

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]
- *Version:* 1.0.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**.]

1 Example

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

5 [C#]
6

```
7 using System;
8 public class MyClass {}
9 public class ArgExceptionExample {
10     public static void Main() {
11         MyClass my = new MyClass();
12         string s = "sometext";
13         try {
14             int i = s.CompareTo(my);
15         }
16         catch (ArgumentException e) {
17             Console.WriteLine("Error: {0}", e);
18         }
19     }
20 }
21
```

22 The output is

23
24 Error: System.ArgumentException: Object must be of type
25 String.

26
27
28 at System.String.CompareTo(Object value)

29
30
31 at ArgExceptionExample.Main()
32

1 **ArgumentException() Constructor**

```
2 [ILASM]  
3 public rtspecialname specialname instance void .ctor()  
4  
5 [C#]  
6 public ArgumentException()
```

6 **Summary**

7 Constructs and initializes a new instance of the
8 **System.ArgumentException** class.

9 **Description**

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

15
16 The **System.ArgumentException.InnerException** property is
17 initialized to **null**.

18

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
<i>message</i>	A System.String that describes the error. The content of <i>message</i> 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
<i>message</i>	A System.String that describes the error. The content of <i>message</i> 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.
<i>innerException</i>	An instance of System.Exception that is the cause of the current Exception. If <i>innerException</i> is non-null, then the current Exception was raised in a catch block handling <i>innerException</i> .

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
<i>message</i>	A System.String that describes the error. The content of <i>message</i> 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.
<i>paramName</i>	A System.String that contains the name of the parameter that caused the current exception.
<i>innerException</i>	An instance of System.Exception that is the cause of the current Exception. If <i>innerException</i> is non-null, then the current Exception was raised in a catch block handling <i>innerException</i> .

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
<i>message</i>	A System.String that describes the error. The content of <i>message</i> 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.
<i>paramName</i>	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.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.