

- o Improved performance
- o Language independent
- o Platform independent
- o Garbage collection
- o Provides language features such as inheritance, interfaces, and overloading for object-oriented programmings.

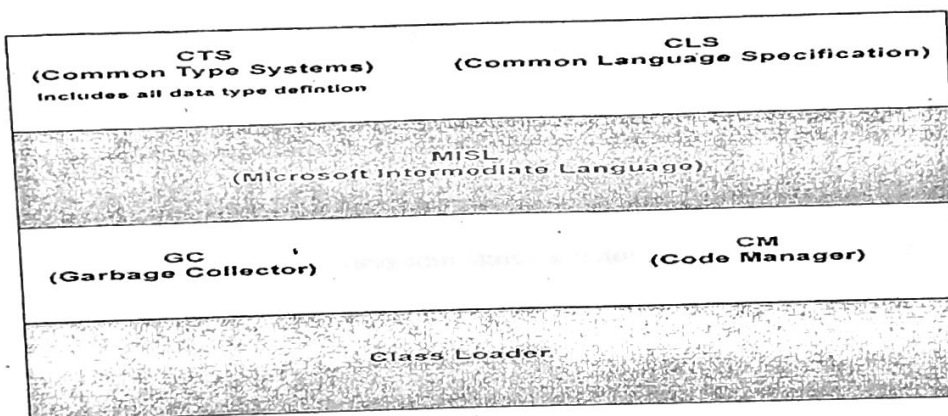
CLR can be understood as a collection of services that are required to execute a given compiled code. CLR is a core component of the .NET framework which sits on the top of the operating system and manages program's execution.

- .NET can be understood as a runtime environment and a comprehensive base class library.
- The runtime environment is known as Common Language Runtime (CLR).
- The primary role of CLR is to manage, load, and locate .NET objects on your behalf. CLR also takes care of memory management, application hosting, thread management, and perform basic security features.

CLR also performs the following services,

- Garbage collection
- Memory management
- Managing exceptions
- Security and authentications
- Thread management

Architecture of CLR (Common Language Runtime)



Garbage Collection (GC)

- One of the most important features of managed code is the concept of garbage collection.
- This is the .NET method of making sure that the memory used by an application is freed up completely when the application is no longer in use.