



.Net Framework

A Survey of Important Libraries

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System Namespace

- ◆ Provides basic services required by most programs.
- ◆ Important Objects:
 - AppDomain, Array, Console, Convert, DateTime, Environment, EventArgs, Exception, MarshalByRefObject, Math, MulticastDelegate, Object, Random, String, Type
- ◆ Important Interfaces:
 - ICloneable, IComparable, IDisposable

System.Collections

- ◆ Provides data structures that are typed to hold objects.
- ◆ Important Objects:
 - ArrayList, BitArray, Hashtable, Queue, SortedList, Stack
- ◆ Important Interfaces:
 - ICollection, IComparer, IDictionary, IDictionaryEnumerator, IEnumerable, IEnumerator, IList

System.Collections.Specialized

- ◆ Provides specialized containers and containers for specific types.
- ◆ Important objects:
 - HybridDictionary, ListDictionary, KeysCollection, StringCollection, StringDictionary, StringEnumerator

System.Collections.Generic

- ◆ Provides data structures with Parameterized type.
- ◆ Important Objects:
 - Comparer<T>, Dictionary<TKey,TValue>, List<T>
- ◆ Important Interfaces:
 - ICollection<T>, IComparer<T>, IDictionary<TKey,TValue>, IEnumerable<T>, IEnumerator<T>, IList<T>

System.IO

- ◆ Supports use of Directories and Files
- ◆ Important objects:
 - BinaryReader, BinaryWriter
 - Directory, DirectoryInfo
 - File, FileInfo
 - FileStream
 - FileSystemInfo, FileSystemWatcher
 - Path
 - TextReader, TextWriter

System.Text

- ◆ Supports building strings and converting blocks of characters to and from blocks of bytes.
- ◆ Important Classes:
 - Decoder, Encoder, StringBuilder

System.Net

- ◆ Supports web-related network operations
- ◆ Important Classes:
 - Dns, HttpWebRequest, HttpWebResponse, IPAddress, WebClient, WebProxy, WebRequest, WebResponse

System.Net.Sockets

- ◆ Supports network programming with sockets.
- ◆ Important Classes:
 - Socket
 - TcpClient, TcpListener
 - UdpClient

System.Runtime.Remoting

- ◆ Supports the abstraction of calls to a remote object.
- ◆ Important Classes:
 - RemotingServices, WellKnownClientTypeEntry, WellKnownServiceTypeEntry
- ◆ Important Enumeration:
 - WellKnownObjectMode

System.Windows.Forms

- ◆ Supports Windows GUI programming.
- ◆ Important Objects:
 - Application, Control, Form, Form.ControlCollection, Menu, MenuItem, MessageBox, NativeWindow, Screen, Timer
 - **Dialogs:**
 - ◆ ColorDialog, FileDialog, FolderBrowserDialog, FontDialog, OpenFileDialog, PrintDialog, SaveFileDialog
 - **Controls:**
 - ◆ Button, CheckBox, ComboBox, DataGrid, DateTimePicker, GroupBox, Label, ListBox, ListView, MonthCalendar, Panel, PictureBox, ProgressBar, RadioButton, RichTextBox, ScrollBar, Splitter, StatusBar, TabControl, TabPage, TextBox, ToolBar, ToolTip, TrackBar, TreeView

System.Xml

- ◆ Provides support for reading, parsing, and writing XML.
- ◆ Important Classes:
 - XmlDocument, XmlElement, XmlNode, XmlNodeList, XmlNodeReader, XmlTextReader, XmlTextWriter

System.Threading

- ◆ Supports the creation and synchronization of threads.
- ◆ Important Classes:
 - Thread, ThreadPool, Timer, WaitHandle
 - Interlocked, Monitor, Mutex, ReaderWriterLock

System.Runtime.InteropServices

- ◆ Provides access to native APIs and COM objects.
- ◆ Important Objects:
 - DllImportAttribute



End of Presentation