

# Intro to C# Programming Environment



# **.NET Framework**

.NET framework is a software framework that is developed by Microsoft.

.NET is used to develop many applications including Web, Desktop, and Mobile Applications.



# **.NET Framework: Runtime**

The Common Language Runtime (CLR) runs code that's stored in a compressed, optimized format called Bytecode.

The language of this bytecode is called Common Intermediate Language (CIL)



# .NET Framework: Runtime

CIL is a full programming language, but it's intended for the computer, and not very human readable. It's hard to program!

So instead we have languages such as C#, VB.NET, and one called F#

Our C# code gets converted (“compiled”) to CIL, and that's what runs.



# About C#



# C# .NET

- Introduced by Microsoft back in 2000 by Anders Hejlsberg
- Object-Oriented
- Derives much of its syntax from older languages called C and C++, but removes a lot of complexity in those languages



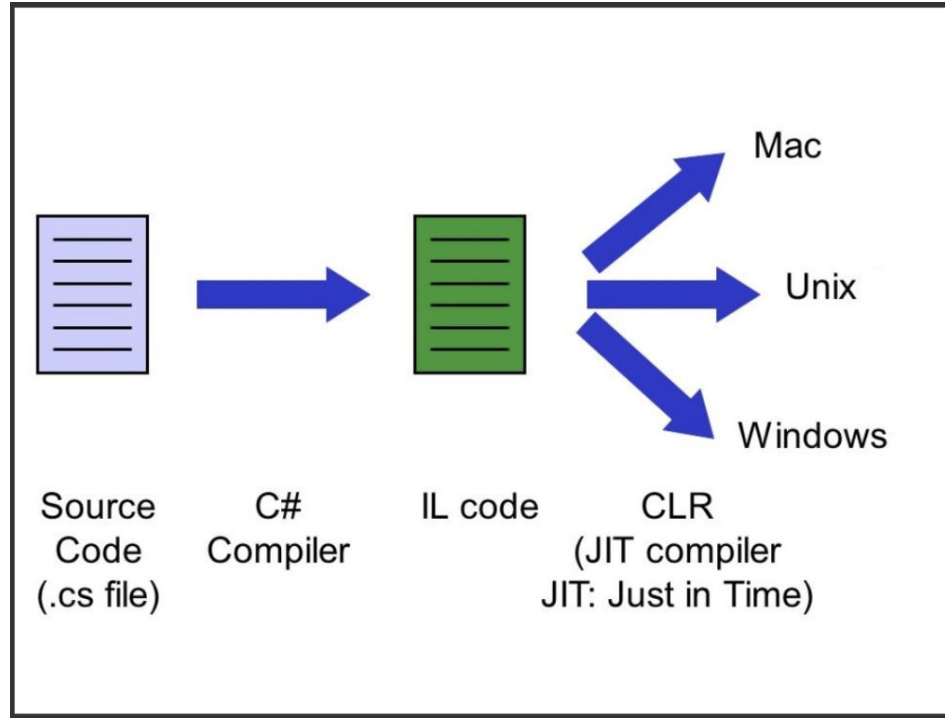
# Operating Systems Supported By C# .NET

Today, virtually all the modern OSes support C# through software called .NET Core:

- Windows
- Mac/OS X
- Linux
- Mobile devices



# How C# Compiles And Interprets Code





# Integrated Development Environments

Visual Studio is the Most Commonly used IDE for developing C#

Other IDEs include: Visual Studio Code (“VS Code” for short) and Eclipse

