

UNIT-I: INTRODUCTION TO C# & .NET PLATFORM & BUILDING C# APPLICATIONS

Introduction to c#(c sharp)

C# is a modern, general-purpose, object-oriented programming language developed by Microsoft

C# was developed by Anders Hejlsberg and his team during the development of .Net Framework.

C# is designed for Common Language Infrastructure (CLI), which consists of the executable code and runtime environment that allows use of various high-level languages on different computer platforms and architectures.

The following reasons make C# a widely used professional language

- It is a modern, general-purpose programming language
- It is object oriented.
- It is component oriented.
- It is easy to learn.
- It is a structured language.
- It produces efficient programs.
- It can be compiled on a variety of computer platforms.
- It is a part of .Net Framework.

The .Net Framework

“.NET framework is a software platform designed to build systems on Windows, Mac OS, and Linux/Unix distributions.”

“NET framework is the managed code and platform-independent programming model. It provides a highly productive environment for software developers and offers excellent skills reuse across multiple application architectures.”

Types of applications –

- Windows applications
- Web applications
- Web services

The .Net framework applications are multi-platform applications. The framework has been designed in such a way that it can be used from any of the following languages: C#, C++, Visual Basic, Jscript, COBOL, etc. All these languages can access the framework as well as communicate with each other.

Following are some of the components of the .Net framework

- Common Language Runtime (CLR)
- The .Net Framework Class Library
- Common Language Specification