

1 System.ArgumentException Class

```
2 [ILAsm]  
3 .class public serializable ArgumentException extends  
4 System.SystemException  
  
5 [C#]  
6 public class ArgumentException: SystemException
```

7 Assembly Info:

- 8 • *Name:* mscorlib
- 9 • *Public Key:* [00 00 00 00 00 00 00 00 04 00 00 00 00 00 00]
- 10 • *Version:* 2.0.x.x
- 11 • *Attributes:*
 - 12 ○ CLSCompliantAttribute(true)

13 Summary

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

15 Inherits From: System.SystemException

16

17 **Library:** BCL

18

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

21

22 Description

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

25

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

- 27 • `System.ArgumentNullException`
- 28 • `System.ArgumentOutOfRangeException`
- 29 • `System.DuplicateWaitObjectException`

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

31

32]

33 Example

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

```
1
2     [C#]

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

17
18 The output is

19
20 Error: System.ArgumentException: Object must be of type String.

21
22
23 at System.String.CompareTo(Object value)

24
25
26 at ArgExceptionExample.Main()

27

28

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 `System.ArgumentException` class.

8 **Description**

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

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

14

1 ArgumentException(System.String)

2 Constructor

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

7 Summary

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

9 Parameters

Parameter	Description
<i>message</i>	A <code>System.String</code> 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.

10

11 Description

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

17

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

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

8 Summary

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

10 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> .

11 12 Description

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

19
20 [Note: For information on inner exceptions, see System.Exception.InnerException.]
21
22

23

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 <code>System.String</code> 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 <code>System.String</code> that contains the name of the parameter that caused the current exception.
<i>innerException</i>	An instance of <code>System.Exception</code> 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 message,  
5 string paramName)  
  
6 [C#]  
7 public ArgumentException(string message, string paramName)
```

8 Summary

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

10 Parameters

Parameter	Description
<i>message</i>	A <code>System.String</code> 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 <code>System.String</code> that contains the name of the parameter that caused the exception.

11

12 Description

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

19

1 **ArgumentException.Message** Property

```
2 [ILAsm]  
3 .property string Message { public hidebysig virtual specialname string  
4 get_Message() }  
  
5 [C#]  
6 public override string Message { get; }
```

7 **Summary**

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

9 **Property Value**

10 A System.String containing the error message with
11 System.ArgumentException.ParamName appended, if it is not null.

12 **Description**

13 This property is read-only.

14

1 **ArgumentException.ParamName Property**

```
2 [ILAsm]  
3 .property string ParamName { public hidebysig virtual specialname string  
4 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 A `System.String` that contains the name of the parameter that caused the current
11 Exception, or `null` if no value was specified to the constructor for the current instance.

12 **Description**

13 This property is read-only.

14 **Behaviors**

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

17

18 **How and When to Override**

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

21

22 **Usage**

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

24

25