# ASP.NET Web Forms Programming for Experienced Visual Basic.NET Programmers

**Duration:** 21 hours

**Prerequisites**: Prior experience with VB.NET is required.

**Course Description:** This course provides students with hands on experience using Visual Studio to create dynamic web sites with the ASP.NET Framework using VB.NET. Students will learn to use the power of ASP.NET Web server controls combined with HTML5 to design Web pages. They will use ASP.NET Validation controls to provide both client-side and server-side data validation for user input. Students will learn how to use master pages to enforce a consistent look and feel across a set of Web pages, as well as how to use user controls to reuse smaller pieces of HTML across multiple pages.

Students explore the complexities of state management in ASP.NET Web Forms and how to use session and view state objects to manage state between HTTP requests.

Students spend time exploring how to use ADO.NET to interact with databases by running SQL queries and executing stored procedures. They will also learn how to read/write XML files using DataSets and DataTables. Students will use ASP.NET Web Forms data binding to easily display data in list controls, the GridView control and the DetailsView control.

Microsoft provides support for Ajax-enabled Web Forms applications using the ASP.NET AJAX Framework. Students will learn how to use some of the server-side features to make asynchronous postbacks from the browser, perform partial page updates using the UpdatePanel, use CSS to dim a page during postback and use the Timer to fetch data from the server asynchronously.

Other topics include: using a Web.config file to control application configuration; working with the query string; working with cookies; reading and writing files; and deploying ASP.NET web applications. Comprehensive labs provide the students with extensive experience creating and deploying dynamic ASP.NET Web Form applications.

## **Students Will Learn**

- Creating ASP.NET Web Forms Applications
- Using ASP.NET Server Controls
- Handling Events
- Using ASP.NET Server Controls
- Using ASP.NET Validation Controls
- Preusing Design: User Controls and Master Pages

- Maintaining State
- Overview of ADO.NET
- Using XML
- Using Data Binding
- ♦ Introduction to ASP.NET AJAX
- Deploying ASP.NET Applications

### Overview

#### **Overview of ASP.NET Web Forms**

- ASP.NET Technologies
- Web Forms vs. MVC
- Understanding the HTTP Request and Response Cycle
- Client-Side vs. Server-Side Code Execution
- Exploring an ASP.NET Web Form
- Understanding the Life-Cycle of an ASP.NET Page Object

#### **Using ASP.NET Server Controls**

- Working with Web Server Controls
- Using Hyperlinks and Button-Based Controls
- Using Label and Textbox Controls
- Using List Controls
- Using the Image Control
- Exploring Other Web Server Controls

#### **Using ASP.NET Validation Controls**

- Understanding ASP.NET Validation Controls
- Performing Client-Side Validation
- Performing Server-Side Validation
- Using the Required Field Validator
- Using the Comparison and Range Validators
- Using the Regular Expression Validator
- Customizing Validation
- Working with Validation Groups
- Unobtrusive Validation
- Using the NuGet Package Manager to Download AspNet.ScriptManager.jQuery

#### **Maintaining State**

- Maintaining State within ASP.NET Web Forms Applications
- Using the Session Object
- Using the ViewState Object
- Reading and Writing Cookies
- Using the Query String

#### **Using XML**

- Introducing XML and XML Schemas
- Writing XML Schemas with a DataSet
- Reading XML Schemas with a DataSet
- Writing XML Data with a DataSet
- Reading XML Data with a DataSet

#### **Creating ASP.NET Web Forms Applications**

- Building ASP.NET Web Forms Applications Using Visual Studio
- Understanding a Web Form Application Project Structure
- Designing Web Forms
- Incorporating CSS into the Web Application
- Understanding the Page Directive
- Working with the Code-Behind Model
- Understanding Web.config
- Transformational Config Files

#### **Handling Events**

- Working with Page-Based Event Handlers
- Writing Control Event Handlers
- Sharing Event Handlers
- Understanding PostBack vs. Non-PostBack Events
- Handling Application-Based Events in Global.asax

### **Reusing Design: User Controls and Master Pages**

- Reusing HTML Snippets with User Controls
- Designing a User Control
- Embedding a User Control on a Page
- Understanding the Master Page Architecture
- Designing a Master Page
- Designing Content Pages

#### **ADO.NET**

- Understanding the ADO.NET Object Model
- Connected vs. Disconnected Access
- Using a Connection to Connect to a Data Source
- Using a Command to Execute Queries and Stored Procedures
- Using a DataReader to Work with Cursors
- Using a DataSet with Disconnected Data
- Using DataAdapters with DataSets

#### **Using Data Binding**

- Understanding ASP.NET Data Source Controls
- Configuring Data Sources
- Examining ASP.NET Data Bound Controls
- Using List Controls
- Using the GridView Control
- Using the DetailsView Control

#### Introduction to ASP.NET AJAX

- Understanding Ajax
- Enabling ASP.NET AJAX with the ScriptManager
- Configuring Partial Page Updates with the UpdatePanel
- Displaying a Progress Indicator Using UpdateProgress
- Making Periodic Postbacks Using the Timer
- Using the NuGet Package Manager to Download jQuery

Exploring Other Data Bound Controls

#### **Deploying ASP.NET Applications**

- Configuring IIS for Deployment
- Configuring an ASP.NET Web Form Application for Deployment
- Using Publish to Deploy a ASP.NET Web Application

## **Related Bootcamp**

| Track                            | Duration       | Price    |
|----------------------------------|----------------|----------|
| Microsoft .NET Developer: VB.NET | 5-course track | \$6,000  |
|                                  | 6-course track | \$7,200  |
|                                  | 7-course track | \$8,400  |
|                                  | 8-course track | \$9,600  |
|                                  | 9-course track | \$10,800 |

# **Contact Us**

Address: 1 Village Square, Suite 3 Chelmsford, MA 01824

**Phone:** 978.250.4983

Mon - Thur: 9 am - 5 pm EST Fri: 9 am - 4 pm EST

**E-mail:** info@developer-bootcamp.com

Copyright© 2018 Developer Bootcamp