of the page.

In this lesson you'll inspect the *Page* object and view some of the more important parts of it.

1 Open *CSharpTest* from your sample files folder.

2 Open *default.aspx.cs* (the code-behind file of *default.aspx*).

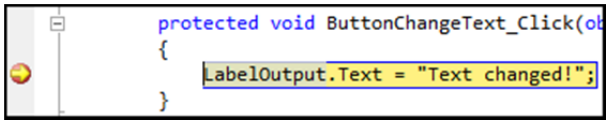
3 Add a breakpoint to the *ButtonChangeText_Click* event.



Right click on the line that begins *LabelOutput.Text* and click Breakpoint→Insert Breakpoint or click in the gray bar to the left of the line.

4 Run *default.aspx* in Debug mode and click the button.

Your code should pause at the breakpoint.

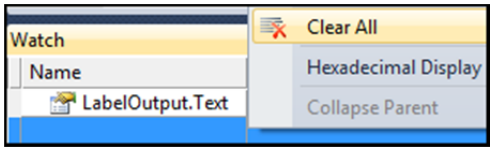


5 Display the Watch window.

Click the *Watch* tab, at the bottom left hand side of the screen, to display the *Watch* window if it's not visible already.

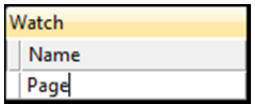
6 Clear all current watches.

Right-click in the *Watch* window and then click *Clear All* from the shortcut menu.



This will clear any existing watches from the window.

7 Manually add a watch for *Page*.

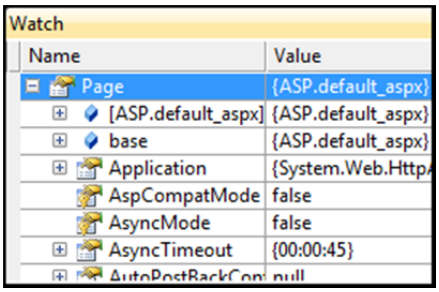


1. Click in the empty box under *Name* in the *Watch* window.
2. Type **Page** into the box and press <**Enter**>.

A watch will be added for the *Page* object.

8 Expand *Page* in the *Watch* window.

Expand the *Page* object to view its properties by clicking the + sign next to it in the *Watch* window.

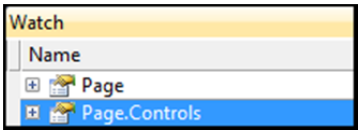


9 Add a watch for *Page.Controls*.

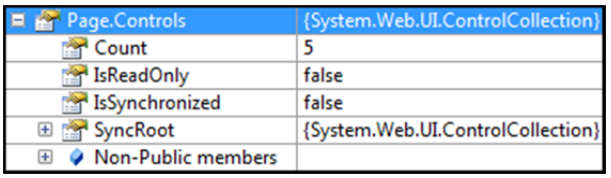
As you can see, the *Page* object has an overwhelming number of properties, most of which won't make much sense to you at the moment.

The *Page* object can be thought of as a container for absolutely everything on an ASP.NET page.

1. In the same way as you did for *Page*, add a watch for:
   Page.Controls



2. Expand *Page.Controls*.

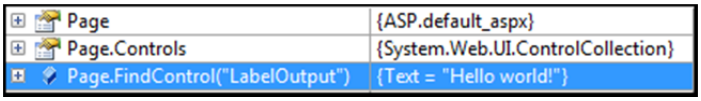


   You will see that the *Count* property is 5. This is because *Page.Controls* is a collection containing 5 controls. You'll learn all about collections in: *Lesson 8-2: Create a collection*.

10 View properties of *LabelOutput* through the *Page* object.

Add the following watch to the *Watch* window:

Page.FindControl("LabelOutput")



You will see that the *LabelOutput* control is found within the *Page* object and its *Text* property is displayed. The controls in the *Page* object are more specifically contained in the *Page.Controls* collection (see sidebar). *FindControl* makes it easy to locate a specific control.

As you've seen already, you don't need to use *Page.FindControl* under normal circumstances. You've only done this to illustrate that everything you add to a page becomes part of the *Page* object.

You'll examine some other important parts of the *Page* object in the rest of this session.

11 Stop debugging and close Visual Studio.

note

The Page.Controls collection

Page.FindControl is a short-cut to enable easier access to the controls that are stored in the *Page.Controls* collection.

You could have retrieved *LabelOutput* using the more confusing syntax:

Page.Controls[3].Controls[1]

This is the 'real' location of the *LabelOutput* control. This type of syntax will make more sense to you after: *Lesson 8-1: Create an array*.