



C# static code analysis

Unique rules to find Bugs, Vulnerabilities, Security Hotspots, and Code Smells in your C# code





Security Hotspot

Tags

(28)

⊗ Code Smell

O Quick Fix

Analyze your code

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Q



Code Smell

Underscores should be used to make large numbers readable

Code Smell

"ToString()" calls should not be

Code Smell

"==" should not be used when "Equals" is overridden

Code Smell

An abstract class should have both abstract and concrete methods

Code Smell

Multiple variables should not be declared on the same line

Code Smell

Culture should be specified for "string" operations

Code Smell

"switch" statements should have at least 3 "case" clauses

Code Smell

break statements should not be used except for switch cases

Code Smell

String literals should not be duplicated

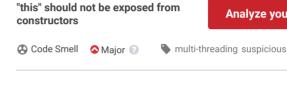
Code Smell

Files should contain an empty newline at the end

Code Smell

Unused "using" should be removed

Code Smell



In single-threaded environments, the use of this in constructors is normal, and expected. But in multi-threaded environments, it could expose partially-constructed objects to other threads, and should be used with caution.

The classic example is a class with a static list of its instances. If the constructor stores this in the list, another thread could access the object before it's fullyformed. Even when the storage of this is the last instruction in the constructor. there's still a danger if the class is not final. In that case, the initialization of subclasses won't be complete before this is exposed.

This rule raises an issue when $\verb|this|$ is assigned to any globally-visible object in a constructor, and when it is passed to the method of another object in a constructor

Noncompliant Code Example

```
public class Monument
 public static readonly List<Monument> ALL_MONUMENTS = new
 public Monument(string location, ...)
   ALL_MONUMENTS.Add(this); // Noncompliant; passed to a m
    this.location = location;
    // ...
}
```

Exceptions

This rule ignores instances of assigning this directly to a static field of the same class because that case is covered by {rule:csharpsquid:S3010}

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A close curly brace should be located at the beginning of a line

Code Smell

Tabulation characters should not be used

Code Smell

Methods and properties should be named in PascalCase

Code Smell

Track uses of in-source issue suppressions

Code Smell