

Table of Contents

BuildFromCSharpSourceCode	3
Classes	
CSharp	4
BuildFromProject	5
Issue8540	7
A	8
Classes	
A	9
B	10
Classes	
B	11
Classes	
Class1	12
Class1.Issue8665	17
Class1.Issue8696Attribute	20
Class1.Issue8948	22
Class1.Test<T>	23
Inheritdoc	24
Inheritdoc.Issue6366	26
Inheritdoc.Issue6366.Class1<T>	27
Inheritdoc.Issue6366.Class2	29
Inheritdoc.Issue7035	31
Inheritdoc.Issue7484	32
Inheritdoc.Issue8101	34
Structs	
Inheritdoc.Issue8129	36
Interfaces	
Class1.Issue8948	37
Inheritdoc	38
Enums	
Class1.Issue9260	39
BuildFromVBSourceCode	40
Classes	
BaseClass1	41
Class1	42
CatLibrary	45
Core	47
Classes	

ContainersRefType.ContainersRefTypeChild	48
ExplicitLayoutClass	49
Issue231	50
Structs	
ContainersRefType	51
Interfaces	
ContainersRefType.ContainersRefTypeChildInterface	53
Enums	
ContainersRefType.ColorType	54
Delegates	
ContainersRefType.ContainersRefTypeDelegate	55
Classes	
Cat<T, K>	56
CatException<T>	65
Complex<T, J>	66
ICatExtension	67
Tom	69
TomFromBaseClass	71
Interfaces	
IAnimal	72
ICat	74
Delegates	
FakeDelegate<T>	75
MRefDelegate<K, T, L>	76
MRefNormalDelegate	77
MRef	78
Demo	79
Enumeration	80
Enums	
ColorType	81

Namespace BuildFromCSharpSourceCode

Classes

[CSharp](#)

Class CSharp

Namespace: [BuildFromCSharpSourceCode](#)

```
public class CSharp
```

Inheritance

[object](#)  ← [CSharp](#)

Inherited Members

[object.Equals\(object?\)](#)  , [object.Equals\(object?, object?\)](#)  , [object.GetHashCode\(\)](#)  ,
[object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  ,
[object.ReferenceEquals\(object?, object?\)](#)  , [object.ToString\(\)](#) 

Methods

Main(string[])

```
public static void Main(string[] args)
```

Parameters

args [string](#)  []

Namespace BuildFromProject

Namespaces

[BuildFromProject.Issue8540](#)

Classes

[Inheritdoc.Issue6366.Class1<T>](#)

[Class1](#)

[Inheritdoc.Issue6366.Class2](#)

[Inheritdoc](#)

[Inheritdoc.Issue6366](#)

[Inheritdoc.Issue7035](#)

[Inheritdoc.Issue7484](#)

This is a test class to have something for DocFX to document.

[Inheritdoc.Issue8101](#)

[Class1.Issue8665](#)

[Class1.Issue8696Attribute](#)

[Class1.Issue8948](#)

[Class1.Test<T>](#)

Structs

[Inheritdoc.Issue8129](#)

Interfaces

[Inheritdoc](#)

[Class1.Issue8948](#)

Enums

Namespace BuildFromProject.Issue8540

Namespaces

[BuildFromProject.Issue8540.A](#)

[BuildFromProject.Issue8540.B](#)

Namespace BuildFromProject.Issue8540.A

Classes

[A](#)

Class A

Namespace: [BuildFromProject.Issue8540.A](#)








Assembly: BuildFromProject.dll

```
public class A
```

Inheritance

[object](#)  ← [A](#)

Inherited Members

[object.Equals\(object?\)](#)  , [object.Equals\(object?, object?\)](#)  , [object.GetHashCode\(\)](#)  ,
[object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  ,
[object.ReferenceEquals\(object?, object?\)](#)  , [object.ToString\(\)](#) 

Namespace BuildFromProject.Issue8540.B

Classes

[B](#)

Class B

Namespace: [BuildFromProject.Issue8540.B](#)








Assembly: BuildFromProject.dll

```
public class B
```

Inheritance

[object](#)  ← [B](#)

Inherited Members

[object.Equals\(object?\)](#)  , [object.Equals\(object?, object?\)](#)  , [object.GetHashCode\(\)](#)  ,
[object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  ,
[object.ReferenceEquals\(object?, object?\)](#)  , [object.ToString\(\)](#) 

Class Class1

Namespace: [BuildFromProject](#)

Assembly: BuildFromProject.dll

```
public class Class1 : IClass1
```

Inheritance

[object](#)  ← [Class1](#)

Implements

IClass1

Inherited Members

[object.Equals\(object?\)](#)  , [object.Equals\(object?, object?\)](#)  , [object.GetHashCode\(\)](#)  ,
[object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  ,
[object.ReferenceEquals\(object?, object?\)](#)  , [object.ToString\(\)](#) 

Methods

Issue1651()

Pricing models are used to calculate theoretical option values

- **1** - Black Scholes
- **2** - Black76
- **3** - Black76Fut
- **4** - Equity Tree
- **5** - Variance Swap
- **6** - Dividend Forecast

```
public void Issue1651()
```

Issue1887()

IConfiguration related helper and extension routines.

```
public void Issue1887()
```

Issue2623()

```
public void Issue2623()
```

Examples

```
MyClass myClass = new MyClass();
```

```
void Update()  
{  
    myClass.Execute();  
}
```

Remarks

For example:

```
MyClass myClass = new MyClass();
```

```
void Update()  
{  
    myClass.Execute();  
}
```

Issue2723()

```
public void Issue2723()
```

Remarks

NOTE

This is a <note>. & " '

Inline <angle brackets>.

[link](#)

```
for (var i = 0; i > 10; i++) // & " '
var range = new Range<int> { Min = 0, Max = 10 };
```

```
var range = new Range<int> { Min = 0, Max = 10 };
```

Issue4017()

```
public void Issue4017()
```

Examples

```
public void HookMessageDeleted(BaseSocketClient client)
{
    client.MessageDeleted += HandleMessageDelete;
}
```

```
public Task HandleMessageDelete(Cacheable<IMessage, ulong> cachedMessage, ISocketMessage)
{
    // check if the message exists in cache; if not, we cannot report what was removed
    if (!cachedMessage.HasValue) return;
    var message = cachedMessage.Value;
    Console.WriteLine($"A message ({message.Id}) from {message.Author} was removed from
        + Environment.NewLine
        + message.Content);
    return Task.CompletedTask;
}
```

Remarks

```
void Update()  
{  
    myClass.Execute();  
}
```

Issue4392()

```
public void Issue4392()
```

Remarks

```
@\"\\?\\\" @\"\\?\\\"
```

Issue7484()

```
public void Issue7484()
```

Remarks

There's really no reason to not believe that this class can test things.

Term	Description
A Term	A Description
Bee Term	Bee Description

Issue8764<T>()

```
public void Issue8764<T>() where T : unmanaged
```

Type Parameters

```
T
```

Issue896()

Test

```
public void Issue896()
```

See Also

[Class1.Test<T>](#) , [Class1](#)

Issue9216()

Calculates the determinant of a 3-dimensional matrix:

$$A = \begin{vmatrix} a_{11} & a_{12} & a_{13} \\ a_{21} & a_{22} & a_{23} \\ a_{31} & a_{32} & a_{33} \end{vmatrix}$$

Returns the smallest value:

$$\begin{cases} a, a < b \\ b, b > a \end{cases}$$

```
public static double Issue9216()
```

Returns

[double](#)[↗]

XmlCommentIncludeTag()

This method should do something...

```
public void XmlCommentIncludeTag()
```

Remarks

This is remarks.

Class Class1.Issue8665

Namespace: [BuildFromProject](#)

Assembly: BuildFromProject.dll

```
public class Class1.Issue8665
```

Inheritance

[object](#)  ← [Class1.Issue8665](#)

Inherited Members

[object.Equals\(object?\)](#)  , [object.Equals\(object?, object?\)](#)  , [object.GetHashCode\(\)](#)  ,
[object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  ,
[object.ReferenceEquals\(object?, object?\)](#)  , [object.ToString\(\)](#) 

Constructors

Issue8665()

```
public Issue8665()
```

Issue8665(int)

```
public Issue8665(int foo)
```

Parameters

foo [int](#) 

Issue8665(int, char)

```
public Issue8665(int foo, char bar)
```

Parameters

foo [int](#)

bar [char](#)

Issue8665(int, char, string)

```
public Issue8665(int foo, char bar, string baz)
```

Parameters

foo [int](#)

bar [char](#)

baz [string](#)

Properties

Bar

```
public char Bar { get; }
```

Property Value

[char](#)

Baz

```
public string Baz { get; }
```

Property Value

[string](#)

Foo

```
public int Foo { get; }
```

Property Value

[int](#)

Class Class1.Issue8696Attribute

Namespace: [BuildFromProject](#)












Assembly: BuildFromProject.dll

```
public class Class1.Issue8696Attribute : Attribute
```

Inheritance

[object](#)  < [Attribute](#)  < [Class1.Issue8696Attribute](#)

Inherited Members

[Attribute.Equals\(object?\)](#)  , [Attribute.GetCustomAttribute\(Assembly, Type\)](#)  ,
[Attribute.GetCustomAttribute\(Assembly, Type, bool\)](#)  ,
[Attribute.GetCustomAttribute\(MemberInfo, Type\)](#)  ,
[Attribute.GetCustomAttribute\(MemberInfo, Type, bool\)](#)  ,
[Attribute.GetCustomAttribute\(Module, Type\)](#)  ,
[Attribute.GetCustomAttribute\(Module, Type, bool\)](#)  ,
[Attribute.GetCustomAttribute\(ParameterInfo, Type\)](#)  ,
[Attribute.GetCustomAttribute\(ParameterInfo, Type, bool\)](#)  ,
[Attribute.GetCustomAttributes\(Assembly\)](#)  ,
[Attribute.GetCustomAttributes\(Assembly, bool\)](#)  ,
[Attribute.GetCustomAttributes\(Assembly, Type\)](#)  ,
[Attribute.GetCustomAttributes\(Assembly, Type, bool\)](#)  ,
[Attribute.GetCustomAttributes\(MemberInfo\)](#)  ,
[Attribute.GetCustomAttributes\(MemberInfo, bool\)](#)  ,
[Attribute.GetCustomAttributes\(MemberInfo, Type\)](#)  ,
[Attribute.GetCustomAttributes\(MemberInfo, Type, bool\)](#)  ,
[Attribute.GetCustomAttributes\(Module\)](#)  , [Attribute.GetCustomAttributes\(Module, bool\)](#)  ,
[Attribute.GetCustomAttributes\(Module, Type\)](#)  ,
[Attribute.GetCustomAttributes\(Module, Type, bool\)](#)  ,
[Attribute.GetCustomAttributes\(ParameterInfo\)](#)  ,
[Attribute.GetCustomAttributes\(ParameterInfo, bool\)](#)  ,
[Attribute.GetCustomAttributes\(ParameterInfo, Type\)](#)  ,
[Attribute.GetCustomAttributes\(ParameterInfo, Type, bool\)](#)  , [Attribute.GetHashCode\(\)](#)  ,
[Attribute.IsDefaultAttribute\(\)](#)  , [Attribute.IsDefined\(Assembly, Type\)](#)  ,
[Attribute.IsDefined\(Assembly, Type, bool\)](#)  , [Attribute.IsDefined\(MemberInfo, Type\)](#)  ,
[Attribute.IsDefined\(MemberInfo, Type, bool\)](#)  , [Attribute.IsDefined\(Module, Type\)](#)  ,

[Attribute.IsDefined\(Module, Type, bool\)](#) , [Attribute.IsDefined\(ParameterInfo, Type\)](#) ,
[Attribute.IsDefined\(ParameterInfo, Type, bool\)](#) , [Attribute.Match\(object?\)](#) ,
[Attribute.TypeId](#) , [object.Equals\(object?\)](#) , [object.Equals\(object?, object?\)](#) ,
[object.GetHashCode\(\)](#) , [object.GetType\(\)](#) , [object.MemberwiseClone\(\)](#) ,
[object.ReferenceEquals\(object?, object?\)](#) , [object.ToString\(\)](#)

Constructors

Issue8696Attribute(string?, int, int, string[]?, bool, Type?)

```
[Class1.Issue8696("Changes the name of the server in the server list", 0, 0, null, false)  
public Issue8696Attribute(string? description = null, int boundsMin = 0, int boundsMax
```

Parameters

description [string](#)?

boundsMin [int](#)

boundsMax [int](#)

validGameModes [string](#)[]?

hasMultipleSelections [bool](#)

enumType [Type](#)?

Class Class1.Issue8948

Namespace: [BuildFromProject](#)

Assembly: BuildFromProject.dll

```
public class Class1.Issue8948 : Class1.IIssue8948
```

Inheritance

[object](#)  ← [Class1.Issue8948](#)

Implements

[Class1.IIssue8948](#)

Inherited Members

[object.Equals\(object?\)](#)  , [object.Equals\(object?, object?\)](#)  , [object.GetHashCode\(\)](#)  ,
[object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  ,
[object.ReferenceEquals\(object?, object?\)](#)  , [object.ToString\(\)](#) 

Methods

DoNothing<T>()

Does nothing with generic type T.

```
public void DoNothing<T>()
```

Type Parameters

T

A generic type.

Class Class1.Test<T>

Namespace: [BuildFromProject](#)

Assembly: BuildFromProject.dll

```
public class Class1.Test<T>
```

Type Parameters

T

Inheritance

[object](#)  ← [Class1.Test<T>](#)

Inherited Members

[object.Equals\(object?\)](#)  , [object.Equals\(object?, object?\)](#)  , [object.GetHashCode\(\)](#)  ,
[object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  ,
[object.ReferenceEquals\(object?, object?\)](#)  , [object.ToString\(\)](#) 

Class Inheritdoc

Namespace: [BuildFromProject](#)

Assembly: BuildFromProject.dll

```
public class Inheritdoc : IInheritdoc, IDisposable
```

Inheritance

[object](#)  ← [Inheritdoc](#)

Implements

[IInheritdoc](#) , [IDisposable](#) 

Inherited Members

[object.Equals\(object?\)](#)  , [object.Equals\(object?, object?\)](#)  , [object.GetHashCode\(\)](#)  ,
[object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  ,
[object.ReferenceEquals\(object?, object?\)](#)  , [object.ToString\(\)](#) 

Methods

Dispose()

Performs application-defined tasks associated with freeing, releasing, or resetting unmanaged resources.

```
public void Dispose()
```

Issue7628()

This method should do something...

```
public void Issue7628()
```


Issue7629()

This method should do something...

```
public void Issue7629()
```

Class Inheritdoc.Issue6366

Namespace: [BuildFromProject](#)








Assembly: BuildFromProject.dll

```
public class Inheritdoc.Issue6366
```

Inheritance

[object](#)  ← [Inheritdoc.Issue6366](#)

Inherited Members

[object.Equals\(object?\)](#)  , [object.Equals\(object?, object?\)](#)  , [object.GetHashCode\(\)](#)  ,
[object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  ,
[object.ReferenceEquals\(object?, object?\)](#)  , [object.ToString\(\)](#) 

Class Inheritdoc.Issue6366.Class1<T>

Namespace: [BuildFromProject](#)

Assembly: BuildFromProject.dll

```
public abstract class Inheritdoc.Issue6366.Class1<T>
```

Type Parameters

T

Inheritance

[object](#)[☞] ← [Inheritdoc.Issue6366.Class1<T>](#)

Inherited Members

[object.Equals\(object?\)](#)[☞] , [object.Equals\(object?, object?\)](#)[☞] , [object.GetHashCode\(\)](#)[☞] ,
[object.GetType\(\)](#)[☞] , [object.MemberwiseClone\(\)](#)[☞] ,
[object.ReferenceEquals\(object?, object?\)](#)[☞] , [object.ToString\(\)](#)[☞]

Methods

TestMethod1(T, int)

This text inherited.

```
public abstract T TestMethod1(T parm1, int parm2)
```

Parameters

parm1 T

This text NOT inherited.

parm2 [int](#)[☞]

This text inherited.

Returns

T

This text inherited.

Class Inheritdoc.Issue6366.Class2

Namespace: [BuildFromProject](#)

Assembly: BuildFromProject.dll

```
public class Inheritdoc.Issue6366.Class2 : Inheritdoc.Issue6366.Class1<bool>
```

Inheritance

[object](#) < [Inheritdoc.Issue6366.Class1<bool>](#) < [Inheritdoc.Issue6366.Class2](#)

Inherited Members

[Inheritdoc.Issue6366.Class1<bool>.TestMethod1\(bool, int\)](#) , [object.Equals\(object?\)](#) ,
[object.Equals\(object?, object?\)](#) , [object.GetHashCode\(\)](#) , [object.GetType\(\)](#) ,
[object.MemberwiseClone\(\)](#) , [object.ReferenceEquals\(object?, object?\)](#) ,
[object.ToString\(\)](#)

Methods

TestMethod1(bool, int)

This text inherited.

```
public override bool TestMethod1(bool parm1, int parm2)
```

Parameters

parm1 [bool](#)

This text NOT inherited.

parm2 [int](#)

This text inherited.

Returns

[bool](#)

This text inherited.

Class Inheritdoc.Issue7035

Namespace: [BuildFromProject](#)








Assembly: BuildFromProject.dll

```
public class Inheritdoc.Issue7035
```

Inheritance

[object](#)  ← [Inheritdoc.Issue7035](#)

Inherited Members

[object.Equals\(object?\)](#)  , [object.Equals\(object?, object?\)](#)  , [object.GetHashCode\(\)](#)  ,
[object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  ,
[object.ReferenceEquals\(object?, object?\)](#)  , [object.ToString\(\)](#) 

Methods

A()

```
public void A()
```

B()

```
public void B()
```

Class Inheritdoc.Issue7484

Namespace: [BuildFromProject](#)

Assembly: BuildFromProject.dll








This is a test class to have something for DocFX to document.

```
public class Inheritdoc.Issue7484
```

Inheritance

[object](#)  < [Inheritdoc.Issue7484](#)

Inherited Members

[object.Equals\(object?\)](#)  , [object.Equals\(object?, object?\)](#)  , [object.GetHashCode\(\)](#)  ,
[object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  ,
[object.ReferenceEquals\(object?, object?\)](#)  , [object.ToString\(\)](#) 

Remarks

We're going to talk about things now.

BoolReturningMethod(bool)	Simple method to generate docs for.
DoDad	A string that could have something.

Constructors

Issue7484()

This is a constructor to document.

```
public Issue7484()
```


Properties

DoDad

A string that could have something.

```
public string DoDad { get; }
```

Property Value

[string](#)

Methods

BoolReturningMethod(bool)

Simple method to generate docs for.

```
public bool BoolReturningMethod(bool source)
```

Parameters

source [bool](#)

A meaningless boolean value, much like most questions in the world.

Returns

[bool](#)

An exactly equivalently meaningless boolean value, much like most answers in the world.

Remarks

I'd like to take a moment to thank all of those who helped me get to a place where I can write documentation like this.

Class Inheritdoc.Issue8101

Namespace: [BuildFromProject](#)








Assembly: BuildFromProject.dll

```
public class Inheritdoc.Issue8101
```

Inheritance

[object](#)  ← [Inheritdoc.Issue8101](#)

Inherited Members

[object.Equals\(object?\)](#)  , [object.Equals\(object?, object?\)](#)  , [object.GetHashCode\(\)](#)  ,
[object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  ,
[object.ReferenceEquals\(object?, object?\)](#)  , [object.ToString\(\)](#) 

Methods

Tween(float, float, float, Action<float>)

Create a new tween.

```
public static object Tween(float from, float to, float duration, Action<float> onChange)
```

Parameters

from [float](#) 

The starting value.

to [float](#) 

The end value.

duration [float](#) 

Total tween duration in seconds.

`onChange` [Action](#) <[float](#)>

A callback that will be invoked every time the tween value changes.

Returns

[object](#)

The newly created tween instance.

Tween(int, int, float, Action<int>)

Create a new tween.

```
public static object Tween(int from, int to, float duration, Action<int> onChange)
```

Parameters

`from` [int](#)

The starting value.

`to` [int](#)

The end value.

`duration` [float](#)

Total tween duration in seconds.

`onChange` [Action](#) <[int](#)>

A callback that will be invoked every time the tween value changes.

Returns

[object](#)

The newly created tween instance.







Struct Inheritdoc.Issue8129

Namespace: [BuildFromProject](#)

Assembly: BuildFromProject.dll

```
public struct Inheritdoc.Issue8129
```

Inherited Members

[object.Equals\(object?\)](#) , [object.Equals\(object?, object?\)](#) , [object.GetHashCode\(\)](#) ,
[object.GetType\(\)](#) , [object.ReferenceEquals\(object?, object?\)](#) , [object.ToString\(\)](#)

Constructors

Issue8129(string)

```
public Issue8129(string foo)
```

Parameters

foo [string](#)

Interface Class1.Issue8948

Namespace: [BuildFromProject](#)

Assembly: BuildFromProject.dll

```
public interface Class1.Issue8948
```

Methods

DoNothing<T>()

Does nothing with generic type **T**.

```
void DoNothing<T>()
```

Type Parameters

T

A generic type.

Interface IInheritdoc

Namespace: [BuildFromProject](#)

Assembly: BuildFromProject.dll

```
public interface IInheritdoc
```

Methods

Issue7629()

This method should do something...

```
void Issue7629()
```

Enum Class1.Issue9260

Namespace: [BuildFromProject](#)

Assembly: BuildFromProject.dll

```
public enum Class1.Issue9260
```

Fields

Value = 0

This is a regular enum value.

This is a remarks section. Very important remarks about Value go here.

~~OldAndUnusedValue = 1~~ **Deprecated**

This is old and unused. You shouldn't use it anymore.

Don't use this, seriously! Use Value instead.

~~OldAndUnusedValue2 = 2~~ **Deprecated**

Use Value

This is old and unused. You shouldn't use it anymore.

Don't use this, seriously! Use Value instead.

Namespace BuildFromVBSourceCode

Classes

[BaseClass1](#)

This is the BaseClass

[Class1](#)

This is summary from vb class...

Class BaseClass1

Namespace: [BuildFromVBSourceCode](#)

This is the BaseClass

```
public abstract class BaseClass1
```

Inheritance

[object](#)  ← [BaseClass1](#)

Derived

[Class1](#)

Inherited Members

[object.Equals\(object\)](#)  , [object.Equals\(object, object\)](#)  , [object.Finalize\(\)](#)  ,
[object.GetHashCode\(\)](#)  , [object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  ,
[object.ReferenceEquals\(object, object\)](#)  , [object.ToString\(\)](#) 

Methods

WithDeclarationKeyword(Class1)

```
public abstract DateTime WithDeclarationKeyword(Class1 keyword)
```

Parameters

keyword [Class1](#)

Returns

[DateTime](#) 

Class Class1

Namespace: [BuildFromVBSourceCode](#)









This is summary from vb class...

```
public class Class1 : BaseClass1
```

Inheritance

[object](#)  ← [BaseClass1](#) ← [Class1](#)

Inherited Members

[BaseClass1.WithDeclarationKeyword\(Class1\)](#) , [object.Equals\(object\)](#)  ,
[object.Equals\(object, object\)](#)  , [object.Finalize\(\)](#)  , [object.GetHashCode\(\)](#)  ,
[object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  , [object.ReferenceEquals\(object, object\)](#)  ,
[object.ToString\(\)](#) 

Fields

ValueClass

This is a *Value* type

```
public Class1 ValueClass
```

Field Value

[Class1](#)

Properties

Keyword **Deprecated**

This member is obsolete.

```
[Obsolete("This member is obsolete.", true)]  
public Class1 Keyword { get; }
```

Property Value

[Class1](#)

Methods

Value(string)

This is a *Function*

```
public int Value(string name)
```

Parameters

name [string](#)

Name as the **String** value

Returns

[int](#)

Returns Ahooo

WithDeclarationKeyword(Class1)

What is **Sub**?

```
public override DateTime WithDeclarationKeyword(Class1 keyword)
```

Parameters

keyword [Class1](#)

Returns

[DateTime](#) 

Namespace CatLibrary

Namespaces

[CatLibrary.Core](#)

Classes

[Cat<T, K>](#)

Here's main class of this *Demo*.

You can see mostly type of article within this class and you for more detail, please see the remarks.

this class is a template class. It has two Generic parameter. they are: **T** and **K**.

The extension method of this class can refer to [ICatExtension](#) class

[CatException<T>](#)

[Complex<T, J>](#)

[ICatExtension](#)

It's the class that contains ICat interface's extension method.

This class must be **public** and **static**.

Also it shouldn't be a generic class

[Tom](#)

Tom class is only inherit from Object. Not any member inside itself.

[TomFromBaseClass](#)

TomFromBaseClass inherits from @

Interfaces

[IAnimal](#)

This is **basic** interface of all animal.

[ICat](#)

Cat's interface

Delegates

[FakeDelegate<T>](#)

Fake delegate

[MRefDelegate<K, T, L>](#)

Generic delegate with many constrains.

[MRefNormalDelegate](#)

Delegate in the namespace

Namespace CatLibrary.Core

Classes

[ContainersRefType.ContainersRefTypeChild](#)

[ExplicitLayoutClass](#)

[Issue231](#)

[Issue231](#)

Structs

[ContainersRefType](#)

Struct ContainersRefType

Interfaces

[ContainersRefType.ContainersRefTypeChildInterface](#)

Enums

[ContainersRefType.ColorType](#)

Enumeration ColorType

Delegates

[ContainersRefType.ContainersRefTypeDelegate](#)

Delegate ContainersRefTypeDelegate

Class

ContainersRefType.ContainersRefTypeChild

Namespace: [CatLibrary.Core](#)








Assembly: CatLibrary.Core.dll

```
public class ContainersRefType.ContainersRefTypeChild
```

Inheritance

[object](#)  ← [ContainersRefType.ContainersRefTypeChild](#)

Inherited Members

[object.Equals\(object?\)](#)  , [object.Equals\(object?, object?\)](#)  , [object.GetHashCode\(\)](#)  ,
[object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  ,
[object.ReferenceEquals\(object?, object?\)](#)  , [object.ToString\(\)](#) 

Class ExplicitLayoutClass

Namespace: [CatLibrary.Core](#)

Assembly: CatLibrary.Core.dll

```
public class ExplicitLayoutClass
```

Inheritance

[object](#)  ← [ExplicitLayoutClass](#)

Inherited Members

[object.Equals\(object?\)](#)  , [object.Equals\(object?, object?\)](#)  , [object.GetHashCode\(\)](#)  ,
[object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  ,
[object.ReferenceEquals\(object?, object?\)](#)  , [object.ToString\(\)](#) 

Class Issue231

Namespace: [CatLibrary.Core](#)

Assembly: CatLibrary.dll, CatLibrary.Core.dll

```
public static class Issue231
```

Inheritance

[object](#)  ← [Issue231](#)

Inherited Members

[object.Equals\(object?\)](#)  , [object.Equals\(object?, object?\)](#)  , [object.GetHashCode\(\)](#)  ,
[object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  ,
[object.ReferenceEquals\(object?, object?\)](#)  , [object.ToString\(\)](#) 

Methods

Bar(ContainersRefType)

```
public static void Bar(this ContainersRefType c)
```

Parameters

c [ContainersRefType](#)

Foo(ContainersRefType)

```
public static void Foo(this ContainersRefType c)
```

Parameters

c [ContainersRefType](#)

Struct ContainersRefType

Namespace: [CatLibrary.Core](#)

Assembly: CatLibrary.Core.dll

Struct ContainersRefType

```
public struct ContainersRefType
```

Inherited Members

[object.Equals\(object?\)](#)[☞] , [object.Equals\(object?, object?\)](#)[☞] , [object.GetHashCode\(\)](#)[☞] , [object.GetType\(\)](#)[☞] , [object.ReferenceEquals\(object?, object?\)](#)[☞] , [object.ToString\(\)](#)[☞]

Extension Methods

[Issue231.Bar\(ContainersRefType\)](#) , [Issue231.Foo\(ContainersRefType\)](#)

Fields

ColorCount

ColorCount

```
public long ColorCount
```

Field Value

[long](#)[☞]

Properties

GetColorCount

GetColorCount

```
public long GetColorCount { get; }
```

Property Value

[long](#)

Methods

ContainersRefTypeNonRefMethod(params object[])

ContainersRefTypeNonRefMethod

array

```
public static int ContainersRefTypeNonRefMethod(params object[] parmsArray)
```

Parameters

parmsArray [object](#)[]

Returns

[int](#)

ContainersRefTypeEventHandler

```
public event EventHandler ContainersRefTypeEventHandler
```

Event Type

[EventHandler](#)

Interface

ContainersRefType.ContainersRefTypeChildInterface

Namespace: [CatLibrary.Core](#)

Assembly: CatLibrary.Core.dll

```
public interface ContainersRefType.ContainersRefTypeChildInterface
```

Enum ContainersRefType.ColorType

Namespace: [CatLibrary.Core](#)

Assembly: CatLibrary.Core.dll

Enumeration ColorType

```
public enum ContainersRefType.ColorType
```

Fields

Red = 0

red

Blue = 1

blue

Yellow = 2

yellow

Delegate ContainersRefType.ContainersRefTypeDele gate

Namespace: [CatLibrary.Core](#)

Assembly: CatLibrary.Core.dll

Delegate ContainersRefTypeDelegate

```
public delegate void ContainersRefType.ContainersRefTypeDelegate()
```

~~Class Cat<T, K>~~ **Deprecated**

Namespace: [CatLibrary](#)

Assembly: CatLibrary.dll

Here's main class of this *Demo*.

You can see mostly type of article within this class and you for more detail, please see the remarks.

this class is a template class. It has two Generic parameter. they are: **T** and **K**.

The extension method of this class can refer to [ICatExtension](#) class

```
[Serializable]
[Obsolete]
public class Cat<T, K> : ICat, IAnimal where T : class, new() where K : struct
```

Type Parameters

T

This type should be class and can new instance.

K

This type is a struct type, class type can't be used for this parameter.








Inheritance

[object](#)  ← [Cat<T, K>](#)

Implements

[ICat](#) , [IAnimal](#)

Inherited Members

[object.Equals\(object?\)](#)  , [object.Equals\(object?, object?\)](#)  , [object.GetHashCode\(\)](#)  ,
[object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  ,
[object.ReferenceEquals\(object?, object?\)](#)  , [object.ToString\(\)](#) 

Extension Methods

[ICatExtension.Play\(ICat, ContainersRefType.ColorType\)](#) , [ICatExtension.Sleep\(ICat, long\)](#).

Examples

Here's example of how to create an instance of this class. As T is limited with `class` and K is limited with `struct`.

```
var a = new Cat(object, int());  
int catNumber = new int();  
unsafe  
{  
    a.GetFeetLength(catNumber);  
}
```

As you see, here we bring in **pointer** so we need to add `unsafe` keyword.

Remarks

Here's all the content you can see in this class.

Constructors

Cat()

Default constructor.

```
public Cat()
```

Cat(T)

Constructor with one generic parameter.

```
public Cat(T ownType)
```

Parameters

ownType T

This parameter type defined by class.

Cat(string, out int, string, bool)

It's a complex constructor. The parameter will have some attributes.

```
public Cat(string nickName, out int age, string realName, bool isHealthy)
```

Parameters

nickName [string](#)↗

it's string type.

age [int](#)↗

It's an out and ref parameter.

realName [string](#)↗

It's an out paramter.

isHealthy [bool](#)↗

It's an in parameter.

Fields

~~isHealthy~~ **Deprecated**

Field with attribute.

```
[ContextStatic]  
[NonSerialized]  
[Obsolete]  
public bool isHealthy
```

Field Value

[bool](#)

Properties

Age Deprecated

Hint cat's age.

```
[Obsolete]  
protected int Age { get; set; }
```

Property Value

[int](#)

Name

Ell property.

```
public string Name { get; }
```

Property Value

[string](#)

this[string]

This is index property of Cat. You can see that the visibility is different between `get` and `set` method.

```
public int this[string a] { protected get; set; }
```

Property Value

[int](#)

Methods

CalculateFood(DateTime)

It's a method with complex return type.

```
public Dictionary<string, List<int>> CalculateFood(DateTime date)
```

Parameters

date [DateTime](#)

Date time to now.

Returns

[Dictionary](#) <[string](#), [List](#) <[int](#)>>

It's a relationship map of different kind food.

Equals(object)

Override the method of `Object.Equals(object obj)`.

```
public override bool Equals(object obj)
```

Parameters

obj [object](#)

Can pass any class type.

Returns

[bool](#)

The return value tell you whehter the compare operation is successful.

GetTailLength(int*, params object[])

It's an `unsafe` method. As you see, `catName` is a **pointer**, so we need to add `unsafe` keyword.

```
public long GetTailLength(int* catName, params object[] parameters)
```

Parameters

`catName` [int*](#)

Thie represent for cat name length.

`parameters` [object\[\]](#)

Optional parameters.

Returns

[long](#)

Return cat tail's length.

Jump(T, K, ref bool)

This method have attribute above it.

```
[Conditional("Debug")]  
public void Jump(T ownType, K anotherOwnType, ref bool cheat)
```

Parameters

`ownType` T

Type come from class define.

`anotherOwnType` K

Type come from class define.

cheat [bool](#)

Hint whether this cat has cheat mode.

Exceptions

[ArgumentException](#)

This is an argument exception

~~ownEat~~ **Deprecated**

This *event handler* is deprecated.

Eat event of this cat

```
[Obsolete("This _event handler_ is deprecated.")]  
public event EventHandler ownEat
```

Event Type

[EventHandler](#)

Operators

operator +(Cat<T, K>, int)

Addition operator of this class.

```
public static int operator +(Cat<T, K> lsr, int rsr)
```

Parameters

lsr [Cat](#)<T, K>

..

rsr [int](#)

~~

Returns

[int](#)

Result with *int* type.

explicit operator Tom(Cat<T, K>)

Explicit operator of this class.

It means this cat can evolve to change to Tom. Tom and Jerry.

```
public static explicit operator Tom(Cat<T, K> src)
```

Parameters

src [Cat](#)<T, K>

Instance of this class.

Returns

[Tom](#)

Advanced class type of cat.

operator -(Cat<T, K>, int)

Similar with operator +, refer to that topic.

```
public static int operator -(Cat<T, K> lsr, int rsr)
```

Parameters

lsr [Cat](#)<T, K>

rsr [int](#)

Returns

[int](#)

Class CatException<T>

Namespace: [CatLibrary](#)

Assembly: CatLibrary.dll

```
public class CatException<T> : Exception, ISerializable
```

Type Parameters

T





















Inheritance

[object](#)  ← [Exception](#)  ← [CatException<T>](#)

Implements

[ISerializable](#) 

Inherited Members

[Exception.GetBaseException\(\)](#)  ,
[Exception.GetObjectData\(SerializationInfo, StreamingContext\)](#)  , [Exception.GetType\(\)](#)  ,
[Exception.ToString\(\)](#)  , [Exception.Data](#)  , [Exception.HelpLink](#)  , [Exception.HResult](#)  ,
[Exception.InnerException](#)  , [Exception.Message](#)  , [Exception.Source](#)  ,
[Exception.StackTrace](#)  , [Exception.TargetSite](#)  , [Exception.SerializeObjectState](#)  ,
[object.Equals\(object?\)](#)  , [object.Equals\(object?, object?\)](#)  , [object.GetHashCode\(\)](#)  ,
[object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  ,
[object.ReferenceEquals\(object?, object?\)](#)  , [object.ToString\(\)](#) 

Class Complex<T, J>

Namespace: [CatLibrary](#)

Assembly: CatLibrary.dll

```
public class Complex<T, J>
```

Type Parameters

T

J

Inheritance

[object](#)[↗] ← [Complex<T, J>](#)

Inherited Members

[object.Equals\(object?\)](#)[↗] , [object.Equals\(object?, object?\)](#)[↗] , [object.GetHashCode\(\)](#)[↗] ,
[object.GetType\(\)](#)[↗] , [object.MemberwiseClone\(\)](#)[↗] ,
[object.ReferenceEquals\(object?, object?\)](#)[↗] , [object.ToString\(\)](#)[↗]

Class ICatExtension

Namespace: [CatLibrary](#)

Assembly: CatLibrary.dll

It's the class that contains ICat interface's extension method.

This class must be **public** and **static**.








Also it shouldn't be a generic class

```
public static class ICatExtension
```

Inheritance

[object](#)  ← [ICatExtension](#)

Inherited Members

[object.Equals\(object?\)](#)  , [object.Equals\(object?, object?\)](#)  , [object.GetHashCode\(\)](#)  ,
[object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  ,
[object.ReferenceEquals\(object?, object?\)](#)  , [object.ToString\(\)](#) 

Methods

Play(ICat, ColorType)

Extension method to let cat play

```
public static void Play(this ICat icat, ContainersRefType.ColorType toy)
```

Parameters

icat [ICat](#)

Cat

toy [ContainersRefType.ColorType](#)

Something to play

Sleep(ICat, long)

Extension method hint that how long the cat can sleep.

```
public static void Sleep(this ICat icat, long hours)
```

Parameters

icat [ICat](#)

The type will be extended.

hours [long](#)

The length of sleep.

Class Tom

Namespace: [CatLibrary](#)

Assembly: CatLibrary.dll

Tom class is only inherit from Object. Not any member inside itself.

```
public class Tom
```








Inheritance

[object](#)  < [Tom](#)

Derived

[TomFromBaseClass](#)

Inherited Members

[object.Equals\(object?\)](#)  , [object.Equals\(object?, object?\)](#)  , [object.GetHashCode\(\)](#)  ,
[object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  ,
[object.ReferenceEquals\(object?, object?\)](#)  , [object.ToString\(\)](#) 

Methods

TomMethod(Complex<TomFromBaseClass,
TomFromBaseClass>, Tuple<string, Tom>)

This is a Tom Method with complex type as return

```
public Complex<string, TomFromBaseClass> TomMethod(Complex<TomFromBaseClass, TomFromBas
```

Parameters

a [Complex](#)  <[TomFromBaseClass](#), [TomFromBaseClass](#)>

A complex input

b [Tuple](#)  <[string](#) , [Tom](#)>

Another complex input

Returns

[Complex](#)<[string](#)[↗], [TomFromBaseClass](#)>

Complex [TomFromBaseClass](#)

Exceptions

[NotImplementedException](#)[↗]

This is not implemented

[ArgumentException](#)[↗]

This is the exception to be thrown when implemented

[CatException](#)<T>

This is the exception in current documentation

Class TomFromBaseClass

Namespace: [CatLibrary](#)

Assembly: CatLibrary.dll

TomFromBaseClass inherits from @

```
public class TomFromBaseClass : Tom
```

Inheritance

[object](#)  < [Tom](#) < [TomFromBaseClass](#)

Inherited Members

[Tom.TomMethod\(Complex<TomFromBaseClass, TomFromBaseClass>, Tuple<string, Tom>\)](#) ,
[object.Equals\(object?\)](#)  , [object.Equals\(object?, object?\)](#)  , [object.GetHashCode\(\)](#)  ,
[object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  ,
[object.ReferenceEquals\(object?, object?\)](#)  , [object.ToString\(\)](#) 

Constructors

TomFromBaseClass(int)

This is a #ctor with parameter

```
public TomFromBaseClass(int k)
```

Parameters

k [int](#) 

Interface IAnimal

Namespace: [CatLibrary](#)

Assembly: CatLibrary.dll

This is **basic** interface of all animal.

```
public interface IAnimal
```

Properties

Name

Name of Animal.

```
string Name { get; }
```

Property Value

[string](#)

this[int]

Return specific number animal's name.

```
string this[int index] { get; }
```

Property Value

[string](#)

Methods

Eat()

Animal's eat method.

```
void Eat()
```

Eat<Tool>(Tool)

Overload method of eat. This define the animal eat by which tool.

```
void Eat<Tool>(Tool tool) where Tool : class
```

Parameters

tool Tool

Tool name.

Type Parameters

Tool

It's a class type.

Eat(string)

Feed the animal with some food

```
void Eat(string food)
```

Parameters

food [string](#)

Food to eat

Interface ICat

Namespace: [CatLibrary](#)

Assembly: CatLibrary.dll

Cat's interface

```
public interface ICat : IAnimal
```

Implements

[IAnimal](#)

Extension Methods

[ICatExtension.Play\(ICat, ContainersRefType.ColorType\)](#) , [ICatExtension.Sleep\(ICat, long\)](#)

eat

eat event of cat. Every cat must implement this event.

```
event EventHandler eat
```

Event Type

[EventHandler](#)

Delegate FakeDelegate<T>

Namespace: [CatLibrary](#)

Assembly: CatLibrary.dll

Fake delegate

```
public delegate int FakeDelegate<T>(long num, string name, params object[] scores)
```

Parameters

num [long](#)

Fake para

name [string](#)

Fake para

scores [object](#)[]

Optional Parameter.

Returns

[int](#)

Return a fake number to confuse you.

Type Parameters

T

Fake para

Delegate MRefDelegate<K, T, L>

Namespace: [CatLibrary](#)

Assembly: CatLibrary.dll

Generic delegate with many constrains.

```
public delegate void MRefDelegate<K, T, L>(K k, T t, L l) where K : class, IComparable
```

Parameters

k K

Type K.

t T

Type T.

l L

Type L.

Type Parameters

K

Generic K.

T

Generic T.

L

Generic L.

Delegate MRefNormalDelegate

Namespace: [CatLibrary](#)

Assembly: CatLibrary.dll

Delegate in the namespace

```
public delegate void MRefNormalDelegate(List<string> pics, out string name)
```

Parameters

pics [List](#) <[string](#)>

a name list of pictures.

name [string](#)

give out the needed name.

Namespace MRef

Namespaces

[MRef.Demo](#)

Namespace MRef.Demo

Namespaces

[MRef.Demo.Enumeration](#)

Namespace MRef.Demo.Enumeration

Enums

[ColorType](#)

Enumeration ColorType

Enum ColorType

Namespace: [MRef.Demo.Enumeration](#)

Assembly: CatLibrary.dll

Enumeration ColorType

```
public enum ColorType
```

Fields

Red = 0

this color is red

Blue = 1

blue like river

Yellow = 2

yellow comes from desert

Remarks

Red/Blue/Yellow can become all color you want.

See Also

[object](#)