Microsoft .NET

Systems Domain
....Opportunities unlimited

COURSE CONTENTS

Introduction to .NET

- ❖ Understanding .NET Technology
- ❖ .NET Applications
- ❖ .NET Programming Languages

Understanding .Net Framework

- ❖ Need of Framework
- ❖ Versions of Framework
- ❖ Features of Framework
- ❖ Components of Framework
- ❖ Languages under .Net
- ❖ Understanding CLR, CTS, CLS
- ❖ Understanding Code execution Process
- ❖ Namespaces and Assemblies

VB .NET (Console Application)

- ❖ Working with Visual Studio IDE
- ❖ Building VB.NET Applications in Visual Studio
- ❖ Building VB.NET Applications Using Notepad
- ❖ Importing Namespaces
- ❖ Variables, Data Types, Boxing & Unboxing
- ❖ Functions, Arrays, Structures, Enums
- ❖ OOPS Concept in VB .NET
- ❖ Properties, Methods, Constructor, Destructor
- ❖ Inheritance, Polymorphism, Interfaces
- ❖ Delegates, Collections, Generics, Multithreading
- ❖ Exception Handling, File Handling

VB .NET (Windows Application)

- ❖ Introduction about window Applications
- ❖ Common window controls
- ❖ Advanced Controls, Dialog Controls
- ❖ Creating window Applications Data Controls
- ❖ ADO.Net Programming using SQL-Server
- ❖ MDI Applications
- ❖ Creating and using Crystal Reports
- ❖ Creating Setup and Deployment
- ❖ Assemblies

C# .NET (Console Application)

- ❖ Working with Visual Studio IDE
- ❖ Building C# .NET Applications in Visual Studio
- ❖ Building C# .NET Applications Using Notepad
- ❖ Importing Namespaces
- ❖ Variables, Data Types, Boxing & Unboxing
- ❖ Functions, Arrays, Structures, Enums
- ❖ OOPS Concept in C# .NET
- ❖ Properties, Methods, Constructor, Destructor
- ❖ Inheritance, Polymorphism, Interfaces
- ❖ Delegates, Collections, Generics, Multithreading
- ❖ Exception Handling, File Handling

ASP .NET with C#

- ❖ Introduction to ASP .NET
- ❖ Client side and server Side Technologies
- ❖ Creating website in IIS
- ❖ HTML, CSS, Javascript
- ❖ Standard, Navigation, Validation Controls
- ❖ State Management Techniques
- ❖ Skins and Themes, Master Page
- ❖ Introduction to SQL Server
- ❖ Creating Database, Tables
- ❖ Inserting, Updating, Deleting Records
- ❖ Joins, Stored Procedures, Triggers
- ❖ ADO .NET Concept in ASP.NET
- ❖ Data Controls, GridView, Repeater, DataList
- ❖ Updating, Deleting, records from GridView
- ❖ Creating and using Crystal Reports
- ❖ Caching and Types of Caching
- ❖ File Upload, Sending Mails
- ❖ Security Techniques

COURSE CONTENTS

Advanced .NET

XML

- ❖ Introduction
- ❖ Difference between XML & HTML
- ❖ Types of XML
- ❖ DTD, XML Schema
- ❖ XML Web Server Control
- ❖ Converting Relational Data to XML
- ❖ XML with CSS, XSLT, XHTML

Web Services

- ❖ Introduction
- ❖ SOA, SOAP, WSDL
- ❖ Creating Web Service
- ❖ Web Methods
- ❖ Testing Web service
- ❖ Consuming Web Service
- ❖ Creating Web Service Proxy

Language Integrated Query (LINQ)

- ❖ Introduction
- ❖ Developing LINQ Query
- ❖ LINQ to Arrays
- ❖ LINQ to Objects
- ❖ LINQ to XML
- ❖ LINQ to Database, LINQ Designer

ASP .NET AJAX

- ❖ Introduction
- ❖ Working with Ajax Server Controls
- ❖ Creating Ajax enabled Websites and services
- ❖ Introduction to Ajax toolkit.

Windows Communication Foundation (WCF)

- ❖ Introduction
- ❖ WCF Features
- ❖ Difference between Web Service and WCF
- ❖ Understanding SOA
- ❖ WCF Architecture
- ❖ Contracts, Messages
- ❖ Creating a WCF Service

- ❖ Address, Bindings and Contracts
- ❖ Consuming a WCF Service

Window Workflow Foundation (WWF)

- ❖ Introduction
- ❖ Creating and executing Workflow Application
- ❖ Integrating workflow with WCF

Windows Presentation Foundation (WPF)

- ❖ Introduction
- ❖ Programming with WPF
- ❖ Markup and Code-Behind
- ❖ WPF Layouts
- ❖ Creating WPF applications
- ❖ WPF Data Binding (MVVM)
- ❖ WPF User Control
- ❖ Templates in WPF
- ❖ WPF Commands, Routed Events
- ❖ Triggers, Creating Animations

Silverlight

- ❖ Introduction
- ❖ Silverlight User Control
- ❖ Accessing Query String
- ❖ Executing Javascript from Silverlight
- ❖ Calling WCF service From Silverlight
- ❖ Insert update delete data from Silverlight
- ❖ Maintaining Sessions
- ❖ Wrapping a Workflow Service

ASP .NET MVC

- ❖ Introduction
- ❖ MVC design pattern
- ❖ Advantages
- ❖ Creating models, Views and Controllers
- ❖ Working with SQL Server
- ❖ Adding Validation to the Model
- ❖ Validation Error UI within ASP.NET MVC
- ❖ Implementing Edit, Details, and Delete Views