

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**
2

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

```
5  
6 [C#]  
  
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
```

33

1 `ArgumentException()` Constructor

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

1 **ArgumentException(System.String)**

2 **Constructor**

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

8 **Summary**

9 Constructs and initializes a new instance of the
10 **System.ArgumentException** class.

11 **Parameters**

12
13

| 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. |

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15 **Description**

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

24

1 ArgumentException(System.String, 2 System.Exception) Constructor

```
3 [ILASM]  
4 public rtspecialname specialname instance void .ctor(string  
5 message, class System.Exception innerException)  
  
6 [C#]  
7 public ArgumentException(string message, Exception  
8 innerException)
```

9 Summary

10 Constructs and initializes a new instance of the
11 **System.ArgumentException** class.

12 Parameters

13
14

| 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> . |

15
16

Description

17 This constructor initializes the
18 **System.ArgumentException.Message** property of the new instance
19 using *message*, and the
20 **System.ArgumentException.InnerException** property using
21 *innerException*. If *message* is **null**, the
22 **System.ArgumentException.Message** property is initialized to the
23 system-supplied message provided by the constructor that takes no
24 arguments. The **System.ArgumentException.ParamName** property
25 is initialized to **null**.

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

29

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**.]

1 **ArgumentException(System.String,** 2 **System.String) Constructor**

```
3 [ILASM]  
4 public rtspecialname specialname instance void .ctor(string  
5 message, string paramName)  
  
6 [C#]  
7 public ArgumentException(string message, string paramName)
```

8 **Summary**

9 Constructs and initializes a new instance of the
10 **System.ArgumentException** class.

11 **Parameters**

12
13

| 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. |

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15 **Description**

16 This constructor initializes the
17 **System.ArgumentException.Message** property of the new instance
18 using *message*, and the **System.ArgumentException.ParamName**
19 property using *paramName*. If *message* is **null**, the
20 **System.ArgumentException.Message** property is initialized to the
21 system-supplied message provided by the constructor that takes no
22 arguments. The **System.ArgumentException.InnerException**
23 property is initialized to **null**.

24

1 **ArgumentException.ParamName** Property

```
2 [ILASM]  
3 .property string ParamName { public hidebysig virtual  
4 specialname string get_ParamName() }  
5 [C#]  
6 public virtual string ParamName { get; }
```

7 **Summary**

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

9 **Property Value**

10

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

14 **Description**

15 This property is read-only.

16 **Behaviors**

17 The **System.ArgumentException.ParamName** property returns the
18 same value as was passed into the constructor.

19 **How and When to Override**

20 Override the **System.ArgumentException.ParamName** property to
21 customize the content or format of the parameter name.

22 **Usage**

23 Use this property to retrieve the name of the invalid parameter.
24