

System.FieldAccessException Class

```
[ILASM]
.class public serializable FieldAccessException extends
System.MemberAccessException

[C#]
public class FieldAccessException: MemberAccessException
```

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 there is an attempt to access a field outside the scope in which access is permitted.

Inherits From: System.MemberAccessException

Library: RuntimeInfrastructure

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: This exception is typically thrown when the access level of a field in a class library is changed, and one or more assemblies referencing the library have not been recompiled.]

Example

The following example demonstrates a scenario under which **System.FieldAccessException** is thrown.

The following code contains a class with a public field (myField). This class is compiled into a class library.

[C#]

```
using System;
namespace TestNameSpace
```

```

1      {
2      public class Class1
3      {
4          public Class1()
5          {
6              Console.WriteLine ("Constructing with public field");
7          }
8          public int myField = -1;
9      }
10     }
11

```

12 The following code references the class library above, and accesses
13 TestNameSpace.Class1.myField. This code is compiled into an
14 application.
15
16 [C#]

```

17 using System;
18 using TestNameSpace;
19 class AppTest
20 {
21     public static void Main()
22     {
23         Class1 test = new Class1();
24         Console.WriteLine("Accessing member {0}.",
25 test.myField);
26     }
27 }
28

```

29 The output of the application is
30
31 Constructing with public field
32
33
34 Accessing member -1.
35

36
37 The code for the class library is changed and recompiled so that

1 TestNameSpace.Class1.myField is no longer public. The following code
2 changes myField from public to private.

```
3  
4        [C#]  
  
5        using System;  
6        namespace TestNameSpace  
7        {  
8            public class Class1  
9            {  
10               public Class1()  
11               {  
12                Console.WriteLine ("Constructing with private field");  
13               }  
14               private int myField = -1;  
15            }  
16        }  
17
```

18 When the application is executed again without being recompiled, the
19 output is

```
20  
21        Unhandled Exception: System.FieldAccessException:  
22        TestNameSpace.Class1.myField  
23  
24  
25        at AppTest.Main()  
26
```

27

FieldAccessException() Constructor

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

[C#]
public FieldAccessException()
```

Summary

Constructs and initializes a new instance of the **System.FieldAccessException** class.

Description

This constructor initializes the **System.FieldAccessException.Message** property of the new instance to a system-supplied message that describes the error, such as "Attempted to access a private or protected field inside a type." This message takes into account the current system culture.

The **System.FieldAccessException.InnerException** property of the new instance is initialized to **null**.

1 **FieldAccessException(System.String)**

2 **Constructor**

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

8 **Summary**

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

14

15 **Description**

16 This constructor initializes the
17 **System.FieldAccessException.Message** property of the new
18 instance using *message*. If *message* is **null**, the
19 **System.FieldAccessException.Message** property is initialized to the
20 system-supplied message provided by the constructor that takes no
21 arguments.

22

23 The **System.FieldAccessException.InnerException** property of the
24 new instance is initialized to **null**.

25

FieldAccessException(System.String, System.Exception) Constructor

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

[C#]
public FieldAccessException(string message, Exception
inner)
```

Summary

Constructs and initializes a new instance of the **System.FieldAccessException** 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>inner</i>	An instance of System.Exception that is the cause of the current exception. If <i>inner</i> is not a null reference, the current exception was raised in a catch block handling <i>inner</i> .

Description

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

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