

STUDENT ACTIVITY 4.1 KEY

MTA Course: Web Development Fundamentals
Lesson name: Web Development Fundamentals 4.1
Topic: Understand client-side scripting
File name: WebDevFund_SA_4.1_Key

Resources, software, and additional files needed for this lesson:

- A Windows[®]-based PC with installed Web development software.
Examples include Microsoft[®] Visual Studio 2008[®], or
 - Microsoft Visual Basic 2008[®], Express Edition
(<http://www.microsoft.com/express/downloads/#2008-Visual-Basic>)
 - Microsoft Visual C# 2008[®], Express Edition
(<http://www.microsoft.com/express/downloads/#2008-Visual-CS>)
 - Microsoft Visual Web Developer 2008, Express Edition
(<http://www.microsoft.com/express/downloads/#2008-Visual-Web-Developer>)
- Use these sites for additional information:
Video lessons and references on using JavaScript with ASP.NET:
<http://www.asp.net/learn/videos/video-276.aspx>
<http://www.asp.net/learn/videos/video-279.aspx>

Directions to the student:

1. View the video: <http://www.asp.net/learn/videos/video-275.aspx>
2. Answer the following questions:
 - a. Explain how the hidden field changes its value after clicking the Get Data button in the first portion of the video.

Student answers will vary, but they should explain how the value displays the value from the script if the pre-render has not been executed on the server. But once the pre-render code was un-commented, it showed the server side value.

Next, the author changes the value again in the client script and shows that the server will not see the new value on page load.

- b. What advantages does the developer get when the JavaScript code is moved to an external JavaScript file?

This allowed multiple pages to access the same JavaScript without re-typing the code (which also reduces the potential for human error).

- c. Explain how the developer is using the `ClientScriptManager` class?

This enables the developer to have access to the hidden field value on the server by using the *RegisterHiddenField* method in server-side code to programmatically create a hidden field on the client. This is done in the code-behind part of the web application.

Sample VB code (in Page Load):

```
Dim csm As ClientScriptManager = Page.ClientScript
Dim hiddenName As String = "sharedData"
Dim hiddenValue As String = "Client data value"

csm.RegisterHiddenField(hiddenName, hiddenValue)
```

- d. Download the VB or C# version of the code. Run the programs making changes and setting breakpoints to test your understanding of client-side scripting. Record your steps, experiences, and problems.

Student answers will vary, circulate among the students to help with any debug errors they cannot resolve.

- 3. Be prepared to discuss your findings as a group.