



TECHNOLOGIES

DOTNET COURSE

Our ASP.NET 4.5 training course is an intensive hands-on introduction to developing, testing and deploying commercial-quality web applications written in C# 5.0 using Visual Studio 2012.

If you are interested in custom / on-site ASP.NET training for any size of team, please get in touch – we would be glad to help build a course that meets your learning requirements.

Please let us know if you need to focus on previous versions of the .NET Framework or Visual Studio as we may be able to accommodate your needs during the public course (and certainly through custom / on-site ASP.NET training).

We can take into account your existing technical skills, project requirements and timeframes, and specific topics of interest to tailor the most relevant and focused course for you.

This can be particularly useful if you need to learn just the new features and Best Practices with Microsoft ASP.NET, or need to include extra topics to help with pre-requisite skills.

What you will learn

- Develop ASP.NET 4.5 Web Apps using C#
- Create rich interfaces using jQuery / AJAX
- Data access Best Practices with ADO.NET and LINQ
- ADO.NET Entity Framework
- Test and deploy your web apps
- Creating RESTful Web Services using Web API

Who should attend?

Web developers who need an intensive introduction to developing professional web applications using ASP.NET 4.5 and Visual Studio 2012

Prerequisites

Attendance of our Intro to C# Programming Training Course or have equivalent experience of developing with a relatively recent version of a .NET language (eg VB.NET with .NET 3.5)

ASP.NET 4.5 Training Course Syllabuses

Defining Types

- Overview of the .NET Framework
- Essential concepts for Types in .NET
- Classes, objects, and Arrays
- Value Types



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- Nullable Types

Defining Members

- Parameters
- Construction & Destruction
- Properties

Inheritance and Interfaces

- Inheritance
- Interfaces
- Object Disposal
- Additional Interface Techniques

Generics

- Getting started with Generic
- Generic Struts, Delegates, Interfaces
- Generic Methods

Using .NET Framework APIs

- Exception Handling
- Collections
- Regular Expressions

Introduction to ASP.NET

- Creating ASP.NET Web Sites
- Creating ASP.NET Web Applications

Using ASP.NET Controls

- Using HTML Controls
- Using Web Controls
- Understanding Post-Backs

Page Processing

- Understanding the Page Lifecycle
- Automatic Post-Backs
- Putting it into practice



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State Management

- Session Stat
- Cookies
- Putting it into practice

Application Management

- Application State
- Application Settings
- Defining Error Pages
- Putting it into practice

Data Binding

- Single-value Data Binding
- Repeated-value Data Binding
- SQL Data Source Binding
- XML Data Source Binding

Rich Data Controls

- Using GridView with a database
- Creating an editable GridView
- Using a GridView with Objects
- Additional Techniques

Using LINQ in Web Applications

- Getting started with LINQ to SQL
- Defining relations
- Using LINQ in ASP.NET

The ADO.NET Entity Framework

- Introduction to the Entity Framework
- Creating a simple entity data model
- Querying entities
- Dynamic Data Entities Web applications



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User Controls

- The theory of user controls
- Putting it into practice

Custom Server Controls

- Getting started with Server Controls
- Defining a simple Server Control
- Additional Server Control techniques
- Working with input controls

Using jQuery with ASP.NET

- Getting familiar with jQuery
- Using jQuery with AJAX

Deploying ASP.NET Web Applications to IIS

- IIS Architecture
- Using IIS7
- Visual Studio Deployment

Overview of ASP.NET MVC 4

- Overview of ASP.NET MVC 4

Creating RESTful Web Services using Web API

- Overview of RESTful Services
- Getting started with the Web API

Additional topics - time allowing / on-site custom ASP.NET training

- Designing and Implementing ASP.NET Security
- ADO.NET Connected Data Access
- ADO.NET Disconnected Data Access
- XML Processing