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**Programming - Level 1**

# Managed vs Unmanaged Code

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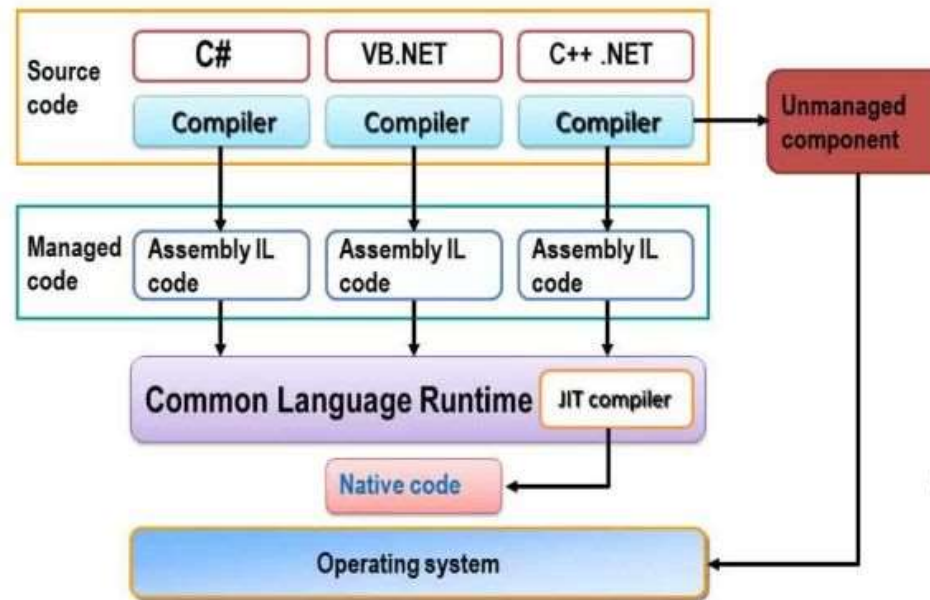


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## The CLR Execution Model



# Managed Code

- The code that runs with CLR is called managed code, whereas the code outside the CLR is called unmanaged code.
- The CLR also provides an Interoperability layer, which allows both the managed and unmanaged codes to interoperate.
- Any language that is written in the .NET framework is managed code. Managed code use CLR, which looks after your applications by managing memory, handling security, allowing cross-language debugging, etc.



# Unmanaged Code

- The code developed outside the .NET framework is known as unmanaged code.
- Applications that do not run under the control of the CLR are said to be unmanaged. Certain languages such as C++ can be used to write such applications, such as low-level access functions of the operating system.
- Background compatibility with VB, ASP, and COM are examples of unmanaged code. This code is executed with the help of wrapper classes.

COM: Component Object Model: It's a client server communication using method in the server without the need to compile them into your application. (old technology 1993 by Microsoft).



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