

Visual Studio2013

Duration: 240 Hours

1. **C#.Net (Framework (4.5)).**
2. **Asp.Net (Framework (4.5)).**
3. **Asp.net (MVC5.0).**
4. **Silverlight (4).**
5. **Soft skills.**

Module 1: C#.Net (Framework (4.5)).

.NET FRAMEWORK (4.5) FUNDAMENTALS:Course Outline:

- Introduction to .Net framework and components-CLR, CLS, CTS &architecture.
- Understanding Object-Oriented Programming.
- Understanding Data Types.
- Intro. To visual studio 2013.
- Intro to Application programming in .net Framework.

PROGRAMMING IN C#:Course Outline

- Beginning with C#.
- Writing Applications using C#.
- Working with functions, constructors & destructor.
- Overloading, Properties, Inheritance, Abstract classes, Interfaces.
- Access specifiers. Inheritance, Polymorphism.
- Enum, Structs, and Delegates.
- Exception Handling.
- Threading &Multithreading.
- Working with File handling and I/O stream.
- Working with Collections and Generics.
- Reflection, Assembly and Metadata, Attributes & Custom attributes.
- C# language specific features.
- Intro. To Drawing.
- Deployment.
- Intro. To Ado.net &Data Architectures& Classes.
- Web Services&WebMethod.

Course Outline:

- Creating an Interactive Web Page, Page life cycle.
- Different server controls [validation controls etc.]
- Working with Client-Side Scripting& Intro. To CSS.
- Debugging& tracing Web Applications.
- Configuring and Deploying Web Applications.
- Membership and role management. Authentication and Authorization. Login controls.
- Ado.net, LINQ. Intro.to Entity Framework, ORM. Different Data source controls.
- Master pages & themes.
- Webparts.
- Ajax and Ajax Control Toolkit.
- State Management [Client side & Server Side], caching.
- Webservices&webmethod.

Module3: MVC 5 in .Net

Course Outline

- Getting Started with ASP.NET MVC:
- ASP.NET MVC project templates; What's new in ASP.NET 5 and 5.1; Understanding the structure of an ASP.NET MVC project; Naming conventionsDefining controllers; Creating a Complete ASP.NET MVC Application:
- Creating strongly-typed views; Understanding URLs and action methods; Using HTML helpers; Handling form post-backs; Data validation
- Using the Razor View Engine:
- implementing a Razor view; Razor syntax; Accessing model data in Razor views
- implementing a repository and Entity Framework data model; Using Dependency Injection; Implementing a custom controller factory
- Test Driven Development with ASP.NET MVC:
- Recap of TDD; Unit Testing frameworks; Walk-through of using TDD with ASP.NET MVC
- View Techniques:
- Defining and using custom HTML helpers; Defining a layout/master page; Using styles;
- Defining and using partial views; Razor helper method syntax
- Implementing Navigation:
- Defining view-model classes; Implementing data filtering in a controller; Understanding the routing mechanism; Adding custom entries to a route table; Defining defaults, parameters.
- State Management:
- Using hidden fields; Session and application state.
- View scaffold templates; Controller scaffold templates; Global filters.
- Using Ajax, jQuery, and Bootstrap with ASP.NET MVC:

Module : 4Silverlight

Binding in XAML

- Introduction to XAML-Based Applications
- Tools for Designing and Developing XAML-Based Applications
- Anatomy of a XAML-Based Application

Creating Vector Graphics with Expression Studio 4

- Creating Vector Graphics with Expression Design 4

Laying out a XAML-Based Application

- Organizing Controls in the User Interface
- Adding and Manipulating Controls

Developing and Debugging XAML-Based Applications

- Developing WPF Applications
- Developing Silverlight Applications
- Hosting Silverlight Applications
- Debugging XAML-Based Applications

Creating Controls Programmatically and Working with Media Files

- Creating and Using Controls Programmatically
- Working with Media Files

Working with Resources, Styles, Control Templates, and Behaviors

- Working with Resources
- Working with Styles and Control Templates
- Working with Actions, Triggers, and Behaviors

Implementing Transforms, Animations, and Visual States

- Transforms in XAML-Based Applications
- Animations in XAML-Based Applications
- Implementing and Working with Visual States

Binding in XAML

- Property Binding in XAML-Based Applications
- Data Binding in XAML-Based Applications