

Dot Net Framework 4.0: Advanced Microsoft ASP.NET Web Development

Duration: 85 Hours

What you will learn

This course is your first step towards success as a Dot Net professional, designed to give you a firm foundation in basic Dot Net framework. In this class, you'll learn how to install and maintain Dot Net framework, to develop web application. You will gain conceptual understanding of Dot Net Technologies and how its components work and interact with one another. You will also learn how to create a web application and window application in an effective and efficient manner including developing web service, application software's, database connectivity's and deploying Dot Net applications. The lesson topics are reinforced with structured hands-on practices. This course is designed to provide depth knowledge on Dot Net technologies, and to make you an expert on these technologies.

Learn To

Install Dot Net framework
Basic coding standards
Database connectivity
Application Development
Publishing Website/Web Application

Scope

Software Architect
Web application development
Web Application Developer
Technical consultant
Software Associate
Software Engineer

Prerequisites

Basic Programming Knowledge

Course Objectives

To understand;
Basic functioning in Dot Net Framework 4.0
Web & window application development

Database connectivity development

Deploying the Dot Net developed application.

Course Topics

Prerequisites: C# and SQL

Fundamentals of ASP.NET

Introduction to Web Applications

HTML

CSS

Java Script

Understanding architecture ASP.NET

Creating ASP.NET Pages – Web Forms

Working with web controls like Button, Textbox etc.

Enabling view state for individual controls

Different type of List controls

Setting Meta tags

Validation controls

File Upload, Ad Rotator, Multi View, Calendar etc

State Management – Cookies, Sessions and Applications

Handling session and application events using global.sax

Error handling in ASP.NET, Tracing and debugging

Routing

MS SQL Server

Introduction to SQL Server 2008

Working with basic SQL

T-SQL Functions – Numeric, String, Date Time System

Programming constructs of T-SQL

Stored procedures

Stored functions

Triggers

ADO.NET

Understanding ADO.NET provider model

Connection to SQL Server, Oracle and MS Access and other databases

Command and Data reader objects

Working with parameters

Working with disconnected data using Data Set, Data table etc

Transaction management with ADO.NET

Calling stores procedures from ADO.NET

Introduction to Data Binding

Data binding with List controls

Working with SQL Data Source control

Working with Grid View

Details View, Form View to manipulate data

Data List and Repeater controls

List View control to group data

Query Extender control

XML

What is XML?

Where and why XML is used?

Using XML API-XML Text Reader, XML Document

Searching XML document using XPATH

Defining structure using DTD and Schema

XML Data Source control

Navigation, Security and Caching

Tree view, Menu, Site Map Data Source etc

Master pages and Themes

Understanding Authentication and authorization

Forms authentication

Windows and Passport authentication

Membership API and Login controls

Output caching

Data caching using Cache objects

Web Services

What is Web Service?

Understanding SOAP, WSDL, Proxy etc.

Creating Web services

How to consume web services

AJAX

What is AJAX and need for AJAX?

Implementing AJAX with Java Script

Using ASP.NET AJAX – Update Panel, Update Progress etc

Using ASP.NET AJAX Control toolkit

Client side Template Rendering – Data View control

LINQ

What is LINQ?

Query operators and methods

Accessing Object using LINQ

Understanding LINQ to XML

Using LINQ to SQL to access and manipulate database

Using LINQ Data source control

Mobile Web Application

Architecture of mobile web applications

Using Mobile web controls

Devices specific content