System.ArgumentException Class

```
[ILAsm]
.class public serializable ArgumentException extends
System.SystemException

[C#]
public class ArgumentException: SystemException
```

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

Represents the error that occurs when an argument passed to a method is invalid.

Inherits From: System.SystemException

Library: BCL

Thread Safety: All public static members of this type are safe for multithreaded operations. No instance members are guaranteed to be thread safe.

Description

`System.ArgumentException` is thrown when a method is invoked and at least one of the passed arguments does not meet the method's parameter specification.

[*Note:* The Base Class Library includes three derived types:

- `System.ArgumentNullException`

- `System.ArgumentOutOfRangeException`

- `System.DuplicateWaitObjectException`

When appropriate, use these types instead of `System.ArgumentException`.

]

Example

The following example demonstrates an error that causes a
`System.ArgumentException` exception to be thrown by the system.

[C#]

```
using System;
public class MyClass {}
public class ArgExceptionExample {
  public static void Main() {
    MyClass my = new MyClass();
    string s = "sometext";
    try {
       int i = s.CompareTo(my);
    }
    catch (ArgumentException e) {
       Console.WriteLine("Error: {0}",e);
    }
  }
}
```

The output is

```
Error: System.ArgumentException: Object must be of type String.


at System.String.CompareTo(Object value)


at ArgExceptionExample.Main()
```

ArgumentException() Constructor

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


[C#]
public ArgumentException()
```

Summary

Constructs and initializes a new instance of the `System.ArgumentException` class.

Description

This constructor initializes the `System.ArgumentException.Message` property of the new instance to a system-supplied message that describes the error, such as "An invalid argument was specified." This message takes into account the current system culture.

The `System.ArgumentException.InnerException` property is initialized to `null`.

ArgumentException(System.String) Constructor

```
[ILAsm]
public rtspecialname specialname instance void .ctor(string message)


[C#]
public ArgumentException(string message)
```

Summary

Constructs and initializes a new instance of the `System.ArgumentException` class.

Parameters

Parameter	Description
message	A `System.String` that describes the error. The content of *message* is intended to be understood by humans. The caller of this constructor is required to ensure that this string has been localized for the current system culture.

Description

This constructor initializes the `System.ArgumentException.Message` property of the new instance using *message*. If *message* is `null`, the `System.ArgumentException.Message` property is initialized to the system-supplied message provided by the constructor that takes no arguments. The `System.ArgumentException.InnerException` and `System.ArgumentException.ParamName` properties are initialized to `null`.

ArgumentException(System.String, System.Exception) Constructor

```
[ILAsm]
public rtspecialname specialname instance void .ctor(string message,
class System.Exception innerException)


[C#]
public ArgumentException(string message, Exception innerException)
```

Summary

Constructs and initializes a new instance of the `System.ArgumentException` class.

Parameters

Parameter	Description
message	A `System.String` that describes the error. The content of *message* is intended to be understood by humans. The caller of this constructor is required to ensure that this string has been localized for the current system culture.
innerException	An instance of `System.Exception` that is the cause of the current Exception. If *innerException* is non-null, then the current Exception was raised in a catch block handling *innerException*.

Description

This constructor initializes the `System.ArgumentException.Message` property of the new instance using *message*, and the `System.ArgumentException.InnerException` property using *innerException*. If *message* is `null`, the `System.ArgumentException.Message` property is initialized to the system-supplied message provided by the constructor that takes no arguments. The `System.ArgumentException.ParamName` property is initialized to `null`.

[*Note:* For information on inner exceptions, see `System.Exception.InnerException`.]

ArgumentException(System.String, System.String, System.Exception) Constructor

```
[ILAsm]
public rtspecialname specialname instance void .ctor(string message,
string paramName, class System.Exception innerException)


[C#]
public ArgumentException(string message, string paramName, Exception
innerException)
```

Summary

Constructs and initializes a new instance of the `System.ArgumentException` class.

Parameters

Parameter	Description
message	A `System.String` that describes the error. The content of *message* is intended to be understood by humans. The caller of this constructor is required to ensure that this string has been localized for the current system culture.
paramName	A `System.String` that contains the name of the parameter that caused the current exception.
innerException	An instance of `System.Exception` that is the cause of the current Exception. If *innerException* is non-null, then the current Exception was raised in a catch block handling *innerException*.

Description

This constructor initializes the `System.ArgumentException.Message` property of the new instance using *message*, the `System.ArgumentException.ParamName` property using *paramName*, and the `System.ArgumentException.InnerException` property using *innerException*. If *message* is `null`, the `System.ArgumentException.Message` property is initialized to the system-supplied message provided by the constructor that takes no arguments.

[*Note:* For information on inner exceptions, see `System.Exception.InnerException`.]

ArgumentException(System.String, System.String) Constructor

```
[ILAsm]
public rtspecialname specialname instance void .ctor(string message,
string paramName)


[C#]
public ArgumentException(string message, string paramName)
```

Summary

Constructs and initializes a new instance of the `System.ArgumentException` class.

Parameters

Parameter	Description
message	A `System.String` that describes the error. The content of *message* is intended to be understood by humans. The caller of this constructor is required to ensure that this string has been localized for the current system culture.
paramName	A `System.String` that contains the name of the parameter that caused the exception.

Description

This constructor initializes the `System.ArgumentException.Message` property of the new instance using *message*, and the `System.ArgumentException.ParamName` property using *paramName*. If *message* is `null`, the `System.ArgumentException.Message` property is initialized to the system-supplied message provided by the constructor that takes no arguments. The `System.ArgumentException.InnerException` property is initialized to `null`.

ArgumentException.Message Property

```
[ILAsm]
.property string Message { public hidebysig virtual specialname
string get_Message() }

[C#]
public override string Message { get; }
```

Summary

Gets the error message that explains the reason for the exception.

Property Value

A `System.String` containing the error message with
`System.ArgumentException.ParamName` appended, if it in not `null`.

Description

This property is read-only.

ArgumentException.ParamName Property

```
[ILAsm]
.property string ParamName { public hidebysig virtual specialname
string get_ParamName() }


[C#]
public virtual string ParamName { get; }
```

Summary

Gets the name of the parameter that caused the current Exception.

Property Value

A `System.String` that contains the name of the parameter that caused the
current Exception, or `null` if no value was specified to the constructor for the
current instance.

Description

This property is read-only.

Behaviors

The `System.ArgumentException.ParamName` property returns the same value as
was passed into the constructor.

How and When to Override

Override the `System.ArgumentException.ParamName` property to customize the
content or format of the parameter name.

Usage

Use this property to retrieve the name of the invalid parameter.