

Hands-on course , 5
day(s)
Ref : AST

Participants

Developers willing to develop robust Web applications using the successful .NET technologies - ASP.NET and ADO.NET - under the Visual Studio IDE.

Pre-requisites

Ability to create HTML pages including table and forms. Familiarity with C# or VB.NET language is an imperative prerequisite in order to follow the course.

Next sessions

ASP.NET 2.0/3.5 Web Development with VS 2008 L1

OBJECTIVES

This course will teach you how to develop real-world Web applications using the new features and functionality included in the ASP.NET 4.0/3.5. The course explains how to use Visual Studio built-in tools to access data by using ADO.NET. A module also covers how to create and publish XML Web services.

1) Introduction to Internet and Intranet development

2) Concept of dynamic pages creation

3) ASP.NET HTML and Web controls

4) Data source controls and data binding with ADO.NET

5) XML Web Service

1) Introduction to Internet and Intranet development

- Basic principle of a web server and html requests.
- Static and Dynamic web sites.
- Introduction to the .NET Framework. Benefits of the CLR execution model.
- Main components used in today's web applications: ASP.Net, ADO.Net, Web Services, Framework .NET.
- Keys to develop a Web application with ASP.NET.
- Using the Visual Studio .NET toolbox to add server controls to a Web Form.

Workshop

Using Visual Studio 2010/2008 in order to create a web site and an input form.

2) Concept of dynamic pages creation

- Principle and challenges.
- Managed ASP.NET : inline code and codebehind.
- Adding and using web server controls.
- ViewState persistence.
- Client persistence with the cookies collection. Server persistence with Session object and Application object.
- The new enhanced persistence approach.
- Fundamentals of a Web Form : Page Object.
- Life cycle of the Page Class: events management.
- Cross-pages PostBack mechanisms.
- Specific web files and folders in ASP.NET.

Workshop

Development of a Web Application involving cross-page postback through web forms.

3) ASP.NET HTML and Web controls

- Transforming HTML controls and expose clients and servers events.
- Exploring the namespace Web.UI.HtmlControls.
- How to use the HtmlGenericControl class.
- Integration with client script language like JavaScript.
- Exploring the Namespace Web.UI.ServerControls.
- Functionalities exposed from the basic server controls.
- How to use the client-side and server-side validation controls to screen data.
- User, Content and Rich Controls.

Workshop

Creation of an advanced user interface.

4) Data source controls and data binding with ADO.NET

- Creating a Connection to the Database.
- Displaying a DataSet in a List-Bound Control.
- XML and the DataSet Object.
- Development of web apps using Master/Details controls (GridView, DetailView, FormView, etc.).
- Accessing Data with DataReaders. Using the new DataSource Model.

Workshop

Accessing an SQL database from an ASP.NET page and incorporating the data into the Web application.

5) XML Web Service

- Overview of XML Web Services and SOA Architectures.
- Calling a Web Service by HTTP. Use of a Proxy.
- Creating and consume an XML Web service.

Workshop

Use the templates in Visual Studio .NET to create an XML Web service.