

 Secrets

 ABAP

 Apex

 C

 C++

 CloudFormation

 COBOL

 C#

 CSS

 Flex

 Go

 HTML

 **Java**

 JavaScript

 Kotlin

 Objective C

 PHP

 PL/I

 PL/SQL

 Python

 RPG

 Ruby

 Scala

 Swift

 Terraform

 Text

 TypeScript

 T-SQL

 VB.NET

 VB6

 XML



Java static code analysis

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

All rules 632

Vulnerability 53

Bug 154

Security Hotspot 36

Code Smell 389

Quick Fix 42

Abstract class names should comply with a naming convention
Code Smell
Strings literals should be placed on the left side when checking for equality
Code Smell
Files should contain an empty newline at the end
Code Smell
Source code should be indented consistently
Code Smell
A close curly brace should be located at the beginning of a line
Code Smell
Close curly brace and the next "else", "catch" and "finally" keywords should be on two different lines
Code Smell
Close curly brace and the next "else", "catch" and "finally" keywords should be located on the same line
Code Smell
An open curly brace should be located at the beginning of a line
Code Smell
An open curly brace should be located at the end of a line
Code Smell
Tabulation characters should not be used
Code Smell
Functions should not be defined with a variable number of arguments
Code Smell

Collection methods with O(n) performance should be used carefully

Analyze your code

Code Smell

Minor

performance

The time complexity of method calls on collections is not always obvious. For instance, for most collections the `size()` method takes constant time, but the time required to execute `ConcurrentLinkedQueue.size()` is $O(n)$, i.e. directly proportional to the number of elements in the collection. When the collection is large, this could therefore be an expensive operation.

This rule raises an issue when the following $O(n)$ methods are called outside of constructors on class fields:

- ArrayList
 - contains
 - remove
- LinkedList
 - get
 - contains
- ConcurrentLinkedQueue
 - size
 - contains
- ConcurrentLinkedDeque
 - size
 - contains
- CopyOnWriteArrayList
 - add
 - contains
 - remove
- CopyOnWriteArraySet
 - add
 - contains
 - remove

Noncompliant Code Example

```
ConcurrentLinkedQueue queue = new ConcurrentLinkedQueue();
//...
log.info("Queue contains " + queue.size() + " elements");
```

Available In:

sonarlint

sonarcloud

sonarqube

<div>Local-Variable Type Inference should be used</div> <div> Code Smell</div>
<div>Migrate your tests from JUnit4 to the new JUnit5 annotations</div> <div> Code Smell</div>
<div>Track uses of disallowed classes</div> <div> Code Smell</div>
<div>Track uses of "@SuppressWarnings" annotations</div> <div> Code Smell</div>