1. What is the advantage of an enum over its underlying type?

The advantage of an enum over its underlying type is that the enum assigns symbolic names to a set of values, whereas if the underlying type is an int, it might not be obvious what the number represents. For example, the enum Season can assign a certain value to the symbolic name of spring, which is a more robust solution than assigning that value to 0.

1. Declare a enum with underlying type long.

enum Season : long { Spring, Summer, Fall, Winter }

1. Is an instantiated struct a value or reference type?

An instantiated struct is a value type.

1. What is the purpose of the CIL?

The Common Intermediate Language (CIL) takes C# code and turns it into instructions written in pseudo-code that is stored in an assembly. The primary purpose is to create a set of platform-neutral instructions that the platform-specific CLR can read.

1. What does the CLR do?

The Common Language Runtime (CLR) is responsible for providing a safe and secure environment for code in the form of a virtual machine. At runtime, the CLR converts the CIL into machine readable WinRT API calls.

1. What alternative to native code does the Universal Windows Platform provide for unmanaged applications?

Universal Windows Platform (UWP) uses APIs exposed by WinRT rather than Win32. The primary purpose of Windows Runtime (WinRT), which is a layer on top of the native Win32 API, is to simplify the interoperability between languages so that it is easier to integrate components developed using different programming languages.