

## REVIEW LESSON

MTA Course: Web Development Fundamentals  
Lesson name: Web Development Fundamentals 4.1  
Topic: Understand client-side scripting  
File name: WebDevFund\_RL\_4.1

### **Lesson Objective:**

**4.1:** Understand client-side scripting. *This objective may include but is not limited to:* purpose of client-side scripting, various client-side scripting languages.

### **Preparation Details**

#### **Prerequisite student experiences and knowledge**

This MTA Certification Exam Review lesson is written for students who have learned about Web design and Web application programming. Students who do not have the prerequisite knowledge and experiences cited in the objective will find additional learning opportunities using resources such as those listed in the Microsoft® resources and Web links at the end of this review lesson.

Students should have a basic understanding of server-side versus client-side scripting and the benefits of each model. Students should also have conceptual knowledge of various scripting languages, such as Perl or JavaScript.

#### **Instructor preparation activities**

For this lesson, you will need a computer with Microsoft Office 2007®, and Microsoft Visual Studio 2008® attached to a liquid crystal display (LCD) projector to display and review the attached Microsoft PowerPoint® document.

Prepare a place on the whiteboard or bulletin board for the warm-up activity.

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

- WebDevFund\_PPT\_4.1
- WebDevFund\_SA\_4.1
- WebDevFund\_SA\_4.1\_Key
- A Windows®-based PC with installed Web development software. Examples include 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>)
- Sticky notes for warm-up activity.

**Teaching Guide****Essential vocabulary:**

**script**—a set of instructions added to an application or a utility program. The instructions usually use the rules and syntax of the application or utility. On the World Wide Web, scripts are commonly used to customize or add interactivity to Web pages.

**scripting language**—a simple programming language designed to perform special or limited tasks, sometimes associated with a particular application or function. An example of a scripting language is Perl.

**client-side scripting**—script code that runs within the user's Web browser. Examples of its uses include alert displays, confirmation boxes, and pop-up windows.

**Lesson Sequence****Activating prior knowledge/lesson staging (10 minutes)****Warm-up Activity—“Scripting”**

1. Divide the class into groups of three to four students.
2. Instruct each group to brainstorm the pros and cons of server-side scripting and client-side scripting, and to give an example of each.

Students should write each pro and con examples on separate sticky notes.

3. Then ask each group to place their sticky notes on the class whiteboard or bulletin board under the specific categories for each type of scripting (server-side and client-side):
  - a. Examples
  - b. Pros
  - c. Cons
4. Once all notes are placed in the categories, briefly highlight some of the major ones.
  - a. Encourage students to challenge the placement of the sticky notes.

**Lesson activity (30 minutes)**

1. Use the PowerPoint presentation WebDevFund\_PPT\_4.1 to review the concepts for this lesson.
2. Distribute Student Activity WebDevFund\_SA\_4.1.
  - a. Students will practice modifying the Web.config file.
3. Discuss the key objectives of the review assignment.

**Assessment/lesson reflection (10 minutes)**

1. Ask students to summarize how the activity met this lesson objective.
2. If time permits, students can display their activity solutions to the class.
3. Wrap up and provide homework/enrichment opportunities.

**Microsoft resources and Web links**

Students who wish to explore this lesson topic further may visit the following links:

**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-275.aspx>

<http://www.asp.net/learn/videos/video-279.aspx>

**Microsoft ASP.NET:**

<http://www.asp.net>

**Suggested best practices:**

- It may be beneficial to display code examples using the LCD projector for each of the major concepts, particularly when the vocabulary is being reviewed. Choose students to demonstrate the concepts to the class.