

































-  Secrets
-  ABAP
-  Apex
-  C
-  C++
-  CloudFormation
-  COBOL
-  C#
-  CSS
-  Flex
-  Go
-  HTML
-  **Java**
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-  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 rules632

Vulnerability53

Bug154


Security Hotspot36

Code Smell389


Quick Fix42


Tags ▾

Search by name... 🔍


 Bug


The value returned from a stream read should be checked




 Bug


"@NonNull" values should not be set to null




 Bug


"Iterator.next()" methods should throw "NoSuchElementException"




 Bug


"compareTo" results should not be checked for specific values




 Bug


Math operands should be cast before assignment




 Bug


Ints and longs should not be shifted by zero or more than their number of bits-1



 Bug

"compareTo" should not return "Integer.MIN\_VALUE"



 Bug

Boxing and unboxing should not be immediately reversed



 Bug

"equals(Object obj)" should test argument type



 Bug





"Serializable" inner classes of non-serializable classes should be "static"



 Bug

The non-serializable super class of a "Serializable" class should have a no-argument constructor

### "toString()" and "clone()" methods should not return null

 Bug  Major   cwe cert

Calling toString() or clone() on an object should always return a string or an object. Returning null instead contravenes the method's implicit contract.

#### Noncompliant Code Example

```
public String toString () {
    if (this.collection.isEmpty()) {
        return null; // Noncompliant
    } else {
        // ...
    }
}
```




#### Compliant Solution

```
public String toString () {
    if (this.collection.isEmpty()) {
        return "";
    } else {
        // ...
    }
}
```

See

- [MITRE, CWE-476](#) - NULL Pointer Dereference
- [CERT, EXP01-J](#) - Do not use a null in a case where an object is required





Available In:

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https://rules.sonarsource.com/java/RSPEC-2225

1/2

 Bug
Method parameters, caught exceptions and foreach variables' initial values should not be ignored
 Bug
"equals(Object obj)" and "hashCode()" should be overridden in pairs
 Bug
Disclosing fingerprints from web application technologies is security-sensitive
 Security Hotspot