

1 System.Collections.IHashCodeProvider

2 Interface

```
3 [ILAsm]  
4 .class interface public abstract IHashCodeProvider  
5 [C#]  
6 public interface IHashCodeProvider
```

7 Assembly Info:

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

13 Summary

14 Implemented by classes that support custom hash functions for instances of the class.

15 **Library:** BCL

16

17 Description

18 [Note: System.Collections.IHashCodeProvider contains the
19 System.Collections.IHashCodeProvider.GetHashCode method. The consumer of an
20 object should call this method to obtain a hash code for the object using a custom hash
21 function.]
22
23

24

1 2 IHashCodeProvider.GetHashCode(System.Object) Method 3

```
4 [ILAsm]  
5 .method public hidebysig virtual abstract int32 GetHashCode(object obj)  
6 [C#]  
7 int GetHashCode(object obj)
```

8 Summary

9 Generates a hash code for the specified System.Object.

10 Parameters

Parameter	Description
<i>obj</i>	The System.Object for which a hash code is to be generated.

11 12 Return Value

13 A System.Int32 containing the hash code for the specified System.Object.

14 Behaviors

15 If *obj* is null, it is required that a call to
16 System.Collections.IHashCodeProvider.GetHashCode throw
17 System.ArgumentNullException.

18 19 How and When to Override

20 Implement this method to generate a better hash table distribution than the default
21 method provided by the type of the System.Object for which the hash code is being
22 generated.

23 24 Usage

25 The value returned by this method should not be persisted past the lifetime of the
26 application that created the value. The first reason is that the hash function of a class
27 might be altered to generate a better distribution, rendering any values from the old
28 hash function useless. The second reason is that the default implementation of this class
29 does not guarantee that the same value will be returned by different instances.

1

2 **Exceptions**

Exception	Condition
System.ArgumentNullException	<i>obj</i> is null.

3

4