



Softwarequalität prüfen und verbessern

Daniel Ruf // 29.08.2019

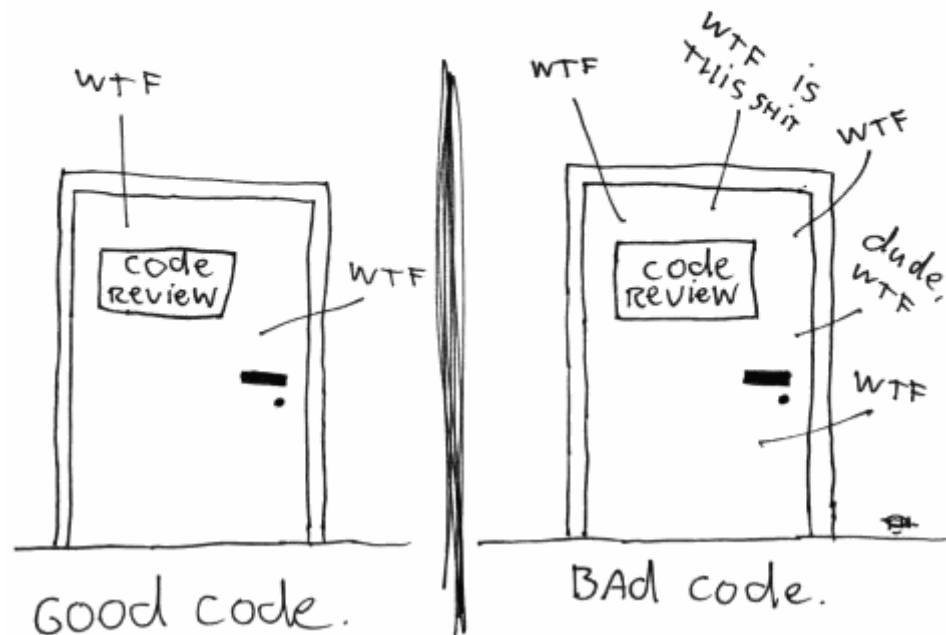


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The ONLY VALID MEASUREMENT
OF CODE QUALITY: WTFs/MINUTE



- bugs
- vulnerabilities
- code smells & anti-patterns

"A code smell is a surface indication that usually corresponds to a deeper problem in the system."

<https://martinfowler.com/bliki/CodeSmell.html>

SonarSource has different solutions
for improving the code quality

- **sonar-scanner** CLI (the core)
- **SonarQube** (the analysis platform)
- **SonarLint** (linting in IDE, requires JRE)
- **SonarCloud** (hosted version of SonarQube)

install sonar-scanner

- extract archive anywhere
- add path to bin directory to your PATH variable
- sonar-scanner --help
- alternatively use **sonarqube-scanner** (NodeJS)

install SonarQube demo instance

- **Docker** (docker pull sonarqube)
- or **manually**

SonarQube runs on port 9000 by default

- `docker pull sonarqube`
- `docker create -p 9000:9000 --name=sonarqube-sulu sonarqube`
- `docker start sonarqube-sulu`

setup a new project (config file)

sonar-project.properties X

```
1  # must be unique in a given SonarQube instance
2  sonar.projectKey=sulu
3
4  # --- optional properties ---
5
6  # defaults to project key
7  #sonar.projectName=My project
8  # defaults to 'not provided'
9  #sonar.projectVersion=1.0
10
11  # Path is relative to the sonar-project.properties file. Defaults to .
12  #sonar.sources=.
13
14  # Encoding of the source code. Default is default system encoding
15  #sonar.sourceEncoding=UTF-8
16
```

live demo

start SonarQube

```
→ projects docker start -a sonarqube-sulu
2019.08.21 05:56:04 INFO app[][o.s.a.AppFileSystem] Cleaning or creating temp directory /opt/sonarqube/temp
2019.08.21 05:56:04 INFO app[][o.s.a.es.EsSettings] Elasticsearch listening on /127.0.0.1:9001
2019.08.21 05:56:04 INFO app[][o.s.a.ProcessLauncherImpl] Launch process[[key='es', ipcIndex=1, logFilenamePrefix=es]] from [/opt/sonarqube/elasticsearch]: /opt/sonarqube/elasticsearch/bin/elasticsearch
2019.08.21 05:56:04 INFO app[][o.s.a.SchedulerImpl] Waiting for Elasticsearch to be up and running
2019.08.21 05:56:04 INFO app[][o.e.p.PluginsService] no modules loaded
2019.08.21 05:56:04 INFO app[][o.e.p.PluginsService] loaded plugin [org.elasticsearch.transport.Netty4Plugin]
OpenJDK 64-Bit Server VM warning: Option UseConcMarkSweepGC was deprecated in version 9.0 and will likely be removed in a future release.
```

start SonarQube

```
2019.08.21 05:56:40 INFO ce[][o.s.p.ProcessEntryPoint] Starting ce
2019.08.21 05:56:40 INFO ce[][o.s.ce.app.CeServer] Compute Engine starting up...
2019.08.21 05:56:41 INFO ce[][o.e.p.PluginsService] no modules loaded
2019.08.21 05:56:41 INFO ce[][o.e.p.PluginsService] loaded plugin [org.elasticsearch.join.ParentJoinPlugin]
2019.08.21 05:56:41 INFO ce[][o.e.p.PluginsService] loaded plugin [org.elasticsearch.percolator.PercolatorPlugin]
2019.08.21 05:56:41 INFO ce[][o.e.p.PluginsService] loaded plugin [org.elasticsearch.transport.Netty4Plugin]
2019.08.21 05:56:42 INFO ce[][o.s.s.e.EsClientProvider] Connected to local Elasticsearch: [127.0.0.1:9001]
2019.08.21 05:56:42 INFO ce[][o.sonar.db.Database] Create JDBC data source for jdbc:h2:tcp://127.0.0.1:9092/sonar
2019.08.21 05:56:42 WARN ce[][o.s.db.dialect.H2] H2 database should be used for evaluation purpose only.
2019.08.21 05:56:43 INFO ce[][o.s.s.p.ServerFileSystemImpl] SonarQube home: /opt/sonarqube
2019.08.21 05:56:43 INFO ce[][o.s.c.c.CePluginRepository] Load plugins
2019.08.21 05:56:45 INFO ce[][o.s.c.c.ComputeEngineContainerImpl] Running Community edition
2019.08.21 05:56:45 INFO ce[][o.s.ce.app.CeServer] Compute Engine is operational
2019.08.21 05:56:45 INFO app[][o.s.a.SchedulerImpl] Process[ce] is up
2019.08.21 05:56:45 INFO app[][o.s.a.SchedulerImpl] SonarQube is up
```

add .scannerwork directory (project cache) to .gitignore

run sonar-scanner in project

```
→ sulu git:(develop) X sonar-scanner
[08:01:29] Starting SonarQube analysis...
[08:01:29] Getting info from "package.json" file
[08:01:29] Checking if executable exists: /home/druf/.sonar/native-sonar-scanner/sonar-scanner-4.0.0.1744-linux/bin/sonar-scanner
[08:01:29] Platform binaries for SonarQube scanner found. Using it.
INFO: Scanner configuration file: /home/druf/.sonar/native-sonar-scanner/sonar-scanner-4.0.0.1744-linux/conf/sonar-scanner.properties
INFO: Project root configuration file: NONE
INFO: SonarQube Scanner 4.0.0.1744
INFO: Java 11.0.3 AdoptOpenJDK (64-bit)
INFO: Linux 4.15.0-58-generic amd64
INFO: User cache: /home/druf/.sonar/cache
INFO: SonarQube server 7.9.1
INFO: Default locale: "de_DE", source code encoding: "UTF-8" (analysis is platform dependent)
INFO: Load global settings
INFO: Load global settings (done) | time=147ms
INFO: Server id: BF41A1F2-AWyt973AtnT_Kse4o71M
INFO: User cache: /home/druf/.sonar/cache
INFO: Load/download plugins
INFO: Load plugins index
INFO: Load plugins index (done) | time=134ms
```

run sonar-scanner in project

```
INFO: ----- Run sensors on project
INFO: Sensor Zero Coverage Sensor
INFO: Sensor Zero Coverage Sensor (done) | time=220ms
INFO: 560 files had no CPD blocks
INFO: Calculating CPD for 2485 files
INFO: CPD calculation finished
INFO: Analysis report generated in 1202ms, dir size=23 MB
INFO: Analysis report compressed in 9600ms, zip size=10 MB
INFO: Analysis report uploaded in 725ms
INFO: ANALYSIS SUCCESSFUL, you can browse http://localhost:9000/dashboard?id=sulu-sulu
INFO: Note that you will be able to access the updated dashboard once the server has processed the submitted analysis report
INFO: More about the report processing at http://localhost:9000/api/ce/task?id=AWyyxk4UhnQl03kQgCyU
INFO: Analysis total time: 2:26.783 s
INFO: -----
INFO: EXECUTION SUCCESS
INFO: -----
INFO: Total time: 2:28.230s
INFO: Final Memory: 14M/57M
INFO: -----
[08:03:57] SonarQube analysis finished.
```

Continuous Code Quality

[Log in](#)[Read documentation](#)

0

Projects Analyzed

0  Bugs0  Vulnerabilities0  Code Smells0  Security Hotspots


Multi-Language

20+ programming languages are supported by SonarQube thanks to our in-house code analyzers, including:


[Java](#)[C/C++](#)[C#](#)[COBOL](#)[ABAP](#)[HTML](#)[RPG](#)[JavaScript](#)[TypeScript](#)[Objective C](#)[XML](#)[VB.NET](#)[PL/SQL](#)[T-SQL](#)[Flex](#)[Python](#)[Groovy](#)[PHP](#)[Swift](#)[Visual Basic](#)[PL/I](#)


Quality Model

Reliability


 **Bugs** track code that is demonstrably wrong or highly likely to yield unexpected behavior.

Security

 **Vulnerabilities** are raised on code that can be exploited by hackers.

 **Security Hotspots** are raised on security-sensitive code that requires manual review to assess whether or not a vulnerability exists.

Maintainability

 **Code Smells** will confuse maintainers or give them pause. They are measured primarily in terms of the time they will take to fix.



[Write Clean Code](#)[Fix The Leak](#)

Continuous Code Quality

[Log in](#)[Read documentation](#)

1

Projects Analyzed

[31](#)  Bugs[12](#)  Vulnerabilities[5.1k](#)  Code Smells[101](#)  Security Hotspots


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[Write Clean Code](#)[Fix The Leak](#)

demo login is admin / admin

 **Projects** Issues Rules Quality Profiles Quality Gates Administration ? + A


My Favorites All

Filters

Quality Gate

Passed 1

Failed 0

Reliability ( Bugs)


A 0

B 0

C 0

D 0

E 1

Security ( Vulnerabilities)


A 0

B 0

C 0

D 0

E 1

Maintainability ( Code Smells)

A 1


B 0


C 0


D 0


E 0


Coverage

 ≥ 80% 0


 70% - 80% 0


 50% - 70% 0


Perspective: Overall Status Sort by: Name 1 projects 


 [sulu-sulu](#) Passed


Last analysis: August 12, 2019, 12:20 PM

31 E
 Bugs

12 E
 Vulnerabilities


5.1k A
 Code Smells

 0.0%
Coverage

 8.8%
Duplications

276k L
PHP, JavaScript, ...

1 of 1 shown

 **Embedded database should be used for evaluation purposes only**

The embedded database will not scale, it will not support upgrading to newer versions of SonarQube, and there is no support for migrating your data out of it into a different database engine.

Quality Gate ?

Passed

Reliability Measures

31 ^E

Bugs ?

started 20 minutes ago

Security Measures

12 ^E

Vulnerabilities ?

101

Security Hotspots ?

Maintainability Measures

177d ^A

Debt ?

5.1k

Code Smells ?

Coverage Measures

 0.0%
Coverage ?

Duplications Measures

 8.8%
Duplications ?

2k

Duplicated Blocks ?

About This Project

No description.

No tags ▾

276k

Lines of Code

PHP 166k

JavaScript 84k

XML 21k

CSS 5.9k

HTML 130

Project Activity

August 12, 2019

not provided

[Show More](#)

Quality Gate

(Default) [Sonar way](#)

Quality Profiles

(CSS) [Sonar way](#)(JavaScript) [Sonar way](#)(PHP) [Sonar way](#)(HTML) [Sonar way](#)(XML) [Sonar way](#)

External Links

[Project's Website](#)[Sources](#)

Project Key

sulu-sulu

Copy

Filters

Type

Bug	31
Vulnerability	12
Code Smell	5.1k
Security Hotspot	101

NEW Security Hotspots

Security Hotspots aren't necessarily issues, but they need to be reviewed to make sure they aren't vulnerabilities.

[Learn More](#)

Severity

Blocker	8	Minor	382
Critical	3.4k	Info	92
Major	1.2k		

Resolution

Status

Security Category

Creation Date

Language

Rule

Tag

Directory

File

Assignee

Author

☐ Bulk Change

↑ ↓ to select issues

← → to navigate



69 / 5,245 issues

180d effort

☐ Bug Major Open Not assigned 1min effort Comment

No tags

src/.../js/components/InfiniteScroller/InfiniteScroller.js

Refactor this code so that this expression does not always evaluate to true.

11 months ago L123

☐ See Rule

Code Smell Major Open Not assigned 10min effort Comment

based-on-misra, cert, cwe, redundant

src/.../InfiniteScroller/tests/InfiniteScroller.test.js

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

2 years ago L10

☐

Code Smell Minor Open Not assigned 5min effort Comment

bad-practice, based-on-misra

src/.../components/MultiAutoComplete/MultiAutoComplete.js

"suggestion" hides or potentially hides a variable declared in an outer scope at line 100.

last year L100

☐ See Rule

Code Smell Major Open Not assigned 5min effort Comment

based-on-misra, cert, pitfall, suspicious

"Item" hides or potentially hides a variable declared in an outer scope at line 106.

last year L106

☐

See Rule

Code Smell Major Open Not assigned 5min effort Comment

based-on-misra, cert, pitfall, suspicious

src/.../RectangleSelection/normalizers/RatioNormalizer.js

Remove this useless assignment to local variable "width" See Rule

2 years ago L19

☐

Code Smell Major Open Not assigned 15min effort Comment

cert, cwe, unused

src/.../Resources/js/components/Table/table.scss

Unexpected duplicate selector ".cell-content", first used at line 91 See Rule

last year L156

☐

Code Smell Major Open Not assigned 1min effort Comment

No tags

src/.../Resources/js/components/Url/Url.js

"onProtocolChange" hides or potentially hides a variable declared in an outer scope at line 98. See Rule

3 months ago L89

☐

← 69 / 5,245 issues ↻

Refactor this code so that this expression does not always evaluate to true.

Code Smell

src/.../tests/InfiniteScroller.test.js

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

Code Smell

src/.../MultiAutoComplete/MultiAutoComple...

"suggestion" hides or potentially hides a variable declared in an outer scope at line 100.

Code Smell +1

"Item" hides or potentially hides a variable declared in an outer scope at line 106.

Code Smell +1

src/.../normalizers/RatioNormalizer.js

Remove this useless assignment to local variable "width"

Code Smell

src/.../js/components/Table/table.scss

Unexpected duplicate selector ".cell-content", first used at line 91

Code Smell

src/.../js/components/Url/Url.js

"onProtocolChange" hides or potentially hides a variable declared in an outer scope at line 98.

```
142 dani... height: $rowHeight;
143 patr... padding: $paddingCell 20px;
144 erfa... font-size: 12px;
145 patr... border-width: $borderWidth 0;
146 erfa... border-style: solid;
147         border-color: $cellBorderColor;
148         color: $cellTextColor;
149         background-color: $cellBackgroundColor;
150
```

```
151 erfa... &.small {
152         width: 1px;
153     }
154 }
155
```

```
156 patr... .cell-content {
```

Unexpected duplicate selector ".cell-content", first used at line 91

[See Rule](#)

last year ▾

L156 🔗

Code Smell ▾ Major ▾ Open ▾ Not assigned ▾ 1min effort Comment

No tags ▾

```
157         height: 100%;
158 dani... min-height: calc($rowHeight - $paddingCell * 2 - $borderWidth * 2);
159 patr... display: flex;
160         align-items: center;
161     }
162
```

```
163 erfa... .button-cell {
164         padding: 0;
165         background-color: $cellBackgroundColor;
166 dani... color: $buttonCellColor;
167 erfa... text-align: center;
168
```

```
169         &:hover {
170             button {
171                 visibility: visible;
172 dani... background-color: $buttonCellBackgroundColorHover;
173 patr... border-right: $borderWidth solid $buttonCellBorderColor;
174 dani... color: $buttonCellColorHover;
175 erfa...             }
176         }
177
```

```
178         button {
179             visibility: hidden;
180 erfa... width: 100%;
181 patr... height: 40px;
```


← 60 / 138 issues ↻

src/.../Controller/PositionControllerTest.php

Remove this unused "\$position2" local variable.

Code Smell

src/.../Command/SubscriberDebugComma...

Remove this unused "\$name" local variable.

Code Smell

src/.../DependencyInjection/Configuration...

Remove this unused "\$rootNode" local variable.

Code Smell

src/.../MediaBundle/Api/Media.php

Remove this unused "\$key" local variable.

Code Smell

Remove this unused "\$apiCategories" local variable.

Code Smell

src/.../Media/FormatManager/FormatMana...

Remove this unused "\$options" local variable.

Code Smell

src/.../Controller/CollectionControllerTest.php

Remove this unused "\$collection" local variable.

Code Smell

995 dani...

996

997 mail...

998

999

1000

1001

1002

1003

1004

1005

1006

1007

1008

1009

1010

1011

1012

1013 dani...

1014

1015

1016 mail...

1017 dani...

1018

1019 dani...

1020

1021

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1031

1032

1033

return \$this;

}

/**

* Returns the categories of the media.

*

* @VirtualProperty

* @SerializedName("categories")

*

* @return Category[]

*/

public function getCategories()

{

\$apiCategories = [];

Remove this unused "\$apiCategories" local variable.

See Rule

3 years ago

L1009

Code Smell

Minor

Open

Not assigned

5min effort

Comment

unused

\$fileVersion = \$this->getFileVersion();

\$categories = \$fileVersion->getCategories();

return array_map(function(CategoryEntity \$category) {

return \$category->getId();

}, \$categories->toArray());

}

/**

* Adds a target group to the entity.

*

* @param TargetGroupInterface \$targetGroup

*

* @return self

*/

public function addTargetGroup(TargetGroupInterface \$targetGroup)

{

\$fileVersion = \$this->getFileVersion();

\$fileVersion->addTargetGroup(\$targetGroup);

return \$this;

}

/**



65 / 5,101 issues

**Unexpected duplicate selector
".checkboxbox", first used at line 8**

Code Smell

src/.../InfiniteScroller/InfiniteScroller.js

**Refactor this code so that this
expression does not always evaluate
to true.**

Code Smell

src/.../tests/InfiniteScroller.test.js

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

Code Smell

src/.../MultiAutoComplete/MultiAutoComple...

**"suggestion" hides or potentially
hides a variable declared in an outer
scope at line 100.**

Code Smell +1

**"Item" hides or potentially hides a
variable declared in an outer scope at
line 106.**

Code Smell +1

src/.../normalizers/RatioNormalizer.js

**Remove this useless assignment to
local variable "width"**

Code Smell

src/.../js/components/Table/table.scss

**Unexpected duplicate selector ".cell-
content", first used at line 91**

Code Smell

```
5  erfa...    minWidth: number;
6            minHeight: number;
7            containerWidth: number;
8            containerHeight: number;
9  marc...
10 erfa...    constructor(containerWidth: number, containerHeight: number, width: number, height: num
11            this.containerWidth = containerWidth;
12            this.containerHeight = containerHeight;
13            this.minWidth = width;
14            this.minHeight = height;
15 marc...    }
16
17            normalize(data: SelectionData): SelectionData {
18                let height = data.height;
19                let width = data.width;
20 dani...    const calculatedWidth = height * (this.minWidth / this.minHeight);
21 marc...
22 erfa...    if (calculatedWidth > this.containerWidth) {
23                width = this.containerWidth;
24                height = width * (this.minHeight / this.minWidth);
25 marc...    } else {
26 erfa...        width = calculatedWidth;
27 marc...    }
28
29            return {...data, width, height};
30        }
31    }
32
```

Remove this useless assignment to local variable "width" See Rule 2 years ago L19
Code Smell Major Open Not assigned 15min effort Comment cert, cwe, unused

Unexpected duplicate selector
".checkbox", first used at line 8

Code Smell

src/.../InfiniteScroller/InfiniteScroller.js

Refactor this code so that this
expression does not always evaluate
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Code Smell

src/.../tests/InfiniteScroller.test.js

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Code Smell

src/.../MultiAutoComplete/MultiAutoComple...

"suggestion" hides or potentially
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scope at line 100.

Code Smell

```
5  erfa...    minWidth: number;
6            minHeight: number;
7            containerWidth: number;
8            containerHeight: number;
9  marc...
10 erfa...    constructor(containerWidth: number, containerHeight: number, width: number, height: num
11            this.containerWidth = containerWidth;
12            this.containerHeight = containerHeight;
13            this.minWidth = width;
14            this.minHeight = height;
15 marc...    }
16
17            normalize(data: SelectionData): SelectionData {
18                let height = data.height;
19                let width = data.width;
20 dani...    const calculatedWidth = height * (this.minWidth / this.minHeight);
21 marc...
22 erfa...    if (calculatedWidth > this.containerWidth) {
23                width = this.containerWidth;
24                height = width * (this.minHeight / this.minWidth);
25 marc...    } else {
26 erfa...    width = calculatedWidth;
```

Remove this useless assignment to local variable "width" [See Rule](#)

2 years ago ▾ L19 🔗

Code Smell ▾ Major ▾ Open ▾ Not assigned ▾ 15min effort Comment

cert, cwe, unused ▾

Dead stores should be removed

Dead stores should be removed

javascript:S1854 🔗

Code Smell Major Main sources cert, cwe, unused Available Since Aug 12, 2019 SonarAnalyzer (JavaScript) Constant/issue: 15min

A dead store happens when a local variable is assigned a value that is not read by any subsequent instruction. Calculating or retrieving a value only to then overwrite it or throw it away, could indicate a serious error in the code. Even if it's not an error, it is at best a waste of resources. Therefore all calculated values should be used.

Noncompliant Code Example

```
i = a + b; // Noncompliant; calculation result not used before value is overwritten
i = compute();
```

Compliant Solution

Filters

Clear All Filters

Search for rules...

Language

Search for languages...

JavaScript

1

1 shown

Type

Bug

0

Vulnerability

0

Code Smell

1

Security Hotspot

0

Tag

Repository

Default Severity

Status

Security Category

Available Since

Template ?

Quality Profile ?

Inheritance

Activation Severity

[Return to List](#)

to select rules



to navigate



1 / 1 rules

Dead stores should be removed

javascript:S1854

Code Smell Major Main sources cert, cwe, unused Available Since Aug 12, 2019

SonarAnalyzer (JavaScript) Constant/issue: 15min

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Noncompliant Code Example

```
i = a + b; // Noncompliant; calculation result not used before value is overwritten
i = compute();
```

Compliant Solution

```
i = a + b;
i += compute();
```

Exceptions

This rule ignores initializations to -1, 0, 1, `null`, `undefined`, `true`, `false`, `""`, `[]` and `{}`.

This rule also ignores variables declared with object destructuring using rest syntax (used to exclude some properties from object):

```
let {a, b, ...rest} = obj; // 'a' and 'b' are ok
doSomething(rest);
```

```
let [x1, x2, x3] = arr; // but 'x1' is noncompliant, as omitting syntax can be used: "let [, x2, x3] = .
doSomething(x2, x3);
```

See

- [MITRE, CWE-563](#) - Assignment to Variable without Use ('Unused Variable')
- [CERT, MSC13-C](#) - Detect and remove unused values
- [CERT, MSC56-1](#) - Detect and remove superfluous code and values



1 / 57 issues



src/.../Category/CategoryManager.php

Refactor this function to reduce its Cognitive Complexity from 26 to the 15 allowed.

Code Smell +22

- 1 +1
- 2 +1
- 3 +1
- 4 +1
- 5 +2 (incl. 1 for nesting)
- 6 +1
- 7 +1
- 8 +1
- 9 +1
- 10 +1
- 11 +1
- 12 +1
- 13 +1
- 14 +1
- 15 +1
- 16 +2 (incl. 1 for nesting)
- 17 +2 (incl. 1 for nesting)
- 18 +1
- 19 +1
- 20 +2 (incl. 1 for nesting)
- 21 +1
- 22 +1

alt + ↑ ↓ to navigate issue locations

src/.../Command/RecoverCommand.php

Refactor this function to reduce its Cognitive Complexity from 23 to the 15 allowed.

Code Smell +16

sulu-sulu src/Sulu/Bundle/CategoryBundle/Category/CategoryManager.php

[See all issues in this file](#)

183 ...

public function save(\$data, \$userId, \$locale, \$patch = false)

Refactor this function to reduce its Cognitive Complexity from 26 to the 15 allowed. [See Rule](#)

3 years ago

L183



Code Smell Critical Open Not assigned 16min effort

brain-overload

184 ...

{

185 ...

1 if (\$this->getProperty(\$data, 'id')) {

186 ...

\$categoryEntity = \$this->findById(\$this->getProperty(\$data, 'id'));

187 ...

} 2 else {

188 ...

\$categoryEntity = \$this->categoryRepository->createNew();

189 ...

}

190 ...

191 ...

// set user properties if userId is set. else these properties are set by the UserBlameSubscriber on save.

192 ...

3 if (\$user = (\$userId) 4 ? \$this->userRepository->findUserById(\$userId) : null) {

193 ...

5 if (!\$categoryEntity->getCreator()) {

194 ...

\$categoryEntity->setCreator(\$user);

195 ...

}

196 ...

\$categoryEntity->setChanger(\$user);

197 ...

}

198 ...

199 ...

\$categoryWrapper = \$this->getApiObject(\$categoryEntity, \$locale);

200 ...

201 ...

6 if (!\$patch 7 || \$this->getProperty(\$data, 'name')) {

202 ...

\$translationEntity = \$this->findOrCreateCategoryTranslation(\$categoryEntity, \$categoryWrapper, \$locale);
\$translationEntity->setTranslation(\$this->getProperty(\$data, 'name', null));

203 ...

204 ...

}

205 ...

206 ...

8 if (!\$patch 9 || \$this->getProperty(\$data, 'description')) {

207 ...

\$translationEntity = \$this->findOrCreateCategoryTranslation(\$categoryEntity, \$categoryWrapper, \$locale);
\$translationEntity->setDescription(\$this->getProperty(\$data, 'description', null));

208 ...

209 ...

}

210 ...

211 ...

10 if (!\$patch 11 || \$this->getProperty(\$data, 'medias')) {

212 ...

\$translationEntity = \$this->findOrCreateCategoryTranslation(\$categoryEntity, \$categoryWrapper, \$locale);
\$translationEntity->setMedias(

213 ...

222 ...

Filters

Search for rules...

Language

Search for languages...

Java	537
Python	439
C#	367
JavaScript	216
PHP	181
VB.NET	138
TypeScript	129
Flex	81
HTML	62
Kotlin	49
Ruby	48
Scala	47
Go	46
CSS	30
XML	16

15 shown [Show More](#)

Type

Bug	442
Vulnerability	100
Code Smell	1.7k
Security Hotspot	109

Tag

Repository

Default Severity

Status



to select rules



to navigate



1 / 2,392 rules

"!important" should not be used on "keyframes"

CSS Bug

"\$this" should not be used in a static context

PHP Bug

"&&" and "||" should be used

PHP Code Smell suspicious

".equals()" should not be used to test the values of "Atomic" classes

Java Bug multi-threading

<!DOCTYPE> declarations should appear before <html> tags

HTML Bug user-experience

<> should not be used to test inequality

Python Code Smell obsolete

<?php> and <?=> tags should be used

PHP Code Smell convention, psr1

<fieldset> tags should contain a <legend>

HTML Bug accessibility

<frames> should have a "title" attribute

HTML Bug accessibility

 and <dt> item tags should be in , or <dl> container tags

HTML Bug

 and tags should be used

HTML Bug accessibility

<table> tags should contain a <caption>

HTML Bug accessibility

<th> tags should have "id" or "scope" attributes

HTML Code Smell accessibility

<title> should be present in all pages

HTML Bug user-experience

"=+" should not be used instead of "+="

C# Bug

"=+" should not be used instead of "+="

VB.NET Bug

"=+" should not be used instead of "+="

Go Bug

"=+" should not be used instead of "+="

Kotlin Bug

"=+" should not be used instead of "+="

Ruby Bug

"=+" should not be used instead of "+="

PHP Bug

Quality Profiles

[Create](#)[Restore](#)

Quality Profiles are collections of rules to apply during an analysis.

For each language there is a default profile. All projects not explicitly assigned to some other profile will be analyzed with the default.

Ideally, all projects will use the same profile for a language. [Learn More](#)

Filter profiles by: ✕ ▼

PHP, 3 profile(s)	Projects [?]	Rules	Updated	Used	
Drupal Built-in	0	21	34 minutes ago	Never	
PSR-2 Built-in	0	20	34 minutes ago	Never	
Sonar way Built-in	Default	107	35 minutes ago	Never	

Recently Added Rules

[Failed unit tests should be fixed](#)

C#, not yet activated

[Skipped unit tests should be either re...](#)

C#, not yet activated

[Source files should have a sufficient ...](#)

C#, not yet activated

[Source files should not have any dupl...](#)

C#, not yet activated

[Failed unit tests should be fixed](#)

XML, not yet activated

[Skipped unit tests should be either re...](#)

XML, not yet activated

[Source files should not have any dupl...](#)

XML, not yet activated

[Source files should have a sufficient ...](#)

XML, not yet activated

[Lines should have sufficient coverage...](#)

XML, not yet activated

[Branches should have sufficient cove...](#)

XML, not yet activated

[See all 2.4k](#)



Embedded database should be used for evaluation purposes only

The embedded database will not scale, it will not support upgrading to newer versions of SonarQube, and there is no support for migrating your data out of it into a different database engine.

Quality Gates ?

[Create](#)

Sonar way

Default

Built-in

Sonar way

Built-in

[Copy](#)

Conditions ?

Only project measures are checked against thresholds. Directories and files are ignored.

Metric ?	Operator	Error
Coverage on New Code	is less than	80.0%
Duplicated Lines on New Code	is greater than	3.0%
Maintainability Rating on New Code	is worse than	A
Reliability Rating on New Code	is worse than	A
Security Rating on New Code	is worse than	A

Projects ?

Every project not specifically associated to a quality gate will be associated to this one by default.



Embedded database should be used for evaluation purposes only

The embedded database will not scale, it will not support upgrading to newer versions of SonarQube, and there is no support for migrating your data out of it into a different database engine.

Project Overview

sulu-sulu

500 / 3,670 files

> Reliability ?

> Security ?

> Maintainability ?

> Coverage

> Duplications

> Size

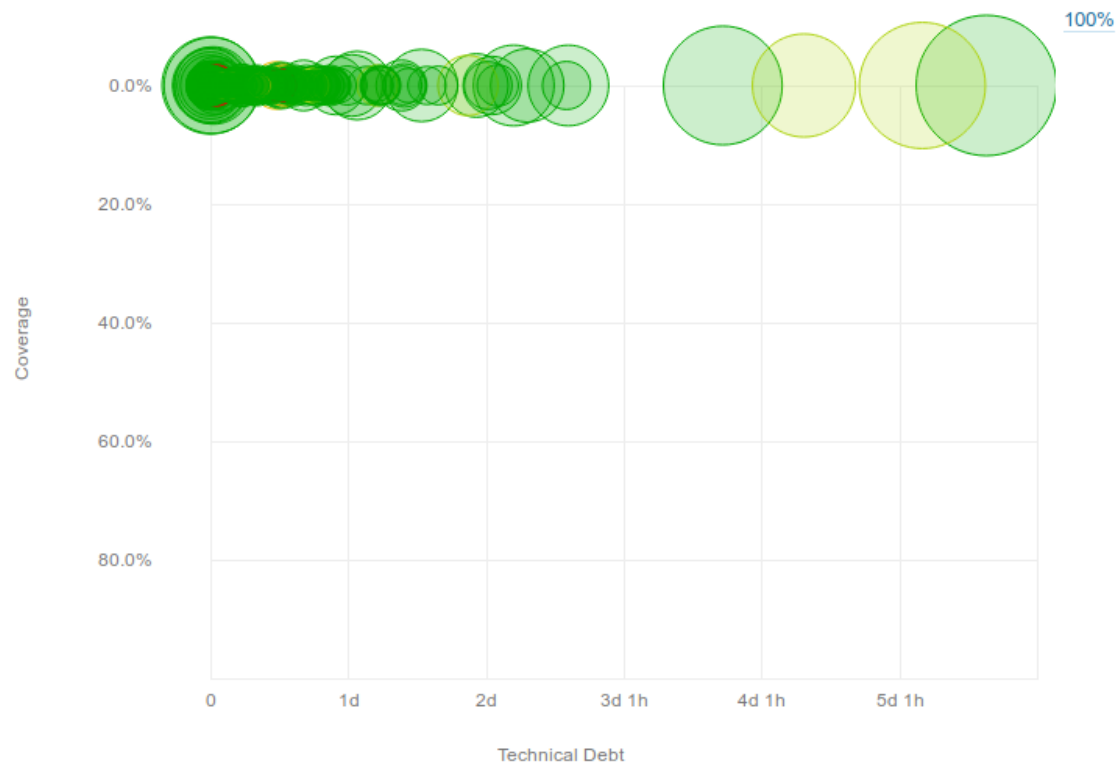
> Complexity ?

> Issues

Risk ?

Color: Worse of Reliability Rating and Security Rating Size: Lines of Code

A B C D E



Embedded database should be used for evaluation purposes only


The embedded database will not scale, it will not support upgrading to newer versions of SonarQube, and there is no support for migrating your data out of it into a different database engine.

many default **rules** and rule sets

3400+ Static Analysis Rules
across 27 programming languages

Carefully annotated and continuously refined

SonarCloud for opensource projects

 .sonarcloud.properties X

1

button.css ×

```
1 .button {  
2   font-size: 12px;  
3   font: 10px Arial;  
4 }  
5
```



GitHub App

SonarCloud

[SonarCloud](#) is the leading product for Continuous Code Quality online, totally free for open-source projects. It supports all major programming languages, including Java, JavaScript, TypeScript, C#, C/C++ and many more. If your code is closed source, SonarCloud also offers a paid plan to run private analyses.

This SonarCloud GitHub application makes it simpler than ever to onboard new code repositories in SonarCloud, get your pull requests decorated with detected quality issues, and invite your team members to collaborate.

To get started in a few minutes, simply follow [the official documentation on SonarCloud](#).

Configure

Manage your installation settings.

Developer

 [sonarcloud](#)

 [Website](#)

SonarCloud is provided by a third-party and is governed by separate terms of service, privacy policy, and support documentation.

 Report abuse

[Pull requests](#) [Issues](#) [Marketplace](#) [Explore](#)[DanielRuf](#) / [sonarcloud-project](#)[Unwatch](#) 1[Star](#) 0[Fork](#) 0[Code](#)[Issues](#) 0[Pull requests](#) 1[Actions](#)[Projects](#) 0[Wiki](#)[Security](#)[Insights](#)[Settings](#)

Add SonarCloud config

[Browse files](#)[master](#)**DanielRuf** committed 11 days ago Verified

0 parents commit 87bbf9e2ec0797e3e5753941b4bb5ddfb689390d

Showing 1 **changed file** with 0 additions and 0 deletions.[Unified](#) [Split](#)0 ■■■■■■■ .sonarcloud.properties

...

No changes.

0 comments on commit 87bbf9e

[Lock conversation](#)[Write](#)[Preview](#)[AA](#) [B](#) [i](#) [“](#) [<>](#) [↶](#) [⋮](#) [≡](#) [✓](#) [@](#) [★](#) [↶](#)

Leave a comment

Attach files by dragging & dropping, selecting or pasting them.

[Comment on this commit](#)

[Pull requests](#) [Issues](#) [Marketplace](#) [Explore](#)[DanielRuf](#) / [sonarcloud-project](#)[Unwatch](#)

1

[★ Star](#)

0

[Fork](#)

0

[Code](#)[Issues](#) 0[Pull requests](#) 1[Actions](#)[Projects](#) 0[Wiki](#)[Security](#)[Insights](#)[Settings](#)Branch: [master](#)[sonarcloud-project](#) / [.sonarcloud.properties](#)[Find file](#)[Copy path](#)[DanielRuf](#) Add SonarCloud config

87bbf9e 11 days ago

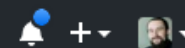
[1 contributor](#)

0 lines (0 sloc) | 0 Bytes

[Raw](#)[Blame](#)[History](#)

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[Pull requests](#) [Issues](#) [Marketplace](#) [Explore](#)[DanielRuf / sonarcloud-project](#)[Unwatch](#)

1

[★ Star](#)

0

[Fork](#)

0

[Code](#)[Issues](#) 0[Pull requests](#) 1[Actions](#)[Projects](#) 0[Wiki](#)[Security](#)[Insights](#)[Settings](#)

Add button styles #1

[Edit](#)[Open](#) DanielRuf wants to merge 1 commit into `master` from `feature/button`[Conversation](#) 0[Commits](#) 1[Checks](#) 1[Files changed](#) 1

+4 -0



DanielRuf commented 11 days ago

Owner

+ 😊 ...

No description provided.[Add button styles](#)

Verified 300b99c

Reviewers

No reviews

Assignees

No one—assign yourself

Labels

None yet

Projects

None yet

Milestone

No milestone

Notifications

[Customize](#)[Unsubscribe](#)

You're receiving notifications because you're watching this repository.

Add more commits by pushing to the `feature/button` branch on [DanielRuf/sonarcloud-project](#).

**All checks have failed**[Hide all checks](#)

1 failing check

**SonarCloud Code Analysis**

Failing after 9s — Quality Gate failed

Required[Details](#)**Required statuses must pass before merging**

All required [statuses](#) and check runs on this pull request must run successfully to enable automatic merging.

[Merge pull request](#)or view [command line instructions](#).

[Pull requests](#) [Issues](#) [Marketplace](#) [Explore](#)[DanielRuf](#) / [sonarcloud-project](#)[Unwatch](#) 1[Star](#) 0[Fork](#) 0[Code](#)[Issues](#) 0[Pull requests](#) 1[Actions](#)[Projects](#) 0[Wiki](#)[Security](#)[Insights](#)[Settings](#)

Add button styles #1

[Edit](#)[Open](#) DanielRuf wants to merge 1 commit into [master](#) from [feature/button](#)[Conversation](#) 0[Commits](#) 1[Checks](#) 1[Files changed](#) 1

+4 -0

[300b99c](#) — Add button styles

1 failing check

**Travis CI**

Queued 11 days ago

[Re-run all checks](#)[Re-run failed checks](#)**SonarCloud**

Failed — 11 days ago

[Re-run all checks](#)[Re-run failed checks](#)**SonarCloud Code Analysis** [Re-run](#)

SonarCloud Code Analysis

Failure [Re-run](#)

ran 11 days ago in less than 10 seconds

[300b99c](#) by @DanielRuf[feature/button](#)

Quality Gate failed

Failed

Reliability Rating on New Code (is worse than A)[See analysis details on SonarCloud](#)

Additional information

The following metrics might not affect the Quality Gate status but improving them will improve your project code quality.

2 Issues

2 Issues



2 Bugs



0 Vulnerabilities (and **0 Security Hotspots** to review)



0 Code Smells

Coverage and Duplications

 No Coverage information

0.0% Duplication (0.0% Estimated after merge)

 [View more details on SonarCloud](#)



Daniel Ruf



sonarcloud-project



1 – Add button styles ▾

for merge into master from feature/button

August 1, 2019, 10:12 PM

[Overview](#)[Issues](#)[Measures](#)[Code](#)[See the PR](#)

Failed

QUALITY GATE ?

Conditions on New Code ?

Failed

FAILED CONDITIONS

D

Reliability Rating on
New Code
is worse than A

METRICS

2

New Bugs

Reliability

D

0

New
Vulnerabilities

0

New
Security
Hotspots ?

Security

A

0

New Code Smells

Maintainability

A

— Coverage on 0 New Lines to cover



0.0%

Duplications on 4
New Lines

0.0%

Estimated after
merge



Daniel Ruf

/ sonarcloud-project



1 – Add button styles

for merge into master from feature/button

August 1, 2019, 10:12 PM

Overview

Issues

Measures

Code

[See the PR](#)

Failed

Filters

Clear All Filters

▼ Type

Bug

Reset

🐛 Bug	2
🔒 Vulnerability	0
💩 Code Smell	0
🔒 Security Hotspot	0

Ctrl + click to add to selection

▼ Severity

🛑 Blocker	0	🟢 Minor	0
🔴 Critical	1	🔵 Info	0
🔴 Major	1		

> Resolution

> Status

> Security Category

> Creation Date

> Language

> Rule

> Tag

> Directory

> File

> Assignee



Bulk Change



to select issues



to navigate



1 / 2 issues

6min effort

button.css

Unexpected shorthand "font" after "font-size" [See Rule](#)

11 days ago ▼ L3 🔗 🔍



Bug



Critical



Open



Daniel Ruf

5min effort

[Comment](#)

🏷 No tags

Unexpected missing generic font family [See Rule](#)

11 days ago ▼ L3 🔗 🔍



Bug



Major



Open



Daniel Ruf

1min effort

[Comment](#)

🏷 No tags

2 of 2 shown



1 / 2 issues



button.css

Unexpected shorthand "font" after "font-size"

Bug

Unexpected missing generic font family

Bug

2 of 2 shown

sonarcloud-project /button.css

[See all issues in this file](#)

```
1 dani...  .button {  
2          font-size: 12px;  
3          font: 10px Arial;
```

Unexpected shorthand "font" after "font-size"[See Rule](#)

11 days ago ▾ L3



Bug ▾



Critical ▾



Open ▾



Daniel Ruf ▾

5min effort

[Comment](#)

No tags ▾

Unexpected missing generic font family[See Rule](#)

11 days ago ▾ L3



Bug ▾



Major ▾



Open ▾



Daniel Ruf ▾

1min effort

[Comment](#)

No tags ▾

```
4      }
```

tools

Php Inspections (EA Ultimate)
Php Inspections (EA Extended)

phpqa.io
jupeter/clean-code-php
mre/awesome-static-analysis
matthias-endler.de/awesome-static-analysis

further resources

en.wikipedia.org/wiki/Code_smell
de.wikipedia.org/wiki/Code-Smell

Clean Code books by Robert C. Martin
Refactoring: Improving the Design of Existing Code (Martin
Fowler, Kent Beck)

"Any fool can write code that a computer can understand. Good programmers write code that humans can understand."
M. Fowler (1999)

thanks for your attention!