Overview of the History of C#

C# is a **modern object-oriented programming language** developed in 2000 formerly called Cool (C-like Object Oriented Language). The development was headed by **Anders Hejlsberg** at Microsoft. It was developed to be a rival to Java (which it is quite similar to). It was created because Sun, (later bought by Oracle) did not want Microsoft to make changes to Java, so Microsoft chose to create their own language instead. C# used to have mascot called **Andy** (named after Anders Hejlsberg). C# has grown quickly since it was first created, with extensive support from Microsoft helping it to gain a large following; it is now one of the most popular programming languages in the world. This programming language was approved by European Computer Manufacturers Association (ECMA) and International Organization for Standardization (ISO).

Reasons that make C# a widely used programming 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.

Few Important Features of C#

- Boolean Conditions
- Automatic Garbage Collection
- Standard Library
- Assembly Versioning
- Properties and Events
- Delegates and Events Management
- Easy-to-use Generics
- Indexers
- Conditional Compilation
- Simple Multithreading
- LINQ and Lambda Expressions
- Integration with Windows

C# Versions

- **C# 1.0/1.2** (2002) – Modern, object-oriented, type safe programming language.
- **C# 2.0** (2005) – Generics, partial classes, anonymous types, iterators, nullable types, static classes, delegate interface.

- **C# 3.0** (2007) – Implicit types, object/collection initializers, auto-implemented properties, extension methods, lambda expressions, expression trees, partial methods.
- **C# 4.0** (2010) – Dynamic binding, named and optional arguments, generic covariance and contravariance.
- **C# 5.0** (2013) – Asynchronous methods, caller information attributes, tuples.
- **C# 6.0** (2015) – Roslyn, await in catch/finally, auto property initializer, string interpolation, nameof operator, dictionary initializers.
- **C# 7.0** (2016) – Tuples, pattern matching, decomposition, improved out variables, ref returns, local functions, literal improvements.