

#10267A: INTRODUCTION TO WEB DEVELOPMENT WITH VISUAL STUDIO 2010

Available Dates: **Call for Dates**

Class Length: **5 day**

Cost: **\$2,795**

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Class Outline:

Description:

This five-day instructor-led course provides knowledge and skills on developing Web applications by using Microsoft Visual Studio 2010.

Course Outline:

Module 1: Exploring Microsoft ASP.NET Web Applications in Microsoft Visual Studio 2010 This module explains the key features of Microsoft .NET Framework and Microsoft ASP.NET. It helps you view the complete Web application that you build in the labs throughout this course.

Lessons

- Introduction to the .NET Framework
- Overview of ASP.NET
- Overview of the Lab Application

Module 2: Creating Web Applications by Using Microsoft Visual Studio 2010 and Microsoft .NET–Based Languages This module describes the different programming languages that are available when you develop Microsoft .NET Framework applications. It explains the fundamental aspects of writing code and creating components by using two of the .NET Framework–based languages, Microsoft Visual Basic and Microsoft Visual C#. It provides an overview of Microsoft Visual Studio 2010. It also explains how to create a simple Web application.

Lessons

- Choosing a Programming Language
- Overview of Visual Studio 2010
- Creating a Simple Web Application

Module 3: Creating a Microsoft ASP.NET Web Form

This module explains how to create Web Forms and populate them with server controls.

Lessons

- Creating Web Forms
- Adding and Configuring Server Controls in a Web Form

Module 4: Adding Functionality to a Microsoft ASP.NET Web Form

This module describes the various methods that you can use to add code to your Microsoft ASP.NET Web application. It explains how to use Web server controls, event handlers, code-behind files, and components. In addition, it explains how to use page events, especially the Page_Load event.

Lessons

- Working with Code-Behind Files
- Handling Server Control Events
- Creating Classes and Components by Using Visual Studio 2010
- Handling Page Events

Module 5: Implementing Master Pages and User Controls. This module explains how to create and implement master pages and how to implement user controls in a Web application.

Lessons

- Creating Master Pages
- Adding User Controls to an ASP.NET Web Form

Module 6: Validating User Input

This module provides an overview of user input validation. It covers information on adding, positioning, and configuring validation controls on a Web Form. In addition, it covers information on validating Web Forms.

Lessons

- Overview of User Input Validation
- ASP.NET Validation Controls
- Validating Web Forms

Module 7: Troubleshooting Microsoft ASP.NET Web Applications

This module describes the steps required to enable tracing and debugging, including how you can use debugging and tracing in a Web application.

Lessons

- Debugging in ASP.NET
- Tracing in ASP.NET

Module 8: Managing Data in an Microsoft ASP.NET 4.0 Web Application

This module provides an overview of Microsoft ADO.NET. It explains how to programmatically work with data by using ADO.NET and how to create a connection to access the data stored in a Microsoft SQL Server database. In addition, it explains how to use the DataSet and DataReader objects to support the local data storage and data manipulation requirements of Web Forms.

Lessons

- Overview of ADO.NET
- Connecting to a Database
- Managing Data

Module 9: Managing Data Access Tasks by Using LINQ

This module explains what LINQ is and how you can use LINQ to manage both XML data and Microsoft SQL Server data in a Microsoft ASP.NET Web application by using Web Server controls and code.

Lessons

- Overview of LINQ
- Managing XML Data by Using LINQ to XML
- Managing SQL Data by Using LINQ to SQL and LINQ to Entities

Module 10: Managing Data by Using Microsoft ASP.NET Dynamic Data. This module provides an overview of Microsoft ASP.NET Dynamic Data. It also covers information on applying ASP.NET Dynamic Data. In addition, it explains how to customize ASP.NET Dynamic Data applications.

Lessons

- Overview of ASP.NET Dynamic Data
- Applying ASP.NET Dynamic Data
- Customizing ASP.NET Dynamic Data Applications

Module 11: Creating a Microsoft ASP.NET Ajax-enabled Web Forms Application

This module provides an overview of Microsoft ASP.NET AJAX and explains how to create an ASP.NET AJAX application. It also introduces the ASP.NET AJAX Control Toolkit, and explains how to install the toolkit and add controls from the toolkit to a Web application.

Lessons

- Introduction to Ajax
- Creating an ASP.NET Ajax Application by Using the Ajax Features for ASP.NET
- Extending an ASP.NET Web Forms Application by Using the Ajax Control Toolkit

Module 12: Consuming Microsoft Windows Communication Foundation Services

This module provides an overview of Windows Communication Foundation services. In addition, this module describes how to call a Windows Communication Foundation (WCF) service directly by using a browser and a proxy from a Web application.

Lessons

- Overview of Windows Communication Foundation Services
- Calling Windows Communication Foundation Services
- Working with WCF Data Services

Module 13: Managing State in Web Applications

This module explains how to manage state in a Microsoft ASP.NET Web application.

Lessons

- State Management
- ASP.NET Profiles
- ASP.NET Caching

Module 14: Configuring and Deploying a Microsoft ASP.NET Web Application

This module explains how to configure and deploy a Microsoft ASP.NET Web application by using the machine.config and web.config files.

Lessons

- Configuring an ASP.NET Web Application
- Deploying an ASP.NET Web Application

Module 15: Securing a Microsoft ASP.NET Web Application. This module explains the various Web application security functionalities. It also covers information on the infrastructure to build and deploy various Web application security functionalities.

Lessons

- Overview of Web Application Security
- Declaratively Configuring Authentication and Authorization
- Working Programmatically with Authentication and Authorization

Module 16: Implementing Advanced Technologies Supported by Microsoft Visual Studio 2010 for Web Development.

This module describes the new Visual Studio 2010 and .NET Framework 4 functionalities, changes, and enhancements for improved Web development. The module also covers how Microsoft ASP.NET MVC 2 and Microsoft Silverlight 4 fit in with .NET Framework 4 and Visual Studio 2010.

Lessons

- Working with the ASP.NET MVC 2 Framework
- Working with Silverlight 4