

## **Escola Superior Tecnologia de Castelo Branco**

### **Computação em Nuvem**

#### **Cloud 7: Segurança, Automação e Orquestração**

#### **Trabalho Prático: Análise Estática de Código com SonarQube**

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## Exercício 1

The screenshot displays the SonarQube dashboard for a project named 'java-calculator'. The interface includes a top navigation bar with links to Projects, Issues, Rules, Quality Profiles, Quality Gates, and Administration. The main content area is divided into several sections:

- QUALITY GATE STATUS:** A green box indicates 'Passed' with the note 'All conditions passed'.
- MEASURES:** A section showing various quality metrics:
  - New Code:** Since March 5, 2021, Started 2 days ago.
  - Reliability:** 0 New Bugs, Grade A.
  - Security:** 0 New Vulnerabilities, Grade A.
  - Security Review:** 0 New Security Hotspots, Grade A.
  - Maintainability:** 0 Added Debt, 0 New Code Smells, Grade A.
  - Coverage:** Coverage on 0 New Lines to cover.
  - Duplications:** Duplications on 0 New Lines.
- ACTIVITY:** A section showing a chart of 'Duplications' over time. The chart shows a single data point for 'new code' at 11:30. The y-axis ranges from 0 to 20, and the x-axis shows times from 11:30 to 11:36. A legend indicates 'Lines of Code' (blue) and 'Duplicated Lines' (dark blue).

At the bottom of the dashboard, there is a warning message: '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.'

localhost:9000/dashboard?id=java-calculator

access, place your bookmarks here on the bookmarks toolbar. [Manage bookmarks...](#)

sonarcube Projects Issues Rules Quality Profiles Quality Gates Administration

Q Search for projects... A

java-calculator master

March 5, 2021, 11:37 PM Version v1.0

Overview Issues Security Hotspots Measures Code Activity

Project Settings Project Information

QUALITY GATE STATUS

**Passed**  
All conditions passed.

MEASURES

**New Code**  
Since March 5, 2021  
Started 2 days ago

**Overall Code**

0 Bugs Reliability A

0 Vulnerabilities Security A

0 Security Hotspots Security Review A

1h 2min Debt 7 Code Smells Maintainability C

0.0% Coverage on 15 Lines to cover Unit Tests

0.0% Duplications on 20 Lines Duplicated Blocks 0

ACTIVITY

localhost:9000/project/issues?id=java-calculator&resolved=false&sinceLeakPeriod=false&types=CODE\_SMELL

For quick access, place your bookmarks here on the bookmarks toolbar. [Manage bookmarks...](#)

sonarcube Projects Issues Rules Quality Profiles Quality Gates Administration

Q Search for projects... A

java-calculator master

March 5, 2021, 11:37 PM Version v1.0

Overview Issues Security Hotspots Measures Code Activity

Project Settings Project Information

My Issues All

Filters

Clear All Filters

Type CODE\_SMELL Clear

Bug 0

Vulnerability 0

Code Smell 7

Ctrl + click to add to selection

Severity

Blocker 0 Minor 2

Critical 0 Info 0

Major 5

Scope

Resolution

Status

Security Category

Creation Date

Language

Rule

Tag

Directory

File

Assignee

Author

Bulk Change

to selected issues to navigate 1/7 Issues 1h 2min effort

CalcJava

Move this file to a named package. Why is this an issue? 6 days ago convention

Remove this unused import 'java.util.Arrays'. Why is this an issue? 6 days ago L1 unused

Replace this use of System.out or System.err by a logger. Why is this an issue? 6 days ago L13 bad-practice, cert, owasp-a3

Replace this use of System.out or System.err by a logger. Why is this an issue? 6 days ago L15 bad-practice, cert, owasp-a3

Replace this use of System.out or System.err by a logger. Why is this an issue? 6 days ago L17 bad-practice, cert, owasp-a3

Replace this use of System.out or System.err by a logger. Why is this an issue? 6 days ago L19 bad-practice, cert, owasp-a3

Replace this use of System.out or System.err by a logger. Why is this an issue? 6 days ago L21 bad-practice, cert, owasp-a3

7 of 7 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.

localhost:9000/project/issues?id=java-calculator&resolved=false&severities=MINOR&types=CODE\_SMELL

ick access, place your bookmarks here on the bookmarks toolbar. [Manage bookmarks...](#)

sonarcube Projects Issues Rules Quality Profiles Quality Gates Administration

java-calculator master March 5, 2021, 11:37 PM Version v1.0

Overview Issues Security Hotspots Measures Code Activity Project Settings Project Information

My Issues All

Filters

Type CODE\_SMELL

Bug 0

Vulnerability 0

Code Smell 2

Severity MINOR

Blocker 0

Critical 0

Major 5

Minor 2

Info 0

Scope

Resolution

Status

Security Category

Creation Date

Language

Rule

Tag

Directory

File

Bulk Change

to select issues

to navigate

1 / 2 issues 12min effort

Calc.java

Move this file to a named package. Why is this an issue? 6 days ago convention

Code Smell Minor Open Not assigned 10min effort Comment

Remove this unused import 'java.util.Arrays'. Why is this an issue? 6 days ago L1 unused

Code Smell Minor Open Not assigned 2min effort Comment

2 of 2 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