

MVC ASP.Net

Duration: 5-6 Weekends

Prerequisites

- A Basic Knowledge of C# Programming Language.

Course Content

1. Introduction to .NET Framework

- What is .NET Framework?
- Development of .NET Framework?
- What are components of .NET Framework?
 - Common Type System?
 - Common Language Specification?
 - Base Class Library?
 - Common Language Runtime?
- IDE for .NET
- Create XML modules.

2. Introduction to ASP.NET MVC

- The role of the Model, View and Controller
- Key benefits of ASP.NET MVC
- Getting Started with ASP.NET 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
- Installing asp.net mvc?
- What asp.net mvc version is my mvc application?
- How to Create an mvc application?

3. Getting Started with ASP.NET MVC

- What is Controller in MVC?
- What is Action Method?
- Default Action Method
- Action Results In ASP.NET MVC
 - View Result
 - Partial View Result
 - Redirect Result
 - Redirect to Action Result
 - Json Result
 - File Result
 - Content Result
 - EmptyResult & JavaScriptResult

4. Action Selectors

- ActionName
- NonAction
- ActionVerbs
 - HttpGet
 - HttpPost
 - HttpDelete
 - HttpPut

5. HTML Helpers

- Html.TextBox & TextBoxFor()
- Html.TextArea() & TextAreaFor()
- Html.Hidden() & HiddenFor()
- Html.Password() & PasswordFor()
- Html.Display() & DisplayFor()
- Html.Label() & LabelFor()
- Editor() & EditorFor()
- Html.CheckBox() & Html.CheckBoxFor()
- Html.RadioButton() & Html.RadioButtonFor()
- Html.DropDownList() & Html.DropDownListFor()
- Html.ListBox() & Html.ListBoxFor()
- Difference between Html.TextBox and Html.TextBoxFor

6. Asp.Net MVC validation technique

- String Length attribute
- Required Field attribute
- Range attribute
- Regular Expression attribute
- Compare attribute
- Validation Summary
- What is the Remote Validation and how to implement it?
- How to make sure client validation is enabled in MVC and what is Unobtrusive JavaScript?

7. Complete CRUD operation using ADO.NET

- List of all the record from the database
- Insert the data into the database with validation
- Update data in database
- Delete the data record from the database
- Displaying images in MVC
- Implementing Paging in MVC
- Implementing Sorting in MVC

8. Data transfer object in asp.net mvc?

- ViewBag
- ViewData
- TempData

9. View Techniques

- Defining and using custom HTML Helpers
- Generate hyperlinks using Action Link html helper
- Razor Views in MVC
- Defining and using partial views & render partial view
- View Engines in MVC
- Customizing the auto generated Create view
- View scaffold templates
- Layout view in mvc
- ViewStart in asp.net mvc
- Named sections in layout files in mvc

10. URL Routing

- Introducing URL Patterns
- Creating and Registering a Simple Route
- Defining Default Values and using Static URL Segments
- Constraining Routes
- Bypassing the Routing System

11. Filters in ASP.NET MVC

- Using Filters
- Authorize Filters
- Exception Filters
- Action Filters
- Result Filters
- Using Built In Filters

12. Using Entity Framework in MVC

- ASP.NET application architecture best practices
- Implementing a Repository and Entity Framework Data Model
- Data Access in MVC using entity Framework.
- Working with multiple tables in MVC
- Using business objects as model in MVC

13. Using AJAX with ASP.NET MVC

- Overview of AJAX and ASP.NET MVC
- What is JavaScript minification?
- JavaScript Bundling?
- What are the advantages of JavaScript minification & Bundling?
- Tools available to minify JavaScript?
- What is the difference between jquery.js and jquery.min.js?
- What is the downside of JavaScript minification?
- Benefits or advantages of using a CDN?