

## ASP.NET MVC Developer Training

### Week 1

- ❖ Introduction to Fundamentals
  - ✓ Introduction to C & C++
  - ✓ Difference between C and C++
  - ✓ C#
  - ✓ HTML
  - ✓ CSS
  - ✓ OOPS Concepts
  - ✓ **Practical Examples of HTML and CSS**

### Week 2

- ❖ **ASP.Net**
  - Introduction
  - Environment
  - Lifecycle
  - Introduction to Internet and Web Applications
  - .NET Framework
  - Common Language Runtime (CLR)
  - Common Type System (CTS)
  - Just In Time (JIT)
  - Microsoft Intermediate Language (MSIL)
  - Intermediate Language Disassembler (ILDASM)
  - Language under .NET
  - Types of Project
  - Creation of new Project in Visual Studio

### Week 3

- ❖ ASP.NET Practical Example
- ❖ Event Handling
- ❖ Server Side Controls
- ❖ Client Side HTML Controls
- ❖ Introduction to Basic Controls of ASP.NET
- ❖ State Management Techniques
- ❖ Client Side validations and Server Side Validations

### Week 4

- ❖ Database Access
- ❖ ADO.NET
- ❖ Grid View & Other Data Access Controls
- ❖ Binding Data
- ❖ Create, Read, Update and Delete Functionality Practically
- ❖ Paging, Sorting and Filtering

## Week 5

- ❖ LINQ
- ❖ Security
- ❖ Error Handling
- ❖ Multi-Threading
- ❖ Introduction to Web Services and its Practical Implementation

## Week 6

### ❖ Advanced Technologies

- Introduction to ASP.NET MVC 5
- Fundamentals of MVC 5
- Introduction to Entity Framework 6 using MVC 5
- MVC Architecture
- Introduction to Razor View Engine
- Practical Work- Create New Project -> ASP.NET MVC 5 using Empty and In-Built Template

## Week 7

- ❖ Introduction to Different Approach of Entity Framework using .NET MVC
  - ✓ Database First Approach
  - ✓ Code First Approach
  - ✓ Model First Approach
- ❖ Lifecycle of an .NET MVC 5 Application
- ❖ Practical Implementation

## Week 8

- ❖ UI, Layouts and Themes
  - Introduction to Razor Syntax
  - Razor View
  - Server Side Programming using Razor Syntax in Razor View
  - Bootstrap
  - Using Page Inspector in ASP.NET MVC
  - Dynamic vs Strongly Typed Views
  - JavaScript & Client Frameworks like jQuery, AJAX etc

## Week 9

- ❖ Working with Data in MVC 5
- ❖ Introduction to Partial Views
- ❖ Layout Pages/Master Detailed Layouts

## Week 10

- ❖ Security Authentication and Authorization
  - ❖ ASP.NET Identity
    - ✓ ASP.NET Simple Membership
    - ✓ O-auth Integration
    - ✓ OWIN
- ❖ Practical Implementation

## Week 11

- ❖ Performance
  - ✓ Profile and Debug your .NET MVC Application
  - ✓ Using Asynchronous Methods in .NET MVC
  - ✓ Building & Minification
- ❖ Internationalization
  - ✓ Internationalization and Globalization
  - ✓ Internationalization with Date and Time with .NET MVC 5

## Week 12

- ❖ MVC 5 WebAPI
  - ✓ Introduction
  - ✓ Practical Implementation
  - ✓ Integration WebAPI with MVC 5 web Application

## Week 13

- ❖ Deployment
  - ✓ Deploy MVC Web Application on Local IS
  - ✓ Introduction to Azure Web Application Deployment

## Week 14

- ❖ Practical work

## Week 15

- ❖ Practical work

## Week 16

- ❖ Introduction to Angular.JS
- ❖ SignalR
- ❖ Design Patterns
- ❖ URL (Practical)
- ❖ Routing (Practical)

**Note: The rest of the time period of industrial training will cover practical work to improve the efficiency.**