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 00]
- *Version:* 2.0.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
{
 public class Class1
 {
   public Class1()
   {
     Console.WriteLine ("Constructing with public field");
   }
   public int myField = -1;
 }
}
```

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

```
[C#]
using System;
using TestNameSpace;
class AppTest
{
  public static void Main()
  {
    Class1 test = new Class1();
    Console.WriteLine("Accessing member {0}.", test.myField);
  }
}
```

The output of the application is

```
Constructing with public field


Accessing member -1.
```

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

```
[C#]
using System;
namespace TestNameSpace
{
 public class Class1
 {
   public Class1()
   {
     Console.WriteLine ("Constructing with private field");
   }
   private int myField = -1;
 }
}
```

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

```
Unhandled Exception: System.FieldAccessException:
```

```
TestNameSpace.Class1.myField

at AppTest.Main()
```

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`.

FieldAccessException(System.String) Constructor

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

[C#]
public FieldAccessException(string message)
```

Summary

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

Parameters

Parameter	Description
message	A `System.String` that describes the error. The content of *message* 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.FieldAccessException.Message` property of the new instance using *message*. If *message* is `null`, the `System.FieldAccessException.Message` property is initialized to the system-supplied message provided by the constructor that takes no arguments.

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

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
message	A `System.String` that describes the error. The content of *message* 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.
inner	An instance of `System.Exception` that is the cause of the current exception. If *inner* is not a `null` reference, the current exception was raised in a catch block handling *inner*.

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`.]