

Basic C# Dot Net

Duration: 3 Days

Overview of C#

- Structure of C# Program.
- Editors for writing C# Program.
- Compiling and Debugging a Program.
- CLR in terms.
- Data Types in C#.
- C# Programming Guidelines.
- Naming Convention standards.
- Basic Input/output operators
- Program Flow
- Structure Programming in C#.

Classes and objects

- Defining Classes
- Class members
- Access Modifiers
- The Main method.
- Constructors
- Static Constructors
- Constants and read-only Fields.
- Object Clean up and Resource management.
- Abstract classes
- Inheritance.

Methods

- Ref and Out parameters.
- Method Overloading (Virtual methods).
- Variable method parameters.
- Virtual methods.
- Static Methods.

Properties Arrays and Indexers

- Properties as smart fields.
- Arrays.

The Type System

- Object Scenario.
- Value types and Reference Types.
- Boxing and Unboxing.
- System. Object.
- Combining Interfaces.
- Types and Aliasing.
- Casting between types.
- CTS and its benefits.

C# Language Features

- Generics
- Using Arrays
- Using Collections
- Generics and its advantages
- Type Casting
- Using Interfaces
- Using Exception Handling
- Try Parse concepts of 2.0
- Event Handling, Delegates, Writing Custom Events etc
- Anonymous Delegates
- Writing custom controls
- IO Stream (File Streams, Binary Stream etc.)
- Finalizer/Dispose pattern
- Unsafe block
- Reflections
- Defining Custom Attributes

C# Advanced

- Threads in C#
- Asynchronous programming – Async n Await
- LINQ
- Lambda