Lesson 3-12: Use Session

In *Lesson 3-11: Send data between pages*, you saw how you can use *Server.Transfer* and *Response.Redirect* to send values between pages.

Session is another way of transferring values between pages, but session values don't just travel between pages, they remain in place for as long as a user's session lasts.

When a user first sends a *Request* to the web server, they are assigned a *Session* which keeps track of them until it has been 20 minutes (by default) since their last *Request*. The session is then said to have "timed out".

important

Memory usage

Because *Session* values persist for the user's entire session, it's not always appropriate to use them. Remember that your server will have to remember every session value you set for every user on your site.

It might seem like one session value wouldn't make much difference, but if you have thousands of people using your site they will mount up.

It is best to only use *Session* to store values that need to be used across your entire site.

Remember that after 20 minutes of inactivity (by default) a user's session will be removed, along with any session values.

note

Session and null

The code you add to *passdata4.aspx* in this lesson would cause an exception if there was no value in *Session* stored under *Text*.

To avoid any errors, you'd ideally use an *if* statement to check for a null value before accessing *Session*.

You'll learn about *if* statements in: *Lesson 7-1: Use the if statement*.

You'll learn more about null in: *Lesson 5-12: Understand null*.

1 Open *CSharpTest* from your sample files folder.

2 Store a value using *Session*.

1. Open the code-behind file of *passdata1.aspx*.

```
protected void ButtonSend_Click(object sender, EventArgs e)
{
    Page.Response.Redirect("passdata3.aspx?text=" + TextBoxText.Text);
}
```

2. Replace the line beginning with *Page.Response.Redirect* line with the following code:

Session["Text"] = TextBoxText.Text;

```
protected void ButtonSend_Click(object sender, EventArgs e)
{
    Session["Text"] = TextBoxText.Text;
}
```

This code stores the contents of *TextBoxText.Text* (ie the text the user types into the text box) in *Session* under the key of *Text*.

Session keys work in exactly the same way as the *ViewState* key you used in: *Lesson 3-9: Work with ViewState*.

3 Retrieve a value from *Session*.

1. Open the code-behind file of *passdata4.aspx*.

```
public partial class passdata4 : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {

    }
}
```

2. Add the following code to the *Page_Load* event handler:

LabelReceivedData.Text = Session["Text"].ToString();

```
protected void Page_Load(object sender, EventArgs e)
{
    LabelReceivedData.Text = Session["Text"].ToString();
}
```

This code will retrieve the value stored under the *Text* key from *Session* and display it in a *Label* control on the page.

4 Transfer the value.

1. Open the code-behind file of *passdata1.aspx*.

```
protected void ButtonSend_Click(object sender, EventArgs e)
{
    Session["Text"] = TextBoxText.Text;
}
```

2. Add the following line of code to the *ButtonSend_Click* event handler:

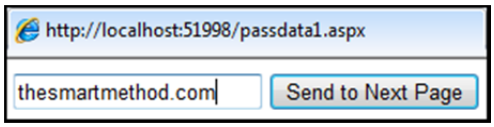
   Page.Response.Redirect("passdata4.aspx");

```
protected void ButtonSend_Click(object sender, EventArgs e)
{
    Session["Text"] = TextBoxText.Text;
    Page.Response.Redirect("passdata4.aspx");
}
```

   As you learned in *Lesson 3-10: Move between pages using C#,* this will send the user to the *passdata4.aspx* page after placing the contents of the *TextBox* in *Session["Text"].*

   passdata4.aspx will then retrieve the value from *Session* and display it.

3. View *passdata1.aspx* in your browser.



4. Change the text in the text-box if you wish and then click the *Send to Next Page* button.

   You will see that the data has been sent to *passdata4.aspx* which has retrieved it from *Session* and displayed it.

5 Close Visual Studio.