

IconMagic

0.1

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Chapter 1

Main Page

IconMagic

See the [GitHub page](#)

Chapter 2

Todo List

Member `TestFramework::addTest` (`std::function< bool(void)>` testFunction)

: document this function

Member `TestFramework::execute` ()

: document this function

Member `TestFramework::getTestsStatus` ()

: document this function

Member `TestFramework::getTotalTestsRun` ()

: document this function

Member `TestFramework::getTotalTestsRunSuccessfully` ()

: document this function

Member `TestFramework::TestFramework` ()

: document this function

Member `TestFramework::~~TestFramework` ()

: document this function

Chapter 3

Hierarchical Index

3.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

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Chapter 4

Class Index

4.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

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Chapter 5

File Index

5.1 File List

Here is a list of all documented files with brief descriptions:

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Created by ThetaSinner (Gregory Jensen). Released as open source	??
D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/doc/ index.hpp	??
D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/doxygen/ example.hpp	25
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D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/ IconMagic.cpp	26
Created by ThetaSinner (Gregory Jensen). Released as open source	26
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Created by ThetaSinner (Gregory Jensen). Released as open source	31
D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/ TextUI.hpp	??
Created by ThetaSinner (Gregory Jensen). Released as open source	??
D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/ Util.hpp	30
Created by ThetaSinner (Gregory Jensen). Released as open source	31
D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/ WindowsToolbox.cpp	??
Created by ThetaSinner (Gregory Jensen). Released as open source	??
D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/ WindowsToolbox.hpp	??
Created by ThetaSinner (Gregory Jensen). Released as open source	??
D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Menu/ Menu.hpp	??
D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Menu/ MenuManager.hpp	??
D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Menu/MenuDefinitions/ MenuFactory.hpp	??
D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/Common/ KeyPath.hpp	??
D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/Common/ KeyService.hpp	??
D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/DataAccess/ DirectRegistry↔	??
Access.hpp	??
D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/DataAccess/ RegistryAccess↔	??
Exception.hpp	??
D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/DataAccess/ SimpleRegistry↔	??
Access.hpp	??
D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/History/ ExtensionHistory.hpp	??

D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/History/ ImageEntry.hpp	??
D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/History/ RegistryHistory.cpp	
Record changes to 'DefaultIcon' keys in the registry using a custom file format	27
D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/History/ RegistryHistory.hpp . . .	??
D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/Scanner/ RegistryScanner.hpp . .	??
D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/Scanner/ ScanTool.hpp	??
D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/test/ framework.cpp	
Created by ThetaSinner (Gregory Jensen). Released as open source	31
D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/test/ framework.hpp	??
D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/test/ Testing.cpp	
Created by ThetaSinner (Gregory Jensen). Released as open source	32
D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/test/ Testing.hpp	
Created by ThetaSinner (Gregory Jensen). Released as open source	32
D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/test/RegistryHistory/ RegistryHistoryTest.cpp	
Created by ThetaSinner (Gregory Jensen). Released as open source	32
D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/test/RegistryHistory/ RegistryHistoryTest.hpp .	??

Chapter 6

Class Documentation

6.1 DirectRegistryAccess Class Reference

Static Public Member Functions

- static bool **openKeyForEnumeration** (HKEY root_key, std::string path, HKEY &h_key)
- static bool **openKeyForEnumeration** (HKEY root_key, HKEY &h_key)
- static bool **openKeyForSettingValue** (HKEY root_key, std::string path, HKEY &h_key)
- static bool **getSubKeyNameAt** (const HKEY &root_key, int n, std::string &key_name)
- static bool **getValueFromKey** (HKEY &h_key, std::string search_value_name, std::string *value)
- static bool **getValueFromKey** (HKEY &h_key, std::string *value)
- static bool **setValueForKey** (HKEY &h_key, std::string value_name, std::string value)
- static bool **setValueForKey** (HKEY &h_key, std::string value)
- static void **closeKey** (HKEY &h_key)

The documentation for this class was generated from the following files:

- D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/DataAccess/DirectRegistryAccess.hpp
- D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/DataAccess/DirectRegistryAccess.cpp

6.2 ExampleClass Class Reference

An example class.

```
#include <example.hpp>
```

Public Types

- enum { [val1](#), [val2](#) }
- enum [MyEnum](#) { [val3](#), [val4](#) }
- enum [MyEnumClass](#) { [MyEnumClass::val5](#) }

Public Member Functions

- int **publicMethod** ()
- int [getProtectedVariable](#) ()
A protected variable getter.
- void [setProtectedVariable](#) (int value_to_set)
A protected variable setter.

Public Attributes

- int **publicVariable**
- int [standardDocstring](#)
- int [inlineDocstring](#)
- enum [ExampleClass::MyEnum myEnumCase](#)
- int [detailedVariable](#)
- int [markdownVariable](#)

Some markdown examples.

Protected Member Functions

- int **protectedMethod** ()

Protected Attributes

- int **protectedVariable**

6.2.1 Detailed Description

An example class.

A detailed description of my example class. The class markup for this comment block indicates which class it is being used to document.

6.2.2 Member Enumeration Documentation

6.2.2.1 anonymous enum

An anonymous enum.

Enumerator

- val1** enum value 1
- val2** enum value 2

6.2.2.2 enum ExampleClass::MyEnum

A named enum.

Enumerator

- val3** MyEnum value 3
- val4** MyEnum value 4

6.2.2.3 enum ExampleClass::MyEnumClass [strong]

An enum class.

Enumerator

- val5** MyEnumClass value 5

6.2.3 Member Function Documentation

6.2.3.1 `int ExampleClass::getProtectedVariable ()`

A protected variable getter.

This method allows access to a protected variable.

Returns

The value of the protected variable.

See also

[setProtectedVariable\(\)](#)

6.2.3.2 `void ExampleClass::setProtectedVariable (int value_to_set)`

A protected variable setter.

This method allows the setting of a protected variable.

See also

[getProtectedVariable\(\)](#)

Parameters

<i>value_to_set</i>	The value to be assigned to the protected variable.
---------------------	---

6.2.4 Member Data Documentation

6.2.4.1 `int ExampleClass::detailedVariable`

A brief description of a variable.

A more detailed description of the very boring variable.

6.2.4.2 `int ExampleClass::inlineDocstring`

This documentation is placed at the end of a variable documentation.

6.2.4.3 `int ExampleClass::markdownVariable`

Some markdown examples.

A big header

With a smaller header underneath.

This is a VERY INTERESTING block quote.

This is a list:

- Level 1

- level 2 tem 1
- Level 1 item 2
 - Level 2 item 1
 - Level 2 item 2

Using 4 spaces you can

```
class code
{
    int x = 4;
};
```

put a code sample into your documentation.

6.2.4.4 enum ExampleClass::MyEnum ExampleClass::myEnumCase

< An instance of type MyEnum

6.2.4.5 int ExampleClass::standardDocstring

This documentation placed before a variable.

The documentation for this class was generated from the following files:

- D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/doxygen/[example.hpp](#)
- D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/doxygen/example.cpp

6.3 ExtensionHistory Class Reference

Public Member Functions

- void **createFromData** (std::string extension_name, [ImageEntry](#) image_entry)
- void **createFromFormatted** (std::string entry)
- int **size** ()
- std::string **getExtensionName** () const
- [ImageEntry](#) **getLastEntry** ()
- std::string **getFormatted** () const
- void **pushImageEntry** ([ImageEntry](#) image_entry)
- void **popImageEntry** ()
- bool **isValid** ()

The documentation for this class was generated from the following files:

- D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/History/ExtensionHistory.hpp
- D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/History/ExtensionHistory.cpp

6.4 ImageEntry Class Reference

Public Member Functions

- void **createFromData** (std::string image_path, std::string image_index)
- void **createFromFormatted** (std::string entry)

- `std::string getPath () const`
- `std::string getImageIndex () const`
- `std::string getFormatted () const`
- `bool isValid ()`

Static Public Attributes

- `static const std::string separator = ","`
- `static const std::string blockOpen = "["`
- `static const std::string blockShut = "]"`

The documentation for this class was generated from the following files:

- `D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/History/ImageEntry.hpp`
- `D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/History/ImageEntry.cpp`

6.5 KeyPath Class Reference

Public Member Functions

- **KeyPath** (`std::string key_name`)
- **KeyPath** (`const KeyPath &kp`)
- **KeyPath & append** (`std::string key_name`)
- `int getPathLength ()`
- `std::string getKeyName (int index)`
- `std::string toString ()`

The documentation for this class was generated from the following files:

- `D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/Common/KeyPath.hpp`
- `D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/Common/KeyPath.cpp`

6.6 KeyService Class Reference

Static Public Member Functions

- `static std::string resolveName (std::string name)`
- `static HKEY getKeyByName (std::string name)`
- `static HKEY getKeyByAnyName (std::string name)`

Static Public Attributes

- `static const std::map< std::string, std::string > ALTERNATE_KEY_NAME_MAP`
- `static const std::map< std::string, HKEY > PREDEFINED_ROOT_KEYS`

6.6.1 Member Data Documentation

6.6.1.1 `const std::map< std::string, std::string > KeyService::ALTERNATE_KEY_NAME_MAP` [static]

Initial value:

```
= {
  {"classes_root", "HKEY_CLASSES_ROOT"},
  {"current_config", "HKEY_CURRENT_CONFIG"},
  {"current_user", "HKEY_CURRENT_USER"},
  {"local_machine", "HKEY_LOCAL_MACHINE"},
  {"users", "HKEY_USERS"}
}
```

6.6.1.2 `const std::map< std::string, HKEY > KeyService::PREDEFINED_ROOT_KEYS` [static]

Initial value:

```
= {
  {"HKEY_CLASSES_ROOT", HKEY_CLASSES_ROOT},
  {"HKEY_CURRENT_CONFIG", HKEY_CURRENT_CONFIG},
  {"HKEY_CURRENT_USER", HKEY_CURRENT_USER},
  {"HKEY_LOCAL_MACHINE", HKEY_LOCAL_MACHINE},
  {"HKEY_USERS", HKEY_USERS}
}
```

The documentation for this class was generated from the following files:

- D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/Common/KeyService.hpp
- D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/Common/KeyService.cpp

6.7 Manager Class Reference

Public Member Functions

- void **cacheBuild** ()

Static Public Attributes

- static const std::string **ICON_MAGIC_CACHE_NAME** = "IconMagicCache"
Notes.
- static const std::string **ICON_MAGIC_CACHE_FILE_EXTENSION** = ".txt"

6.7.1 Member Data Documentation

6.7.1.1 `const std::string Manager::ICON_MAGIC_CACHE_NAME = "IconMagicCache"` [static]

Notes.

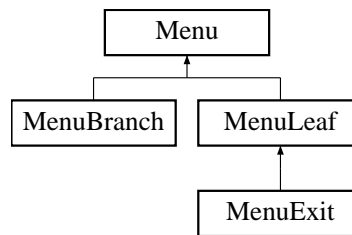
Shared functionality When the file type already exists (has an entry with a default icon. Add a new file type Rebuild system icon cache option [Menu](#) design

The documentation for this class was generated from the following files:

- D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/[Manager.hpp](#)
- D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/[Manager.cpp](#)

6.8 Menu Class Reference

Inheritance diagram for Menu:



Public Member Functions

- **Menu** (std::string title, **Menu** *sub_menu)
- **Menu** * **add** (std::string title, **Menu** *sub_menu)
- std::vector< std::string > **getMenu** ()
- **Menu** * **getParent** ()
- virtual **Menu** * **action** (std::string input)=0

Protected Attributes

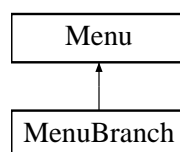
- **Menu** * **parent** = nullptr
- std::vector< std::pair< std::string, **Menu** * > > **menu**

The documentation for this class was generated from the following files:

- D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Menu/Menu.hpp
- D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Menu/Menu.cpp

6.9 MenuBranch Class Reference

Inheritance diagram for MenuBranch:



Public Member Functions

- **Menu** * **action** (std::string input)

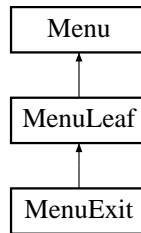
Additional Inherited Members

The documentation for this class was generated from the following files:

- D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Menu/Menu.hpp
- D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Menu/Menu.cpp

6.10 MenuExit Class Reference

Inheritance diagram for MenuExit:



Public Member Functions

- [Menu](#) * **action** (std::string _)

Additional Inherited Members

The documentation for this class was generated from the following files:

- D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Menu/Menu.hpp
- D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Menu/Menu.cpp

6.11 MenuFactory Class Reference

Public Member Functions

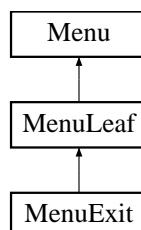
- [Menu](#) * **getMainMenuInstance** ()

The documentation for this class was generated from the following files:

- D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Menu/MenuDefinitions/MenuFactory.hpp
- D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Menu/MenuDefinitions/MenuFactory.cpp

6.12 MenuLeaf Class Reference

Inheritance diagram for MenuLeaf:



Public Member Functions

- [Menu](#) * **action** (std::string input)
- [Menu](#) * **addAction** (std::function< int(void)> f)

Additional Inherited Members

The documentation for this class was generated from the following files:

- D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Menu/Menu.hpp
- D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Menu/Menu.cpp

6.13 MenuManager Class Reference

Public Member Functions

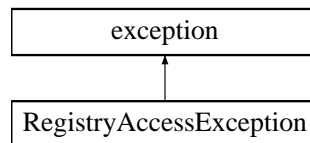
- **MenuManager** ([Menu](#) *menu_handle)
- void **start** ()

The documentation for this class was generated from the following files:

- D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Menu/MenuManager.hpp
- D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Menu/MenuManager.cpp

6.14 RegistryAccessException Class Reference

Inheritance diagram for RegistryAccessException:



Public Member Functions

- **RegistryAccessException** (std::string message)
- std::string **what** ()

The documentation for this class was generated from the following files:

- D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/DataAccess/RegistryAccessException.↔
hpp
- D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/DataAccess/RegistryAccessException.↔
cpp

6.15 RegistryHistory Class Reference

Public Member Functions

- [RegistryHistory](#) ()
Default constructor.
- void [setHistoryFileName](#) (std::string history_file_name)
Set the path to the file to be used for storing registry modification history.
- bool [readHistory](#) ()

- bool [writeHistory](#) ()
- bool **push** (std::string extension_name, std::string image_name, std::string image_index)
- bool **pop** (std::string extension_name)
- void **deleteExtension** (std::string extension_name)
- std::string **getPath** (std::string extension_name)
- std::string **getIndex** (std::string extension_name)
- std::string **getRegString** (std::string extension_name)

6.15.1 Member Function Documentation

6.15.1.1 bool RegistryHistory::readHistory ()

Returns

bool

6.15.1.2 void RegistryHistory::setHistoryFileName (std::string *history_file_name*)

Set the path to the file to be used for storing registry modification history.

Parameters

<i>history_file_name</i>	std::string
--------------------------	-------------

Returns

void

6.15.1.3 bool RegistryHistory::writeHistory ()

Returns

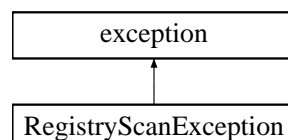
bool

The documentation for this class was generated from the following files:

- D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/History/RegistryHistory.hpp
- D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/History/[RegistryHistory.cpp](#)

6.16 RegistryScanException Class Reference

Inheritance diagram for RegistryScanException:



Public Member Functions

- **RegistryScanException** (std::string msg)
- virtual const char * **what** () const throw ()

Public Attributes

- `std::string err` = "Unknown failure."

The documentation for this class was generated from the following file:

- `D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/Scanner/ScanTool.hpp`

6.17 RegistryScanner Class Reference

Public Member Functions

- `std::vector< std::pair< KeyPath, std::string > >` **getValues** (`std::string key_name`, `std::string value_name`)
- `void` **setRootKey** (`std::string root_key_name`)
- `std::string` **getRootKey** ()
- `void` **setMaxDepth** (`int max_depth`)
- `int` **getMaxDepth** ()
- `void` **setMaxMatches** (`int max_matches`)
- `int` **getMaxMatches** ()

Static Public Member Functions

- `static int` **unlimitedMatches** ()
- `static int` **unlimitedRecursionDepth** ()

The documentation for this class was generated from the following files:

- `D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/Scanner/RegistryScanner.hpp`
- `D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/Scanner/RegistryScanner.cpp`

6.18 ScanTool Class Reference

Public Member Functions

- `std::vector< std::pair< KeyPath, std::string > >` **simpleSearch** (`std::string root_key_name`, `std::string search_key_name`, `std::string search_value_name`, `int maximum_recursion_depth`, `int maximum_items_to_search_for`)
- `bool` **testRootKeyNameValid** (`std::string root_key_name`)

Static Public Member Functions

- `static int` **unlimitedMatches** ()
- `static int` **unlimitedRecursionDepth** ()

Static Public Attributes

- `static const int` **UNLIMITED_RECURSION_DEPTH** = -7
- `static const int` **UNLIMITED_MATCHES** = -7

The documentation for this class was generated from the following files:

- `D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/Scanner/ScanTool.hpp`
- `D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/Scanner/ScanTool.cpp`

6.19 SimpleRegistryAccess Class Reference

Static Public Member Functions

- static std::string **getValueAtPath** ([KeyPath](#) key_path, std::string value_name)
- static std::string **getValueAtPath** ([KeyPath](#) key_path)
- static bool **setValueAtPath** ([KeyPath](#) key_path, std::string value_name, std::string value)
- static bool **setValueAtPath** ([KeyPath](#) key_path, std::string value)

The documentation for this class was generated from the following files:

- D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/DataAccess/SimpleRegistryAccess.↵
hpp
- D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/DataAccess/SimpleRegistryAccess.↵
cpp

6.20 TestFramework Class Reference

Public Member Functions

- void **addTest** (std::function< bool(void)> testFunction)
addTest
- bool **execute** ()
execute
- bool **getTestsStatus** ()
getTestStatus
- int **getTotalTestsRun** ()
getTotalTestsRun
- int **getTotalTestsRunSuccessfully** ()
getTotalTestsRunSuccessfully
- **TestFramework** ()
TestFramework.
- **~TestFramework** ()
~TestFramework

6.20.1 Constructor & Destructor Documentation

6.20.1.1 TestFramework::TestFramework ()

[TestFramework.](#)

Todo : document this function

6.20.1.2 TestFramework::~~TestFramework ()

[~TestFramework](#)

Todo : document this function

6.20.2 Member Function Documentation

6.20.2.1 void TestFramework::addTest (std::function< bool(void)> *testFunction*)

addTest

Todo : document this function

6.20.2.2 bool TestFramework::execute ()

execute

Todo : document this function

6.20.2.3 bool TestFramework::getTestsStatus ()

getTestStatus

Todo : document this function

6.20.2.4 int TestFramework::getTotalTestsRun ()

getTotalTestsRun

Todo : document this function

6.20.2.5 int TestFramework::getTotalTestsRunSuccessfully ()

getTotalTestsRunSuccessfully

Todo : document this function

The documentation for this class was generated from the following files:

- D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/test/framework.hpp
- D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/test/[framework.cpp](#)

Chapter 7

File Documentation

7.1 D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/doxygen/example.hpp File Reference

Examples of the doxygen markup I plan to use accross the project.

Classes

- class [ExampleClass](#)
An example class.

7.1.1 Detailed Description

Examples of the doxygen markup I plan to use accross the project.

Given that I'm new to using doxygen, I thought it'd be a good idea to get to know it's capabilities in a sandbox rather than documenting everything then changing my mind over and over again and having to redo very bit of documentation every time.

You can use the folowwing to document items, hopefully obviously - struct, union, enum, fn, var, def, typedef, file, namespace

7.2 D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main.cpp File Reference

Created by ThetaSinner (Gregory Jensen). Released as open source.

```
#include "main/IconMagic.hpp"
#include <iostream>
#include "../main/Registry/Scanner/ScanTool.hpp"
#include "../main/Registry/DataAccess/SimpleRegistryAccess.hpp"
#include <sstream>
#include <fstream>
#include <list>
#include <string>
#include "../main/Menu/Menu.hpp"
#include "../main/Menu/MenuManager.hpp"
#include "../main/Menu/MenuDefinitions/MenuFactory.hpp"
#include "../main/Manager.hpp"
#include "../main/Util.hpp"
```

Functions

- int **main** (int argc, char **args)

7.2.1 Detailed Description

Created by ThetaSinner (Gregory Jensen). Released as open source.

This file launches IconMagic.

7.3 D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/IconMagic.cpp File Reference

Created by ThetaSinner (Gregory Jensen). Released as open source.

```
#include "IconMagic.hpp"
```

Functions

- int **exitIconMagic** (int exitCode=0)
- int **runIconMagic** ()

7.3.1 Detailed Description

Created by ThetaSinner (Gregory Jensen). Released as open source.

```
// TODO file_desc
```

7.4 D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/IconMagic.hpp File Reference

Created by ThetaSinner (Gregory Jensen). Released as open source.

```
#include <iostream>
#include <string>
#include <vector>
#include "SystemValidation.hpp"
#include "WindowsToolbox.hpp"
#include "TextUI.hpp"
```

Functions

- int **runIconMagic** ()

7.4.1 Detailed Description

Created by ThetaSinner (Gregory Jensen). Released as open source.

```
// TODO file_desc
```


7.5 D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Manager.cpp File Reference

Created by ThetaSinner (Gregory Jensen). Released as open source.

```
#include "../Manager.hpp"
#include <stdio.h>
#include "../Util.hpp"
#include "../WindowsToolbox.hpp"
#include "../Registry/Scanner/RegistryScanner.hpp"
#include "../Registry/History/registryHistory.hpp"
```

7.5.1 Detailed Description

Created by ThetaSinner (Gregory Jensen). Released as open source.

```
// TODO file_desc
```

7.6 D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Manager.hpp File Reference

Created by ThetaSinner (Gregory Jensen). Released as open source.

```
#include <Windows.h>
#include <list>
#include <string>
#include <iostream>
#include <fstream>
```

Classes

- class [Manager](#)

7.6.1 Detailed Description

Created by ThetaSinner (Gregory Jensen). Released as open source.

```
// TODO file_desc
```

7.7 D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/Registry/History/RegistryHistory.cpp File Reference ↩

Record changes to 'DefaultIcon' keys in the registry using a custom file format.

```
#include "../RegistryHistory.hpp"
#include "../../../WindowsToolbox.hpp"
#include "../../../Util.hpp"
```

7.7.1 Detailed Description

Record changes to 'DefaultIcon' keys in the registry using a custom file format.

Designed to manage a custom file format for storing changes made by IconMagic to the registry. Each file extension for which IconMagic has made registry changes will be associated with a list of all the values which have been assigned to the 'DefaultIcon' subkey for that extension. This means that (in the best case) the user can choose to roll back changes, or even revert to the system's default icon.

Created by ThetaSinner (Gregory Jensen). Released as open source.

7.8 D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/SystemValidation.cpp File Reference

Created by ThetaSinner (Gregory Jensen). Released as open source.

```
#include "SystemValidation.hpp"
```

Functions

- `std::string windowsVersion ()`
- `std::string windowsVersionToName (std::string)`
- `bool registryAccess ()`
- `bool verifyWindowsVersionSupported ()`
- `bool verifyWindowsVersionSupportedWithUserInteraction ()`
- `bool verifyProgramHasRegistryAccess ()`
- `bool verifyProgramHasRegistryAccessWithUserInteraction ()`

7.8.1 Detailed Description

Created by ThetaSinner (Gregory Jensen). Released as open source.

```
// TODO file_desc
```

7.8.2 Function Documentation

7.8.2.1 `std::string windowsVersion ()`

GetVersionEx deprecated from this version of windows onwards.

7.9 D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/SystemValidation.hpp File Reference

Created by ThetaSinner (Gregory Jensen). Released as open source.

```
#include <Windows.h>
#include <string>
#include "WindowsToolbox.hpp"
#include "TextUI.hpp"
```

Functions

- bool **verifyWindowsVersionSupported** ()
- bool **verifyWindowsVersionSupportedWithUserInteraction** ()
- bool **verifyProgramHasRegistryAccess** ()
- bool **verifyProgramHasRegistryAccessWithUserInteraction** ()

7.9.1 Detailed Description

Created by ThetaSinner (Gregory Jensen). Released as open source.

// TODO file_desc

7.10 D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/TextUI.cpp File Reference

Created by ThetaSinner (Gregory Jensen). Released as open source.

```
#include "TextUI.hpp"
```

Functions

- void **setConsoleCharacterOutputWidth** (unsigned width)
- void **setConsoleCharacterOutputHeight** (unsigned height)
- void **setPrintFillerCharacter** (char character)
- void **setInputBufferMaxCharacters** (unsigned maximum)
- std::string **repeatString** (std::string str, int times=1)
- std::string **centerStringForConsole** (std::string str, std::string filler="*")
- void **printTitleBox** (std::string title)
- void **printTitleLine** (std::string title)
- void **printLine** (std::string line)
- std::string **getInputLine** (std::string prompt)
- std::string **getInputYesNo** (std::string prompt, bool forceAnswer)
- int **getInputValue** (std::string prompt, bool forceAnswer)
- int **getInputMenuSelection** (const std::vector< std::string > &menuOptions, bool forceAnswer)
- void **waitForUser** ()
- void **printNewLine** (int times)
- void **textClearConsole** ()

Variables

- unsigned int **CONSOLE_CHARACTER_OUTPUT_WIDTH** = 80
- unsigned int **CONSOLE_CHARACTER_OUTPUT_HEIGHT** = 25
- unsigned int **INPUT_BUFFER_MAX_CHARACTERS** = 100
- std::string **PRINT_FILLER_CHARACTER** = "*"

7.10.1 Detailed Description

Created by ThetaSinner (Gregory Jensen). Released as open source.

// TODO file_desc

7.11 D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/TextUI.hpp File Reference

Created by ThetaSinner (Gregory Jensen). Released as open source.

```
#include <iostream>
#include <string>
#include <vector>
#include <sstream>
```

Functions

- void **setConsoleCharacterOutputWidth** (unsigned width)
- void **setConsoleCharacterOutputHeight** (unsigned height)
- void **setPrintFillerCharacter** (char character)
- void **setInputBufferMaxCharacters** (unsigned maximum)
- void **printTitleBox** (std::string title)
- void **printTitleLine** (std::string title)
- void **printLine** (std::string line)
- std::string **getInputLine** (std::string prompt)
- std::string **getInputYesNo** (std::string prompt, bool forceAnswer=false)
- int **getInputValue** (std::string prompt, bool forceAnswer=false)
- int **getInputMenuSelection** (const std::vector< std::string > &options, bool forceAnswer=false)
- void **waitForUser** ()
- void **printNewLine** (int times=1)
- void **textClearConsole** ()

7.11.1 Detailed Description

Created by ThetaSinner (Gregory Jensen). Released as open source.

```
// TODO file_desc
```

7.12 D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/WindowsToolbox.cpp File Reference

Created by ThetaSinner (Gregory Jensen). Released as open source.

```
#include "WindowsToolbox.hpp"
#include <Windows.h>
```

Functions

- std::string **getLastWindowsErrorMessage** ()
- void **systemClearScreen** ()
- bool **validPathToFile** (std::string file_path)
- bool **fileExists** (std::string file_path)
- bool **canOpenFile** (std::string file_path)

7.12.1 Detailed Description

Created by ThetaSinner (Gregory Jensen). Released as open source.

// TODO file_desc

7.13 D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/main/WindowsToolbox.hpp File Reference

Created by ThetaSinner (Gregory Jensen). Released as open source.

```
#include <iostream>
#include <string>
#include <unordered_map>
#include <sstream>
#include <fstream>
#include <list>
```

Macros

- `#define WINDOWS_OPERATION_SUCCESS ERROR_SUCCESS`

Functions

- `std::string getLastWindowsErrorMessage ()`
- `void systemClearScreen ()`
- `bool canOpenFile (std::string file_path)`
- `bool validPathToFile (std::string file_path)`
- `bool fileExists (std::string file_path)`
- `bool scanRegistryForDefaultIcons ()`

7.13.1 Detailed Description

Created by ThetaSinner (Gregory Jensen). Released as open source.

// TODO file_desc

7.14 D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/test/framework.cpp File Reference

Created by ThetaSinner (Gregory Jensen). Released as open source.

```
#include "framework.hpp"
#include <iostream>
```

7.14.1 Detailed Description

Created by ThetaSinner (Gregory Jensen). Released as open source.

// TODO file_desc

7.15 D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/test/RegistryHistory/RegistryHistoryTest.cpp File Reference [↩](#)

Created by ThetaSinner (Gregory Jensen). Released as open source.

```
#include "../framework.hpp"
#include "../main//RegistryHistory.hpp"
```

Functions

- bool **setAndRetrievelmageEntry** ()
- bool **setAndRetrieveFormattedImageEntry** ()
- bool **testRegistryHistory** (int &total_tests_run, int &total_tests_run_successfully)

7.15.1 Detailed Description

Created by ThetaSinner (Gregory Jensen). Released as open source.

```
// TODO file_desc
```

7.15.2 Function Documentation

7.15.2.1 bool testRegistryHistory (int & total_tests_run, int & total_tests_run_successfully)

< Use the test framework to run all tests.

< Set the test statistics so they can be used by the calling process.

7.16 D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/test/Testing.cpp File Reference

Created by ThetaSinner (Gregory Jensen). Released as open source.

```
#include "Testing.hpp"
#include "TextUI.hpp"
```

Functions

- void **testTextUI** ()

7.16.1 Detailed Description

Created by ThetaSinner (Gregory Jensen). Released as open source.

```
// TODO file_desc
```

7.17 D:/Users/Gregory/OneDrive/GitHub/IconMagic/Source/test/Testing.hpp File Reference

Created by ThetaSinner (Gregory Jensen). Released as open source.

Functions

- void **testTextUI** ()

7.17.1 Detailed Description

Created by ThetaSinner (Gregory Jensen). Released as open source.

// TODO file_desc

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