

REVIEW LESSON

MTA Course: Web Development Fundamentals

Lesson name: Web Development Fundamentals 5.2

Topic: Configure projects and solutions and reference assemblies

File name: WebDevFund_RL_5.2

Lesson Objective:

5.2: Configure projects and solutions and reference assemblies. *This objective may include but is not limited to:* local assemblies, shared assemblies (GAC), Web application projects, solutions; configuration files; AppSettings.

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.

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.

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

- WebDevFund_PPT_5.2
- WebDevFund_SA_5.2
- WebDevFund_SA_5.2_Key

- *How Do I Determine Whether to Use a Web Site or a Web Application Project*
(<http://www.asp.net/learn/videos/video-410.aspx>)
 - 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>)

Teaching Guide

Essential Vocabulary:

assemblies—the building blocks of Microsoft .NET Framework applications; they form the fundamental unit of deployment, version control, reuse, activation scoping, and security permissions. An assembly is a collection of types and resources that are built to work together and form a logical unit of functionality. An assembly provides the common language runtime (CLR) with the information it needs to be aware of type implementations. To the runtime, a type does not exist outside the context of an assembly.

shared assemblies—An assembly that can be referenced by more than one application and is explicitly built to be shared by giving it a cryptographically strong name.

Web Application Project—a model for creating a Web application (a set of clients and servers that cooperate to provide the solution to a problem) whose structure and build semantics closely resemble the project model introduced with Visual Studio® .NET 2003 applications. You might decide to use the Web application project model depending on your requirements and your preferred development workflow.

Web Site Project—A model for creating a website (group of related HTML documents and associated files, scripts, and databases that is served up by a server on the World Wide Web) whose structure is a Windows®-style arrangements of files and folders that dynamically compile when a site is opened. Introduced into Visual Studio 2005.

ASP.NET configuration files—ASP.NET configuration data is stored in XML text files that are each named Web.config. Web.config files can appear in multiple directories in ASP.NET applications. These files allow you to easily edit configuration data before, during, or after applications are deployed on the server. ASP.NET configuration files keep application configuration settings separate from application code. Keeping configuration data separate from code makes it easy for you to associate settings with applications, change settings as needed after deploying an application, and extend the configuration schema.

AppSettings—the AppSettings section element of the configuration file contains a series of name/value pairs that your application can use for any purpose.

Lesson Sequence

Activating prior knowledge/lesson staging (5 minutes)

Warm-up Activity—

1. Demonstrate the general process of creating a project using Visual Studio.

Lesson activity (40 minutes)

1. Using the PowerPoint presentation WebDevFund_PPT_5.2, walk the students through the concepts for this lesson.
2. Distribute Student Activity WebDevFund_SA_5.2.

Students will view the video *How Do I Determine Whether to Use a Web Site or a Web Application Project* (<http://www.asp.net/learn/videos/video-410.aspx>) and use the chart to record the differences and similarities between Website projects and Web application projects.

Assessment/lesson reflection (10 minutes)

1. Ask students to share the details of a section of the chart and summarize how the activity met this lesson objective.
2. 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:

Introduction to Web Application Projects

<http://www.asp.net/learn/videos/video-410.aspx>

<http://msdn.microsoft.com/en-us/library/k4cbh4dh.aspx>

<http://msdn.microsoft.com/en-us/library/610xe886.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. Randomly choose students to come up to demonstrate the concepts to the class.