

VB.NET - WINDOWS FILE SYSTEM

VB.Net allows you to work with the directories and files using various directory and file-related classes like, the **DirectoryInfo** class and the **FileInfo** class.

The DirectoryInfo Class

The **DirectoryInfo** class is derived from the **FileSystemInfo** class. It has various methods for creating, moving, and browsing through directories and subdirectories. This class cannot be inherited.

Following are some commonly used **properties** of the **DirectoryInfo** class:

S.N Property Name & Description

1

Attributes

Gets the attributes for the current file or directory.

2

CreationTime

Gets the creation time of the current file or directory.

3

Exists

Gets a Boolean value indicating whether the directory exists.

4

Extension

Gets the string representing the file extension.

5

FullName

Gets the full path of the directory or file.

6

LastAccessTime

Gets the time the current file or directory was last accessed.

7

Name

Gets the name of this DirectoryInfo instance.

Following are some commonly used **methods** of the **DirectoryInfo** class:

S.N Method Name & Purpose

1

Public Sub Create

Creates a directory.

2

Public Function CreateSubdirectory *pathAsString* As DirectoryInfo

Creates a subdirectory or subdirectories on the specified path. The specified path can be relative to this instance of the DirectoryInfo class.

3

Public Overrides Sub Delete

Deletes this DirectoryInfo if it is empty.

4

Public Function GetDirectories As DirectoryInfo

Returns the subdirectories of the current directory.

5

Public Function GetFiles As FileInfo

Returns a file list from the current directory.

For complete list of properties and methods please visit Microsoft's documentation.

The FileInfo Class

The **FileInfo** class is derived from the **FileSystemInfo** class. It has properties and instance methods for creating, copying, deleting, moving, and opening of files, and helps in the creation of FileStream objects. This class cannot be inherited.

Following are some commonly used **properties** of the **FileInfo** class:

S.N Property Name & Description

1

Attributes

Gets the attributes for the current file.

2

CreationTime

Gets the creation time of the current file.

3

Directory

Gets an instance of the directory, which the file belongs to.

4

Exists

Gets a Boolean value indicating whether the file exists.

5

Extension

Gets the string representing the file extension.

6

FullName

Gets the full path of the file.

7

LastAccessTime

Gets the time the current file was last accessed.

8

LastWriteTime

Gets the time of the last written activity of the file.

9

Length

Gets the size, in bytes, of the current file.

10

Name

Gets the name of the file.

Following are some commonly used **methods** of the **FileInfo** class:

S.N Method Name & Purpose

1

Public Function AppendText As StreamWriter

Creates a StreamWriter that appends text to the file represented by this instance of the FileInfo.

2

Public Function Create As FileStream

Creates a file.

3

Public Overrides Sub Delete

Deletes a file permanently.

4

Public Sub MoveTo *destFileNameAsString*

Moves a specified file to a new location, providing the option to specify a new file name.

5

Public Function Open *modeAs FileMode* As FileStream

Opens a file in the specified mode.

6

Public Function Open modeAs FileMode, accessAs FileAccess As FileStream

Opens a file in the specified mode with read, write, or read/write access.

7

Public Function Open modeAs FileMode, accessAs FileAccess, shareAs FileShare As FileStream

Opens a file in the specified mode with read, write, or read/write access and the specified sharing option.

8

Public Function OpenRead As FileStream

Creates a read-only FileStream

9

Public Function OpenWrite As FileStream

Creates a write-only FileStream.

For complete list of properties and methods, please visit Microsoft's documentation

Example

The following example demonstrates the use of the above-mentioned classes:

```
Imports System.IO
Module fileProg
    Sub Main()
        'creating a DirectoryInfo object
        Dim mydir As DirectoryInfo = New DirectoryInfo("c:\Windows")
        ' getting the files in the directory, their names and size
        Dim f As FileInfo() = mydir.GetFiles()
        Dim file As FileInfo
        For Each file In f
            Console.WriteLine("File Name: {0} Size: {1} ", file.Name, file.Length)
        Next file
        Console.ReadKey()
    End Sub
End Module
```

When you compile and run the program, it displays the names of files and their size in the Windows directory.

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