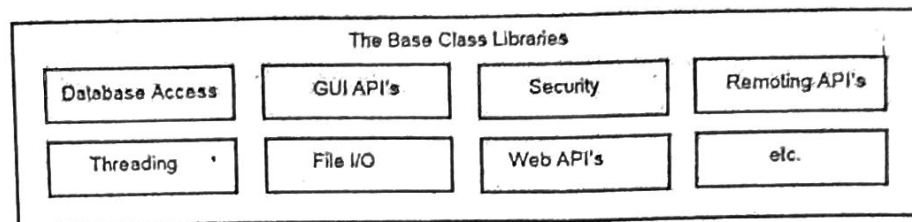## Role of Framework Class Library (FCL)

.NET framework provides an extensive library called Base Class Library which is sometimes also called Framework Class Library (FCL).
You can use these libraries when writing your programs some of them are XML classes, collection classes, threading and synchronization classes etc.

You can use these libraries to build any type of software application. For example, you can use ASP.NET to build web-based applications, REST services, WCF to build distributed systems, WPF to build desktop applications etc.

The Base Class Libraries			
Database Access	GUI API's	Security	Remoting API's
Threading	File I/O	Web API's	etc.

Base Class Library

A namespace is designed for providing a way to keep one set of names separate from another. The class names declared in one namespace does not conflict with the same class names declared in another.

Namespace	Brief Description
System	Contains the fundamentals for programming such as the data types, console, match and arrays, etc.
System.CodeDom	Supports the creation of code at runtime and the ability to run it.
System.Collections	Contains Lists, stacks, hash tables and dictionaries
System.ComponentModel	Provides licensing, controls and type conversion capabilities
System.Configuration	Used for reading and writing program configuration data
System.Data	Is the namespace for ADO.NET
System.Deployment	Upgrading capabilities via ClickOnce
System.Diagnostics	Provides tracing, logging, performance counters, etc. functionality
System.DirectoryServices	Is the namespace used to access the Active Directory
System.Drawing	Contains the GDI+ functionality for graphics support
System.EnterpriseServices	Used when working with COM+ from .NET
System.Globalization	Supports the localization of custom programs
System.IO	Provides connection to file system and the reading and writing to data streams such as files
System.Linq	Interface to LINQ providers and the execution of LINQ queries
System.Linq.Expressions	Namespace which contains delegates and lambda expressions
System.Management	Provides access to system information such as CPU utilization, storage space, etc.