

ASP.Net MVC Technology Training

Duration: 100 Hrs.

Web Programming Introduction

- Understanding role of Web Server and Web Browser.
- Brief about HTTP Protocol.
- HTTP Request structure.
- Form Tag and comparison between Get and Post methods.
- HTTP Response Structure

ASP.NET Introduction & Controls

- ASP.NET Introduction
- First ASP.NET Application.
- Auto Postback Property.
- Event Handler Parameters.
- Dynamically initializing Controls
- IsPostBack property of Page class
- ListControls
- Comparison between HtmlControls and WebControls
- Control Properties and Methods
- FileUpload Control

ASP.NET Architecture

- What is AppDomain
- Life Cycle of ASP.NET Page
- How Control Manages its State
- What is EnableViewState
- How Control raises events
- Event handling in Web Forms
- Writing Custom Classes in WebApplication

CSS & Themes

- Work with CSS
- Use Themes to Customize a Site
- Name Skins within a Theme
- Do server-side Styles using Themes
- Add contents of a Theme and Skin
- Apply themes and Profiles.

Redirecting User to Another Page

- Redirecting Options
- Response.Redirect
- Server.Transfer
- Cross Page Postback
- Determine how the pages was invoked
- Passing values between pages

Server Control

- Label, Literal, TextBox, RadioButton, RadioButtonList, Chckebox, CheckBoxList, DropDownList, Button, LinkButton, ImageButton, Image, Hyperlink, Calendar, ImageMap, MultiView, View, ListBox, Wizard, Panel, Menu.

- Adrotator Control.
- File Download.
- SiteMap, SitemapPath Control, TreeView Control.

Master Pages

- Introduction to MasterPage
- ContentPlaceHolder and Content tags
- Accessing controls of MasterPage in ContentPage
- URL's in MasterPages
- UniqueID and ClientID

Working with User Control

- Overview of User Controls
- Creating a User Control
- Adding Properties to User Control
- Adding Events to User Control
- Using User Control in Web Form
- Rendering Clients Scripts Using Page. ClientScript methods

Validation Controls

- Base Validator
- Required Field Validator
- Compare Validator
- Range Validator
- Regular Expression Validator
- Custom Validator
- Causes Validation Property
- Grouping - Validation Group Property
- Page.Validators and Page.IsValid

ASP.NET State Management

- Static Members
- View State
- Hidden Field in Form
- Query String
- HttpContext
- Cookies-HttpCookie
- Sessions-HttpSessionState
- Application-HttpApplicationState
- Application State variables.
- Summary of All Features

WebConfiguration File and Global.asax

- Introduction to Configuration files
- Page setting in web.config
- Custom Errors
- URL Re-Writing
- Tracing
- Using ConfigSource Attribute
- Using Location Section
- HttpApplication class-Global.asax

Authentication & Authorization

- What is Authentication and Authorization
- Types of Authentication
- Forms Authentication
- Role based Authentication
- Windows and Basic Authentication
- What is ASP.NET Impersonation
- Using location section in web.config

Data Bound Controls

- Databinding traditional way
- SqlDataSource
- GridView
- DetailsView
- FormView
- DataList
- Repeater
- ListView
- DataPager
- ADO.NET

AJAX.NET

- What is AJAX
- What is AJAX.NET
- Script Manager
- Update Panel
- Update Progress
- Timer
- AJAX Control Toolkit
- Web Services.
- XML Web Server Control.
- Writing and Reading XML.
- XSLT.
- Page Level & Application Level Error Handling.
- LINQ.

Understanding & Publishing Web Application

- Introduction to ASP.NET Web Application
- Advantages of IIS Applications
- Creating web application in IIS
- Converting File System application to IIS Application
- Using Virtual Directory
- Publishing ASP.NET Website
- Culture specific formatting
- WCF Introduction.
- WPF Introduction

ASP.NET MVC

- Introduction of Web Technology
- What is ASP.NET MVC

- Role of Model, View, and Controller
- How ASP.NET MVC Works
- Benefits of using ASP.NET MVC

Getting Started with MVC

- ASP.NET MVC project templates
- Understanding the structure of an ASP.NET MVC project
- Naming conventions
- Creating views
- Defining controllers
- Defining a data model
- Overview of coding standards follows during programming

Creating an application in MVC

- Creating strongly-typed views
- Understanding URLs and action methods
- Using HTML helpers
- Handling form post-backs
- Data validation

Razor View Engine

- Razor Basics
- Razor design goals
- Implementation of Razor view
- Razor syntax
- Accessing Model Data in Razor views

Strength ASP.NET MVC Applications

- ASP.NET application architecture best practices
- Implementing a Repository and Entity Framework Data Model

Designing and Implementing Databases with SqlServer

- Introduction to ADO.NET
- Creating Tables and Relationships
- SQL Fundamentals
- Stored Procedures
- Insert, Update, Delete, Select commands

View Techniques

- Defining and using custom HTML Helpers
- Defining a layout / MVC Master Page
- Using Styles
- Defining and using partial views
- Razor Helper Method syntax

Implementing Navigation in MVC web apps

- Defining view-model classes
- Implementing Data Filtering in a Controller
- Understanding the Routing mechanism
- Adding custom entries to a route table
- Defining defaults, parameters, and validation
- Generating URLs and Hyperlinks
- Custom Route constraints

MVC State Management

- Using hidden fields

- Session and Application State

Using AJAX and jQuery with ASP.NET MVC

- Overview of AJAX and ASP.NET MVC
- Unobtrusive AJAX
- Using AJAX Action Links

ASP.NET Web API with MVC

- Overview of the ASP.NET Web API
- Building servers and clients

FTP Management

- Uploading and downloading FTP contents

Sending Emails

- Designing email panel
- How to send an email to various users
- Sending auto emails

Deployment

- Deploying application on Web Server

Project

- Getting customer's requirements
- Preparing database and business logics
- Developing application
- Testing and implementing the project
- Troubleshooting the project application after implementation
- Summary

