

WinInteropUtils

WinInteropUtils is a C# library written in .NET 8 that provides managed P/Invoke wrappers for tons of functions you can use, from reading file attributes to interacting with COM interfaces.

The base namespace is `FireBlade.WinInteropUtils`.

⚠ WARNING

WinInteropUtils is still in beta, so bugs may occur. If you experience any bugs, please report them on the [Issues](#) page.

How to install (for now)

Because **WinInteropUtils** isn't a NuGet package yet, to use it, simply download the DLL file, and go into the add references dialog, select Browse, and open the DLL. For a more detailed guide visit the [Installation section of the Getting Started page](#).

⚠ WARNING

WinInteropUtils is built on .NET 8, so it won't work for .NET Framework projects.

Features

- [WindowsFile](#) file info wrapper
- Full enums (1600+ values) for [HRESULTs](#) and [Win32 error codes](#)
- Dialog boxes
- Useful utility [User32](#) functions ([SendMessage](#), [SetWindowLongPtr](#)...)
- [Constants](#) and [Macros](#)
- [COM interfaces](#)
- Icon management ([DestroyIcon](#), ...)


Namespace FireBlade.WinInteropUtils

Classes

[DefaultWindowLongPtrValues](#)

Defines default index values for [SetWindowLongPtr\(nint, int, nint\)](#) and [GetWindowLongPtr\(nint, int\)](#).


[EnumExtensions](#)

Provides extension methods for [Enum](#) .

[ExceptionExtensions](#)

Provides extension methods for [Exception](#) .

[IconExtensions](#)

Adds extension methods to the [Icon](#)  class.

[Macros](#)

Defines Win32 macros.

[Shell32](#)

Declares P/Invoke functions from [Shell32.dll](#).

[TitleBarInfo](#)

Stores data about a window's title bar.

[User32](#)

Declares P/Invoke functions from [User32.dll](#).

[Win32Constants](#)

Defines common Win32 constants.

[WindowsFile](#)

Stores data about a Windows file.

Structs

[Shell32.SHFILEINFO](#)

The internal Windows API struct for [SHGetFileInfoW\(string, uint, ref SHFILEINFO, uint, uint\)](#) . Use with [GetFileInfoEx\(string, WindowsFileAttributes, SHGetFileInfoFlags, ref SHFILEINFO\)](#).

Enums

[HRESULT](#)

Defines common HRESULT values. Values starting with [S_](#) indicate success, while those starting with [E_](#) indicate an error.

[Shell32.SHGetFileInfoFlags](#)

Provides flags for the Windows API function [SHGetFileInfoW\(string, uint, ref SHFILEINFO, uint, uint\)](#)[↗].
To use this function, call the [GetFileInfoEx\(string, WindowsFileAttributes, SHGetFileInfoFlags, ref SHFILEINFO\)](#) wrapper instead.

[TitleBarElement](#)

Defines elements on a title bar.

[TitleBarElementState](#)

Defines the states of a title bar element.

[Win32ErrorCode](#)

Defines Win32 error codes.

[WindowState](#)

Defines states a window can be in.

[WindowsFileAttributes](#)

Specifies attributes for Windows files.