



SONAR

CODE QUALITY TOOL

DevOps Training

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CLEAN CODE

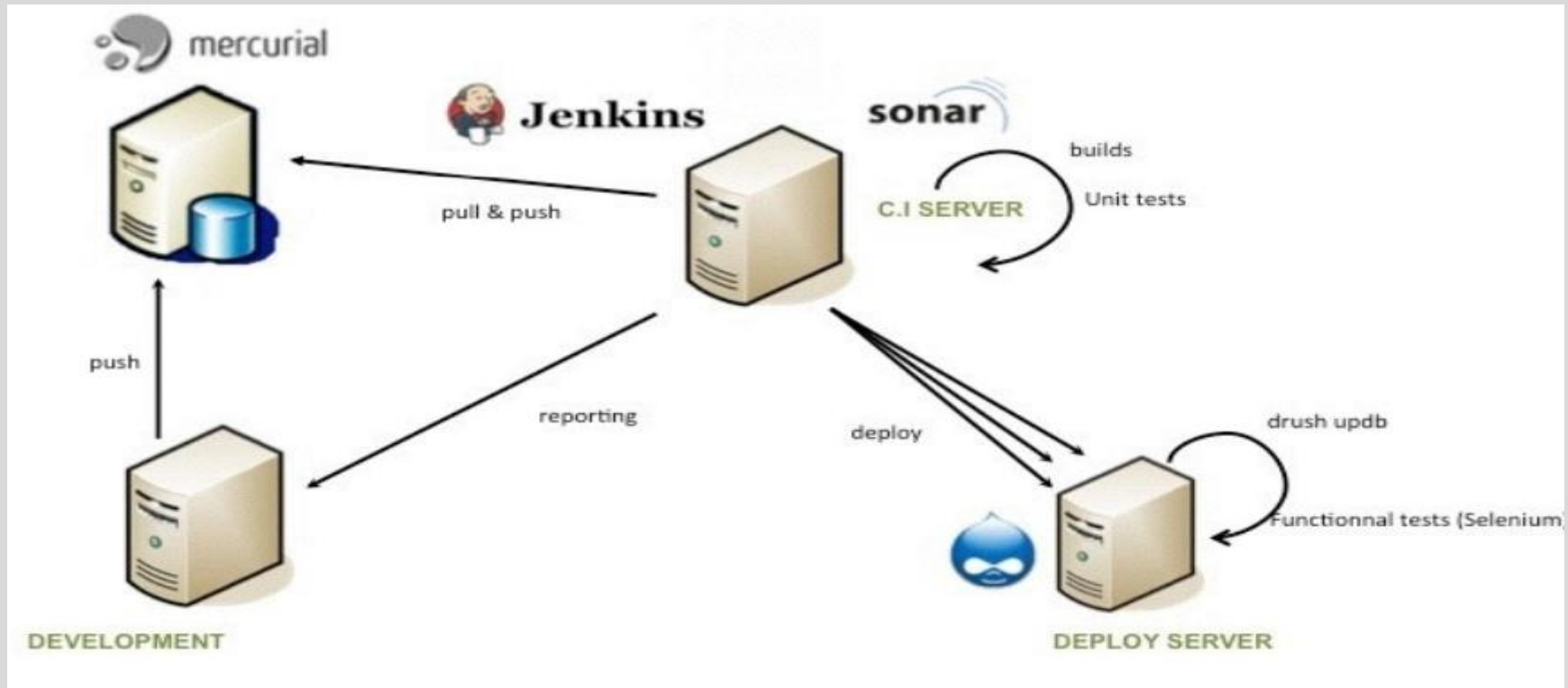
Readable

Acceptable by You

Acceptable by Team

Acceptable by Other

Sonar reporting



TOUCHABLE

Coding Rules –

Complexity –

Duplicated Code –

Potential Bugs –

Tests Coverage –

Architecture Design –

Comment

What is Sonar?

“Sonar is the central place to manage code quality, offering visual reporting on and across projects and enabling to replay the past to follow metrics evolution” Sonar? source:

<http://www.sonarsource.org/>

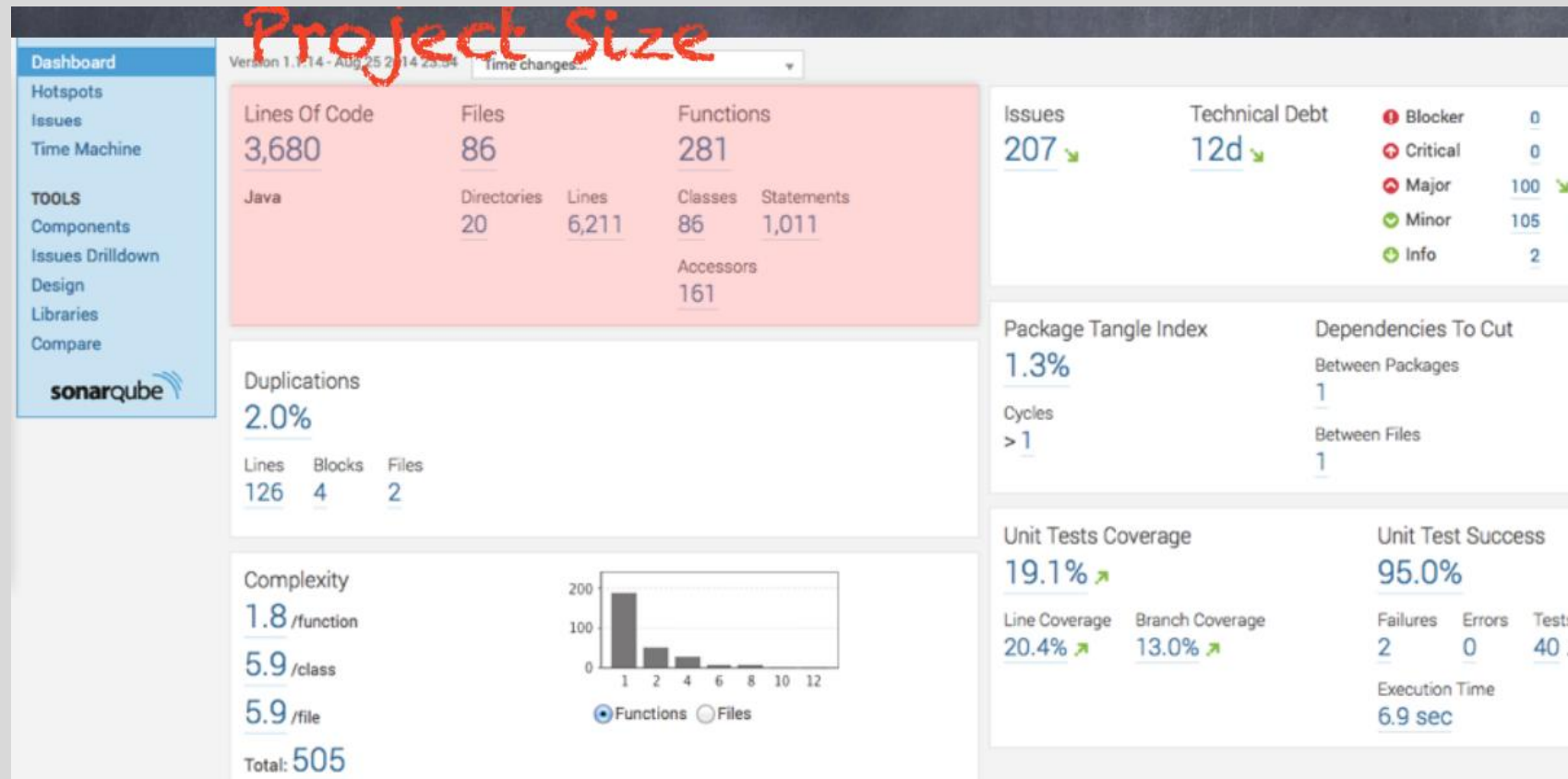
What is SonarQube?

An open web-based application platform to manage code quality

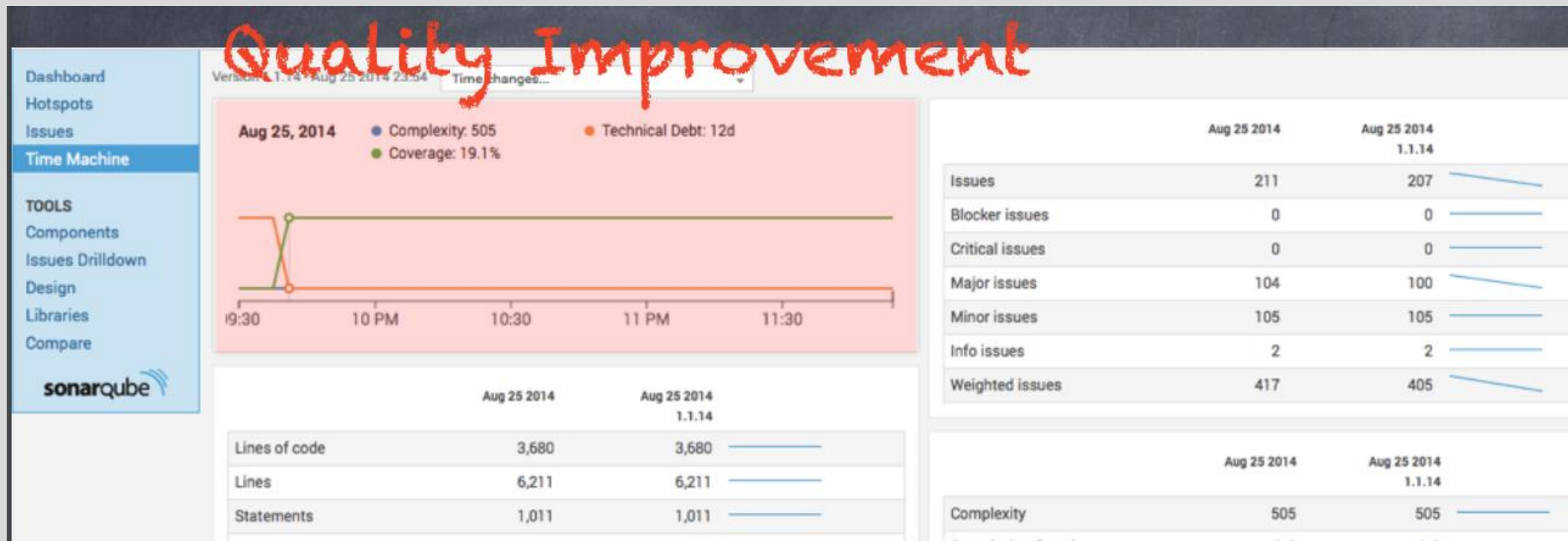
LANGUAGE SUPPORT



REPORT LOOKS LIKE



QUALITY IMPROVEMENT



PROFILE ACTIVATION

```
<profiles>
  <profile>
    <id>sonar</id>
    <activation>
      <activeByDefault>true</activeByDefault>
    </activation>
    <properties>
      <sonar.jdbc.url>jdbc:h2:tcp://localhost:9092/sonar</sonar.jdbc.url>
      <sonar.jdbc.username>sonar</sonar.jdbc.username>
      <sonar.jdbc.password>sonar</sonar.jdbc.password>
      <sonar.host.url>http://localhost:9000</sonar.host.url>
    </properties>
    <repositories>
      <repository>
        <id>Sonar (snapshots)</id>
        <url>http://oss.sonatype.org/content/repositories/snapshots</url>
      </repository>
    </repositories>
  </profile>
</profiles>
</settings>
```

LOW QUALITY CODE



How source code should be?

Source Code Should Be

**Simple
& Readable**



Flexible



Extendable



**Testable
& Covered with Tests**



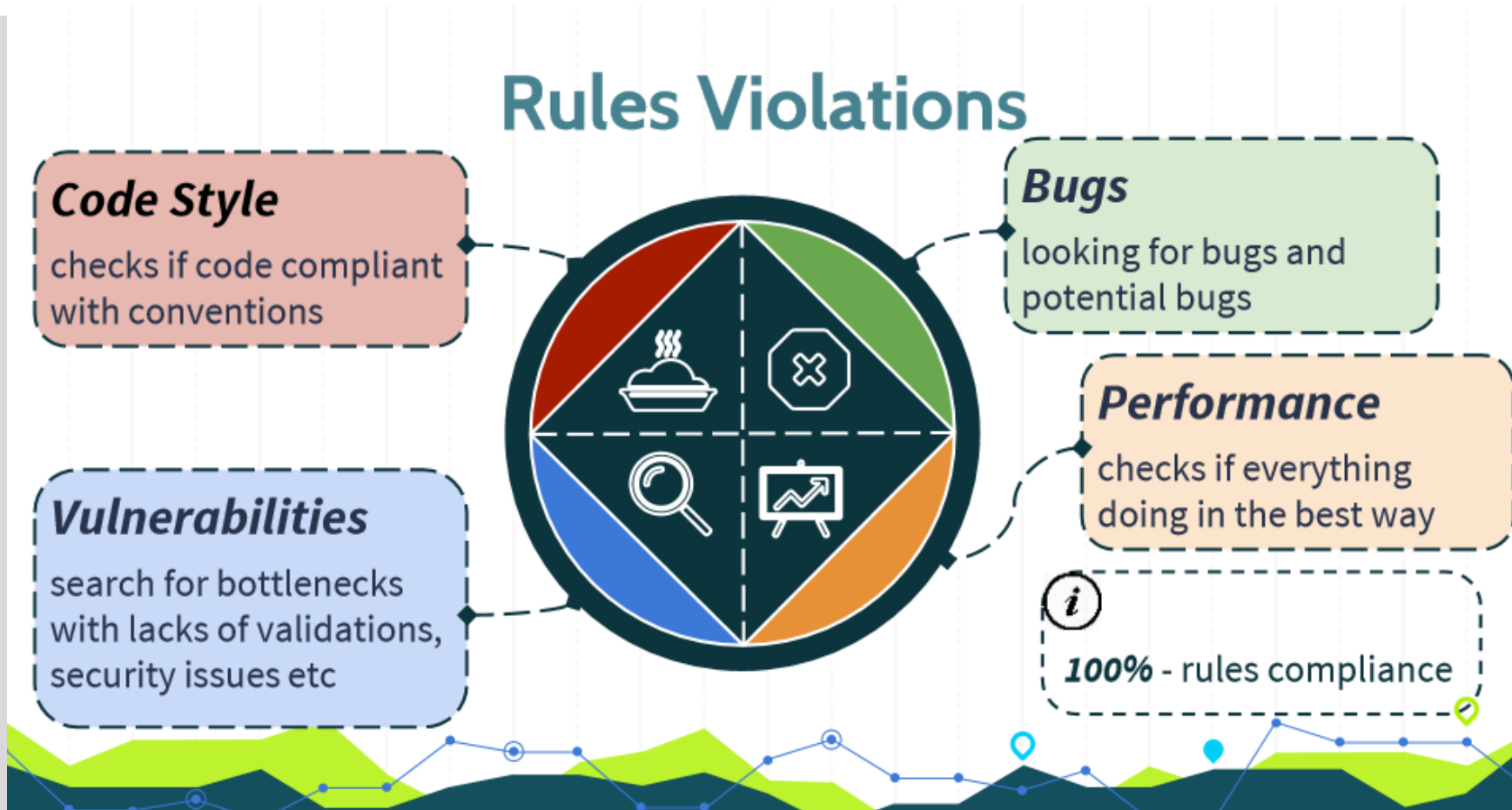
CODE METRICS



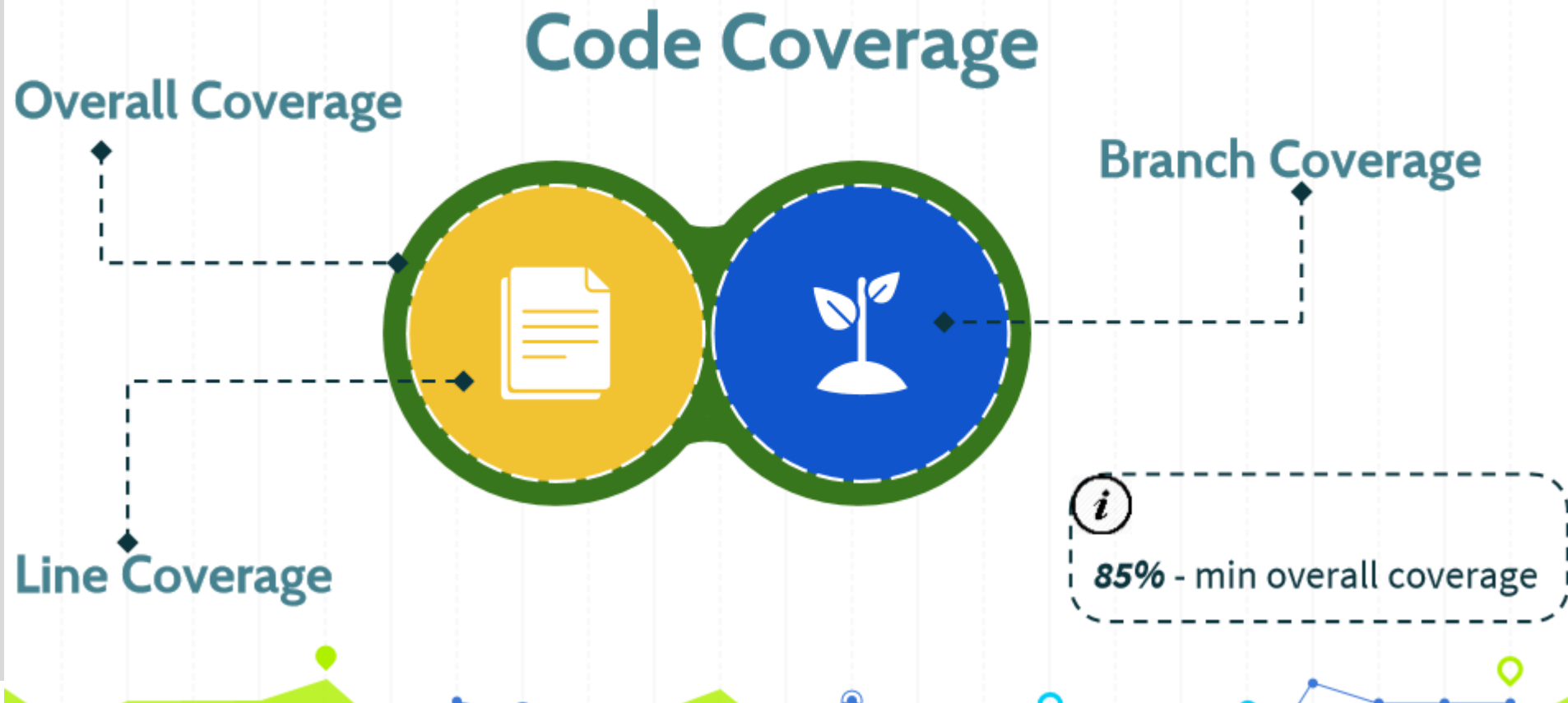
CODE METRICS



RULES



CODE COVERAGE



CODE DUPLICATIONS

Duplications

**I SHALL NOT
DUPLICATE
ANY CODE
ANY CODE ANY CODE**



0% - perfect solution

1% - keep buffer

TECHNICAL DEBT

Technical Debt



Extra development work,
that rises with not clear code.



Financial **DEBT**



Time **DEBT**

QUALITY PROFILES

Quality Rules and Profiles



Code Smells



Bugs



Vulnerabilities



Quality Profile

RULES AND RULES

Rules Plugins and Repositories



Quality gates

Quality Gates

Set of boolean conditions per project,
based on measure thresholds.



Passed





Warning



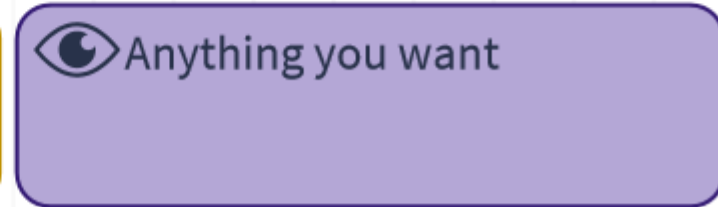
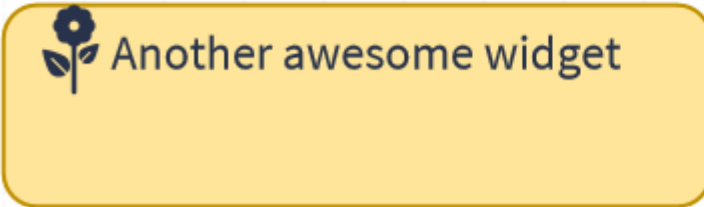
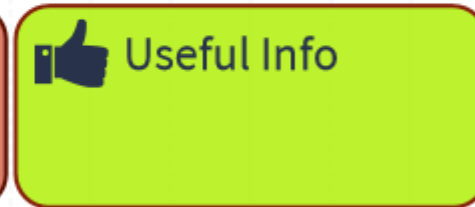
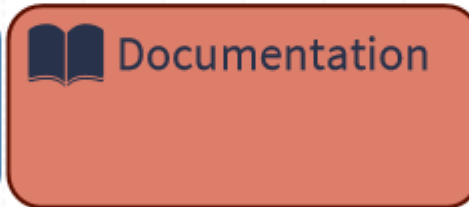
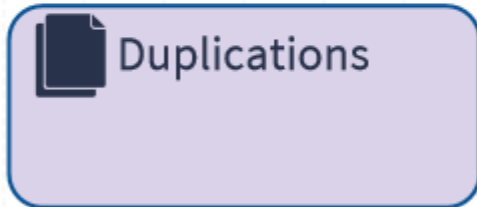
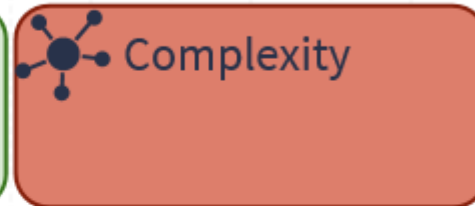
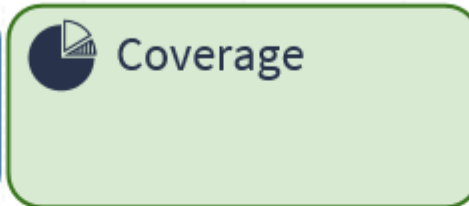
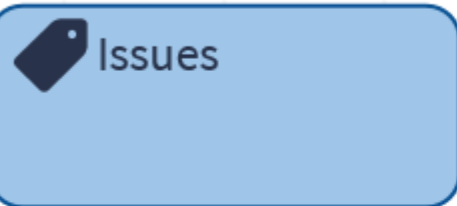
Failed

Quality gates

Quality Gates			
Metric	Operator		
Open Issues	<i>Is greater than</i>	70	100
Blocker Issues	<i>Is greater than</i>		0
Critical Issues	<i>Is greater than</i>		0
New Issues	<i>Is greater than</i>	0	10
Overall Coverage	<i>Is less than</i>	85	80
Unit Test Failures	<i>Is greater than</i>		0

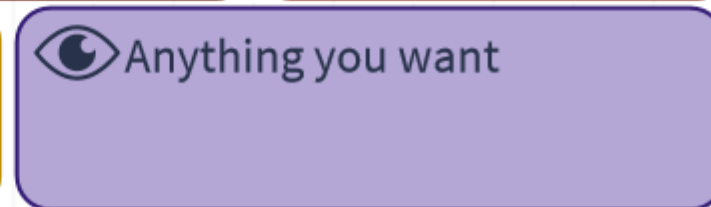
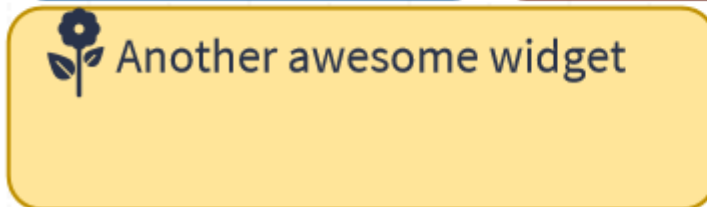
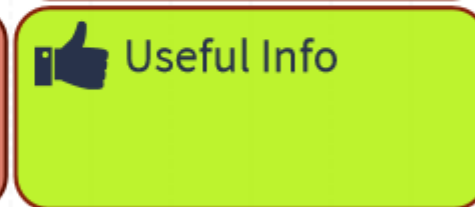
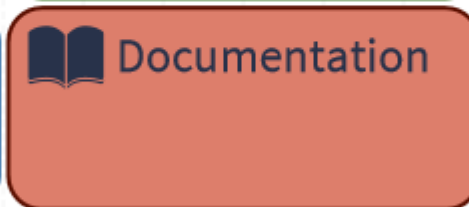
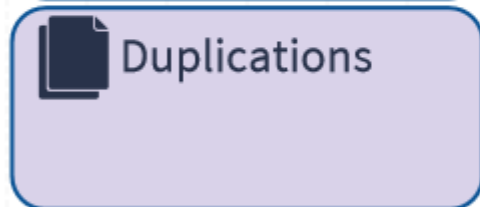
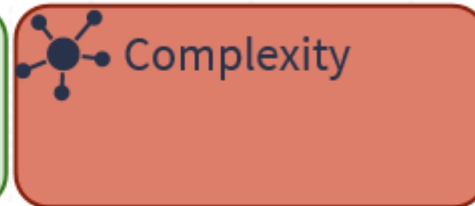
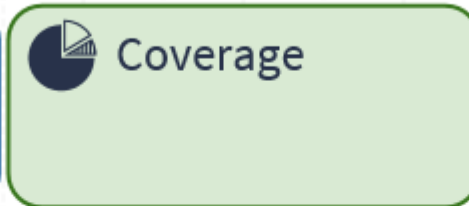
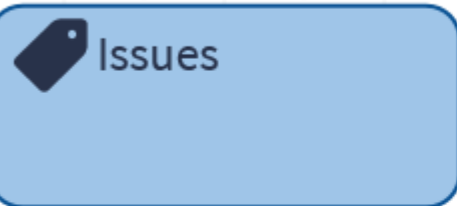
Project Dashboard

Project Dashboard



Project Dashboard

Project Dashboard



it's
Q & A
TIME!



THANK YOU!

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