what meant by C# is managed code?

* In C#, when we say it's **managed code,** we’re talking about how it runs inside a protective, automated environment — kind of like writing software in a world with training wheels, airbags, and a smart assistant that watches for errors.

**What “Managed Code” Actually Means**

Managed code is executed by the **Common Language Runtime (CLR)** — the heart of the .NET Framework. This runtime handles memory, security, exception handling, and more *on your behalf*.

 **Garbage collection** (no manual memory cleanup)

 **Type safety** (no misbehaving variables crashing your system)

 **Security checks** (managed code won't just run wild on your machine)

 **Cross-language integration** (C#, VB.NET, F# — they all play together nicely)

## Contrast: Managed vs Unmanaged Code

* **Managed Code**: Runs under CLR. Example: C#
* **Unmanaged Code**: Runs directly on the OS. Example: C++ or raw Win32 APIs — here, you manage memory, security, etc.

C# is designed to let developers focus on logic and architecture, not on low-level plumbing. That’s why it’s so loved in backend development and enterprise systems — it helps you stay fast, clean, and secure.