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:* 1.0.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 may not 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.
```

```
1
2
3         Declaring type is BaseClass.
4

5
```

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.