

1 System.FieldAccessException Class

```
2 [ILAsm]
3 .class public serializable FieldAccessException extends
4 System.MemberAccessException
5
6 [C#]
7 public class FieldAccessException: MemberAccessException
```

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

16 Inherits From: System.MemberAccessException

17

18 **Library:** RuntimeInfrastructure

19

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

22

23 Description

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

27

28

29 Example

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

32

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

35

36 [C#]

```
37 using System;
38 namespace TestNameSpace
39 {
```

```

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

```

11 The following code references the class library above, and accesses
12 TestNameSpace.Class1.myField. This code is compiled into an application.

14 [C#]

```

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

```

26 The output of the application is

28 Constructing with public field

31 Accessing member -1.

34 The code for the class library is changed and recompiled so that
35 TestNameSpace.Class1.myField is no longer public. The following code changes myField
36 from public to private.

38 [C#]

```

39 using System;
40 namespace TestNameSpace
41 {
42     public class Class1
43     {
44         public Class1()
45         {
46             Console.WriteLine ("Constructing with private field");
47         }
48         private int myField = -1;
49     }
50 }
51

```

```
1  When the application is executed again without being recompiled, the output is
2
3  Unhandled Exception: System.FieldAccessException:
4  TestNameSpace.Class1.myField
5
6
7  at AppTest.Main()
8
9
```

1 `FieldAccessException()` Constructor

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

6 **Summary**

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

8 **Description**

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

13
14 The `System.FieldAccessException.InnerException` property of the new instance is
15 initialized to null.

16

1 FieldAccessException(System.String)

2 Constructor

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

7 Summary

8 Constructs and initializes a new instance of the `System.FieldAccessException` 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.FieldAccessException.Message` property of the
13 new instance using *message*. If *message* is null, the
14 `System.FieldAccessException.Message` property is initialized to the system-supplied
15 message provided by the constructor that takes no arguments.

16

17 The `System.FieldAccessException.InnerException` property of the new instance is
18 initialized to null.

19

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

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

8 Summary

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

11 12 Description

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

18
19 [Note: For more information on inner exceptions, see
20 System.Exception.InnerException.]

21