**Lesson 13**

**Plan of the lesson**

* Expose COM components to the .NET Framework and the .NET Framework components to COM. (Refer *System.Runtime.InteropServices* namespace)
  + Import a type library as an assembly.
  + Create COM types in managed code.
  + Compile an Interop project.
  + Deploy an Interop application.
  + Qualify the .NET Framework types for Interoperation.
  + Apply Interop attributes, such as the *ComVisibleAttribute* class.
  + Package an assembly for COM.
  + Deploy an application for COM access.
* Call unmanaged DLL functions in a .NET Framework application, and control the marshaling of data in a .NET Framework application. (Refer *System.Runtime.InteropServices*namespace)
  + Platform Invoke
  + Create a class to hold DLL functions.
  + Create prototypes in managed code.
  + Call a DLL function.
  + Call a DLL function in special cases, such as passing structures and implementing callback functions.
  + Create a new Exception class and map it to an HRESULT
  + Default marshaling behavior
  + Marshal data with Platform Invoke
  + Marshal data with COM Interop
  + *MarshalAsAttribute* class and *Marshal* class