



## **Dot net Contents:**

### **Day1:**

Basics of C# Programming.  
.Net Framework  
Architecture of .Net Environment  
Assemblies, IL code and Manifest  
Running multiple languages in .NET Environment  
C# as a programming language  
Main function and features of Main in C# Program.  
Data types in C# language  
Data Type Conversions.  
Convert vs. Parse  
Arrays in C#  
Enums in C#  
Classes and Objects

### **Day 2 :**

Syntactical differences with C# and other OOP languages  
Principles of OOP  
SOLID Principle  
Access specifiers  
Inheritance  
Method Overloading and Method Overriding.  
Abstract classes  
Sealed Classes  
Interface Programming.  
Multiple Interface Programming  
Explicit vs Implicit Interface implementations.  
Delegates and Events



### **Day 3:**

Frameworks of C#  
Generic Framework  
ICOMPARABLE vs. ICOMPARER  
IENUMERABLE vs. IENUMERATOR  
Multi Threading Apps  
Asynchronous Programming.  
Serialization in C# Applications.  
Intro to Database Programming

### **Day 4:**

ADO.NET Programming  
Connected Model  
Disconnected Model

### **Day 5:**

DLL Programming.  
Shared Assemblies and Private Assemblies.  
Versioning of Assemblies  
Reflection in .NET  
Intro to Web Application development  
Server side Scripting and Client Side scripting  
ASP.NET as Server side technology

### **Day 6:**

ASP.NET Web Application Development  
Web Forms in ASP.NET  
Life Cycle of an ASP.NET Page  
Rich controls of ASP.Net  
Using Views and Multi Views, AdRotator, Wizard Control  
Using Web Form Controls  
Validation Controls in ASP.NET



State management

Client side state management

Server side state management

Walkthrough on a Shopping cart app with out using database.

#### **Day 7 :**

Data Bound controls

Revisiting ADO.NET Programming on DLLs.

Caching in WebPages

Login Controls

Memberships and roles in ASP.Net

#### **Day 8 :**

ASP.NET MVC

Creating Controllers

Creating Model objects using Entity Framework

Creating Views using RAZOR Syntax

Traversing the data bw Controllers and Views and vise versa

Completing the CRUD Operations using MVC

#### **Day 9 :**

Customizations of MVC

Custom Controllers

Custom View Engines

Filters in MVC

Web security in MVC



Deploying MVC Apps in IIS

**Day 10 :**

Window - The Browser Object Model

Web APIs in ASP.NET

Consuming Web APIs

**Day 11 and 12 :**

.Net Best Practices

Concepts of unit testing

Coding standards and documentation