**What’s New in C# 9.0**

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**C# 9.0 adds the following features and enhancements to the C# language.**

1. **Records**
2. **Init only setters**
3. **Top level statements**
4. **Pattern matching and enhancements**
5. **Performance and Interop**
6. **Native sized Integers**
7. **Function pointers**
8. **Suppress emitting localsinit flag**
9. **Fit and finish features**
10. **Target -typed new expressions**
11. **static anonymous functions**
12. **Target typed conditional expressions**
13. **Covariant return types**
14. **Extension GetEnumerator support for foreach loops**
15. **Lambda discard parameters**
16. **Attributes on local functions**
17. **Support for Code Generators**
18. **Module Initializers**
19. **New features for partial methods**

**Record Types:**

C# 9.0 introduces **record** types. The record keyword to define a reference type that provides built-in functionality for encapsulating data.

You can create record types with immutable properties by using positional parameters =>

DTO’s creation we can use this type.

While records can be mutable, they are primarily intended for supporting immutable data models.

**Init-only:**

An init-only property can only be set in the constructor or by using a property initializer.

**Top-level statements:**

Top-level statements remove unnecessary ceremony from many applications.

**Performance and Interop:**

Three new features improve support for native interop and low-level libraries that require high performance: native sized integers, function pointers, and omitting the localsinit flag.