

System.ObjectDisposedException Class

```
[ILAsm]
.class public serializable ObjectDisposedException extends
System.InvalidOperationException

[C#]
public class ObjectDisposedException: InvalidOperationException
```

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 operation is performed on a disposed object.

Inherits From: System.InvalidOperationException

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

[*Note:* For additional information about disposing objects, see the `System.IDisposable` interface.]

Example

The following example demonstrates an error that causes the `System.ObjectDisposedException` exception to be thrown.

[C#]

```
using System;
using System.IO;

public class ObjectDisposedExceptionTest {
```

```
1     public static void Main() {
2         MemoryStream ms = new MemoryStream(16);
3         ms.Close();
4         try {
5             ms.ReadByte();
6         }
7         catch (ObjectDisposedException e) {
8             Console.WriteLine("Caught: {0}", e.Message);
9         }
10    }
11 }
12 The output is
13
14 Caught: Cannot access a closed Stream.
15
16
```

ObjectDisposedException(System.String) Constructor

```
[ILAsm]  
public rtspecialname specialname instance void .ctor(string objectName)  
  
[C#]  
public ObjectDisposedException(string objectName)
```

Summary

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

Parameters

Parameter	Description
<i>objectName</i>	A <code>System.String</code> containing the name of the disposed object.

Description

This constructor initializes the `System.ObjectDisposedException.ObjectName` property of the new instance using *objectName*. The `System.ObjectDisposedException.Message` property is initialized to a system-supplied message that describes the error and includes *objectname*. This message takes into account the current system culture.

The `System.ObjectDisposedException.InnerException` property of the new instance is initialized to null.

[Note: If *objectName* is null, the `System.ObjectDisposedException.Message` property contains only an error message.]

Example

The following example displays the error message of a `System.ObjectDisposedException` instance created using this constructor.

```
[C#]
```

```
using System;
```

```

1
2 public class ExampleDisposableObject: IDisposable {
3     public static void Main() {
4
5         ExampleDisposableObject obj = new ExampleDisposableObject();
6
7         obj.Close();
8
9         try {
10            Console.WriteLine(obj);
11        } catch (ObjectDisposedException e) {
12            Console.WriteLine("Caught: {0}", e.Message);
13        }
14    }
15
16
17    public ExampleDisposableObject() {
18        isDisposed = false;
19    }
20
21    ~ExampleDisposableObject() {
22        Dispose(true);
23    }
24
25    public void Close() {
26        Dispose(true);
27    }
28
29    public void Dispose() {
30        Dispose(true);
31    }
32
33    public void Dispose(bool disposing) {
34        isDisposed = true;
35    }
36
37    public override String ToString() {
38        if(isDisposed)
39            throw new ObjectDisposedException("ExampleDisposableObject");
40        else
41            return "This is an instance of ExampleDisposableObject.";
42    }
43
44    private bool isDisposed;
45 }
46
47 The output is
48
49 Caught: Cannot access a disposed object named "ExampleDisposableObject".
50
51
52 Object name: "ExampleDisposableObject".
53
54

```

ObjectDisposedException(System.String, System.String) Constructor

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

[C#]
public ObjectDisposedException(string objectName, string message)
```

Summary

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

Parameters

Parameter	Description
<i>objectName</i>	A <code>System.String</code> containing the name of the disposed object.
<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.

Description

This constructor initializes the `System.ObjectDisposedException.Message` property of the new instance using *message*, and the `System.ObjectDisposedException.ObjectName` property using *objectName*. If *message* is null, the `System.ObjectDisposedException.Message` property is initialized to the system-supplied message provided by the constructor that takes no arguments.

The `System.ObjectDisposedException.InnerException` property of the new instance is initialized to null.

Example

The following example throws a `System.ObjectDisposedException` instance created using this constructor.

```
[C#]
```

```

1  using System;
2
3  public class ExampleDisposableObject: IDisposable {
4      public static void Main() {
5
6          ExampleDisposableObject obj = new ExampleDisposableObject();
7
8          obj.Close();
9
10         try {
11             Console.WriteLine(obj);
12         } catch (ObjectDisposedException e) {
13             Console.WriteLine("Caught: {0}", e.Message);
14         }
15     }
16
17
18     public ExampleDisposableObject() {
19         isDisposed = false;
20     }
21
22     ~ExampleDisposableObject() {
23         Dispose(true);
24     }
25
26     public void Close() {
27         Dispose(true);
28     }
29
30     public void Dispose() {
31         Dispose(true);
32     }
33
34     public void Dispose(bool disposing) {
35         isDisposed = true;
36     }
37
38     public override String ToString() {
39         if(isDisposed) {
40             string message = "Oh-oh! This object has been disposed!";
41             string objectName = "ExampleDisposableObject";
42             throw new ObjectDisposedException(objectName, message);
43         }
44         else
45             return "Hello, World!";
46     }
47
48     private bool isDisposed;
49 }
50 The output is
51
52 Caught: Oh-oh! This object has been disposed!
53
54

```

1 Object name: "ExampleDisposableObject".

2

3

ObjectDisposedException.Message Property

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

Summary

Gets the message that describes the error.

Property Value

A `System.String` that describes the error.

Description

If the `System.ObjectDisposedException.ObjectName` property is not null, the message includes the name of the object.

This property is read-only.

[*Note:* This property overrides `System.Exception.Message`.]

ObjectDisposedException.ObjectName

Property

```
[ILAsm]
.property string ObjectName { public hidebysig specialname instance string
get_ObjectName() }

[C#]
public string ObjectName { get; }
```

Summary

Gets the name of the disposed object.

Property Value

A `System.String` containing the name of the disposed object.

Description

[*Note:* If this property is not null or `System.String.Empty`, the value of this property is included in the string returned by the `System.ObjectDisposedException.Message` property.]

This property is read-only.