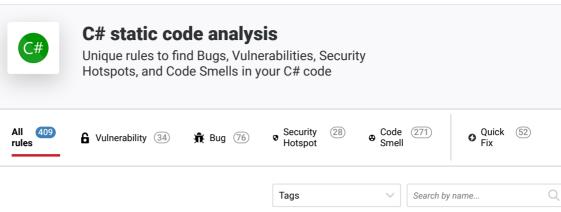
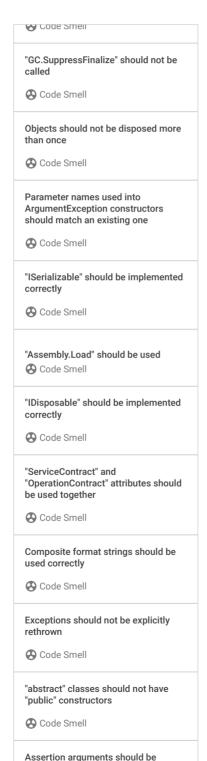


XML



Field-like events should not be



passed in the correct order

Code Smell

```
Analyze your code
virtual
Field-like events are events that do not have explicit add and remove methods. The
compiler generates a private delegate field to back the event, as well as
generating the implicit add and remove methods.
When a virtual field-like event is overridden by another field-like event, the
behavior of the C# compiler is to generate a new private delegate field in the
derived class, separate from the parent's field. This results in multiple and separate
events being created, which is rarely what's actually intended.
To prevent this, remove the virtual designation from the parent class event.
Noncompliant Code Example
 abstract class Car
    public virtual event EventHandler OnRefueled; // Noncompli
    public void Refuel()
      // This OnRefueled will always be null
       if (OnRefueled != null)
         OnRefueled(this, null);
 class R2 : Car
    public override event EventHandler OnRefueled;
 class Program
  {
    static void Main(string[] args)
      var r2 = new R2();
      r2.OnRefueled += new EventHandler((o, a) =>
        Console.WriteLine("This event will never be called");
      });
      r2.Refuel();
 }
```

Compliant Solution

```
abstract class Car
 public event EventHandler OnRefueled; // Compliant
```

Ternary operators should not be nested

Code Smell

Events should be invoked

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"params" should be used on overrides

Code Smell

Generic type parameters should be co/contravariant when possible

Code Smell

Multiple "OrderBy" calls should not be

```
public void Refuel()
    if (OnRefueled != null)
     OnRefueled(this, null);
class R2 : Car {}
class Program
  static void Main(string[] args)
   var r2 = new R2();
    r2.OnRefueled += new EventHandler((o, a) =>
     Console.WriteLine("This event will be called");
   });
    r2.Refuel();
```

Available In:

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