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.

Features

- [WindowsFile](#) file info wrapper
- Full enums (1600+ values) for [HRESULT](#)s 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`.

[StockIconHelper](#)

    Allows you to get a shell stock icon. Unlike the built-in .NET [GetStockIcon(StockIconId, int)](#)⧉ or [Get StockIcon(StockIconId, StockIconOptions)](#)⧉ functions, this wrapper allows you to enter any icon ID you want.

[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.

[StockIcon](#)
Icon identifiers for the [GetIcon(StockIcon, StockIconOptions)](#) function.

[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.