

ASP.Net with MVC (Model View Controller)

Duration: 4 Months

Overview of the ASP.NET

- Introduction of different Web Technology
- What is ASP.NET MVC
- Role of Model, View, and Controller
- How ASP.NET MVC Works
- Benefits of using ASP.NET MVC

Setting up and Installing ASP.NET MVC

- Installing Internet Information Server
- Installation of ASP.NET MVC
- Application Setting in IIS.

Microsoft SQL Server 2012

- Overview of SQL Server 2012
- Installation of SQL Server 2012
- Features of SQL Server Express
- SQL Server 2008 Express management tools

Coding Standards

- Overview of coding standards follow during programming

HTML, CSS & JavaScript

- Basic of HTML, CSS and JavaScript

Asp.Net Standard Controls

- Displaying information
- Label Controls
- Literal Controls
- Bulleted List

Accepting User Input

- Textbox controls
- RadioButton and RadioButtonList Controls
- CheckBox and CheckBoxList Controls
- Button controls
- LinkButton Control
- ImageButton Control
- Using Hyperlink Control
- DropDownList
- ListBox

Displaying Images

- Image Control
- Image Map Control
- Using Panel Control
- Using Hyperlink Control

Object Oriented Programming System

- Concept of Class and Object
- Working with Constructor and Destructor
- Encapsulation
- Inheritance
- Polymorphism
- Method overloading Get and Set Property

Asp.Net Validation Controls + Javascript Validation

- Required Field Validator Control
- Regular Expression Validator Control
- Compare Field Validator Control
- Range Validator Control
- Validation Summary Control
- Custom Validator Control

Designing Websites with master pages

- Creating master pages
- Creating default contents
- Nesting master pages
- Registering master pages in web configuration

Overview of Data Access

- Creating database connections
- Connecting to MSSQL Server and MS Access
- DataSet & DataTable Features
- Using inline SQL Statements
- Using Stored Procedures
- Executing select commands
- Sql Transaction
- Data Type and syntax Language Fundamentals
- Classes
- Namespaces
- Object Oriented Programming concepts
- Overview of Asp.Net inbuilt Classes and method
- File Handling

Using the Grid View Control

- Grid View Control fundamentals
- Displaying Data
- Using Data Keys
- Sorting Data
- Paging through Data

Using the Details View and Form View Controls

- Using the Details View control
- Displaying data with the DetailsView control
- Using Fields with the DetailsView control
- Displaying Empty data with the DetailsView control

Using Repeater and Data List Controls

- Using Repeater Control
- Displaying data with the Repeater Control
- Displaying Data with the Data List Control

Using Navigation Controls

- Understanding Site Maps
- Using the Sitemap Path Control
- Formatting the Sitemap Path Control
- Using the Menu Control
- Using Tree View Control

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
- Using Dependency Injection
- Implementing a custom controller factory

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
- Custom model bindings

Using AJAX and jQuery with ASP.NET MVC

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

ASP.NET Web API with MVC

- Overview of the ASP.NET Web API
- Building servers and clients
- Content negotiation
- Validation
- Query able Interfaces
- Dependency Injection

FTP Management

- Understanding FTP
- Setting up FTP Server (Live)
- 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

Live Project

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