System.Reflection.MemberInfo Class

```
[ILAsm]
.class public abstract serializable MemberInfo extends System.Object

[C#]
public abstract class MemberInfo
```

Assembly Info:

- *Name:* mscorlib
- *Public Key:* [00 00 00 00 00 00 00 00 04 00 00 00 00 00 00 00]
- *Version:* 2.0.x.x
- *Attributes:*
    - CLSCompliantAttribute(true)

Summary

Provides access to member metadata.

Inherits From: System.Object

Library: Reflection

Thread Safety: This type is safe for multithreaded operations.

Description

[*Note:* System.Reflection.MemberInfo is used to represent all members of a type: nested types, fields, events, properties, methods, and constructors. The Base Class Library includes the following derived types:

- System.Reflection.FieldInfo

- System.Reflection.EventInfo

- System.Reflection.PropertyInfo

- System.Type

]

MemberInfo() Constructor

```
[ILAsm]
family rtspecialname specialname instance void .ctor()

[C#]
protected MemberInfo()
```

Summary

Constructs a new instance of the `System.Reflection.MemberInfo` class.

MemberInfo.DeclaringType Property

```
[ILAsm]
.property class System.Type DeclaringType { public hidebysig virtual
abstract specialname class System.Type get_DeclaringType() }


[C#]
public abstract Type DeclaringType { get; }
```

Summary

Gets the type that declares the member reflected by the current instance.

Property Value

The `System.Type` object of the class that declares the member reflected by the
current instance; or, `null` if the member reflected by the current instance is a
global member.

Description

[*Note:* A member of a class (or interface) is either declared on that type or
inherited from a base class (or interface). The
`System.Reflection.MemberInfo.DeclaringType` property value cannot be the
same as the `System.Type` object used to obtain the current instance. These
values will differ if either of the following conditions is true.

- If the `System.Type` object from which the current instance was obtained did
  not declare the member reflected by the current instance, the
  `System.Reflection.MemberInfo.DeclaringType` will represent the base type
  that is closest to that object in its hierarchy chain and declares the member
  reflected by the current instance.

- If the current instance reflects a global member, (that is, it was obtained from
  `System.Reflection.Module.GetMethods`, which returns global methods on a
  module), then the `System.Reflection.MemberInfo.DeclaringType` property
  value is `null`.

]

Behaviors

This property is read-only.

This property is required to return the `System.Type` object for the type that
declares the member reflected by the current instance. This property value is
required to be equal to the `System.Reflection.MemberInfo.ReflectedType`
property value of the current instance if and only if the reflected type also
contains a declaration for the member reflected by the current instance.

How and When to Override

Override this property to get the `System.Type` of the class that declared the member that is reflected by the current instance.

Usage

Use this property to determine the `System.Type` of the class that declared the member that is reflected by the current instance.

Example

The following example demonstrates the difference between the `System.Reflection.MemberInfo.DeclaringType` and `System.Reflection.MemberInfo.ReflectedType` of a member.

[C#]

```
using System;
using System.Reflection;

public class BaseClass {
   public void ReflectedMethod() {}
}

public class DerivedClass: BaseClass {}

public class DeclaringTypeExample {
   public static void Main() {
    Type t = typeof(DerivedClass);
    MemberInfo [] memInfo = t.GetMember("ReflectedMethod");
    Console.WriteLine("Reflected type is {0}.",
memInfo[0].ReflectedType);
    Console.WriteLine("Declaring type is {0}.",
memInfo[0].DeclaringType);
   }
}
```

The output is

```
Reflected type is DerivedClass.
```

```
Declaring type is BaseClass.
```

MemberInfo.Name Property

```
[ILAsm]
.property string Name { public hidebysig virtual abstract
specialname string get_Name() }


[C#]
public abstract string Name { get; }
```

Summary

Gets the name of the member reflected by the current instance.

Property Value

A `System.String` containing the name of the member reflected by the current instance.

Behaviors

This property is read-only.

Only the simple name, not the fully qualified name, of the member reflected by the current instance is returned.

[*Note:* For example, if the current instance reflects the member `Print` in `System.MyClass`, the `System.Reflection.MemberInfo.Name` property would be "Print".]

MemberInfo.ReflectedType Property

```
[ILAsm]
.property class System.Type ReflectedType { public hidebysig virtual
abstract specialname class System.Type get_ReflectedType() }


[C#]
public abstract Type ReflectedType { get; }
```

Summary

Gets the type of the class through which the current instance was obtained.

Property Value

The `System.Type`object for the class through which the current instance was obtained.

Behaviors

This property is read-only.

`ReflectedType` is required to get the type of the object that was used to obtain the current instance. This property value is required to be equal to the `System.Reflection.MemberInfo.DeclaringType` property value of the current instance if and only if the reflected type also contains a declaration for the member reflected by the current instance.