# ZAD2

**Branch: main** 

**VERSION 1.0-SNAPSHOT** 

# **Code analysis**

**By: Administrator** 

2024-12-18

## CONTENT

| Content  | 1  |
|--|----|
| Introduction                                     | 2  |
| Configuration                                    | 2  |
| Synthesis  | 3  |
| Analysis Status                                  | 3  |
| Quality gate status                              | 3  |
| Metrics  | 3  |
| Tests  | 3  |
| Detailed technical debt                          | 4  |
| Metrics Range                                    | 5  |
| Volume   | 5  |
| lssues   | 6  |
| Charts   | 6  |
| Issues count by severity and type                | 8  |
| Issues List                                      | 8  |
| Security Hotspots                                | 9  |
| Security hotspots count by category and priority | 9  |
| Security hotspots List                           | 10 |

#### INTRODUCTION

This document contains results of the code analysis of zad2.

#### CONFIGURATION

- Quality Profiles
  - Names: Sonar way [Java]; Sonar way [XML];
  - o Files: 9c24d35f-16b0-4bd2-b4bc-e96fc1c76e3f.json; 4b086136-2149-4783-8ff9-9189c963009a.json;
- Quality Gate
  - o Name: Sonar way
  - o File: Sonar way.xml

## **SYNTHESIS**

#### ANALYSIS STATUS

Reliability Security Security Review Maintainability









#### QUALITY GATE STATUS

**Quality Gate Status** 

Failed

| Metric                                 | Value                          |
|--|--------------------------------|
| Coverage on New Code                   | ERROR (0.0% is less than 80%)  |
| Duplicated Lines (%) on New Code       | ОК                             |
| Security Hotspots Reviewed on New Code | ERROR (0.0% is less than 100%) |
| New Issues                             | ERROR (2 is greater than 0)    |

| METRICS  |             |                 |   |                              |
|----------|-------------|-----------------|---|------------------------------|
| Coverage | Duplication | Comment density | Median number of lines of code per file | Adherence to coding standard |
| 0.0 %    | 0.0 %       | 9.1 %           | 182.0                                   | 99.8 %                       |

| TES | STS   |              |         |        |          |
|-----|-------|--------------|---------|--------|----------|
|     | Total | Success Rate | Skipped | Errors | Failures |
|     | 19    | 100.0 %      | 0       | 0      | 0        |

| DETAILED TECHNICAL DEBT |          |                 |             |  |  |  |
|-------------------------|----------|-----------------|-------------|--|--|--|
| Reliability             | Security | Maintainability | Total       |  |  |  |
| 0d 0h 30min             | -        | 0d 2h 59min     | 0d 3h 29min |  |  |  |

#### zad2

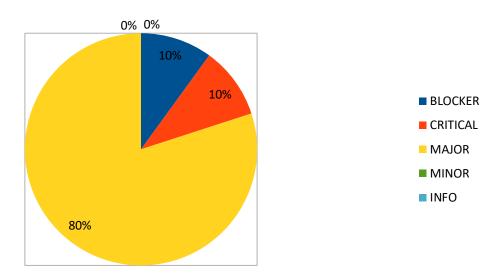
| METF | RICS RANGE               |                         |                              |                        |          |                 |
|------|--------------------------|-------------------------|------------------------------|------------------------|----------|-----------------|
|      | Cyclomatic<br>Complexity | Cognitive<br>Complexity | Lines of<br>code per<br>file | Comment<br>density (%) | Coverage | Duplication (%) |
| Min  | 6.0                      | 0.0                     | 50.0                         | 3.6                    | 0.0      | 0.0             |
| Max  | 155.0                    | 152.0                   | 739.0                        | 13.8                   | 0.0      | 0.0             |

| VOLUME   |        |
|----------|--------|
| Language | Number |
| Java     | 739    |
| XML      | 81     |
| Total    | 820    |

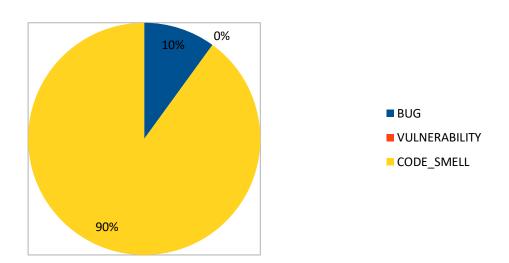
**ISSUES** 

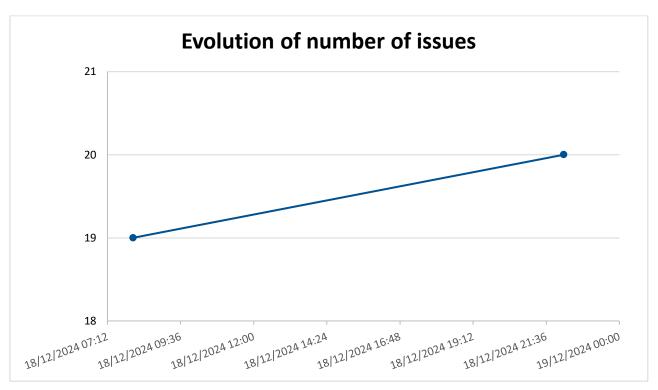
#### **CHARTS**

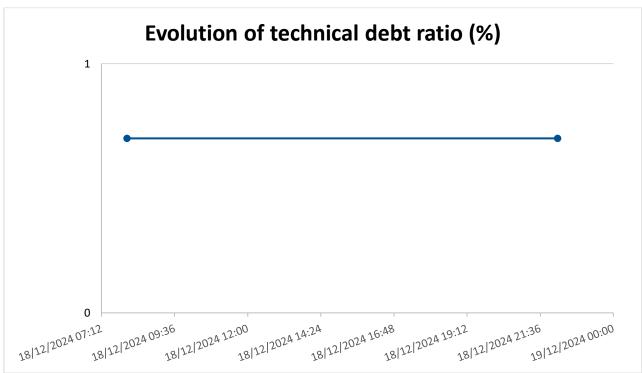
# Number of issues by severity



## Number of issues by type







zad2

| ISSUES COUNT BY SEVERITY AND TYPE |      |       |       |          |         |  |
|-----------------------------------|------|-------|-------|----------|---------|--|
| Type / Severity                   | INFO | MINOR | MAJOR | CRITICAL | BLOCKER |  |
| BUG                               | 0    | 0     | 0     | 0        | 2       |  |
| VULNERABILITY                     | 0    | 0     | 0     | 0        | 0       |  |
| CODE_SMELL                        | 0    | 0     | 16    | 2        | 0       |  |

| ISSUES LIST  |             |            |          |        |
|--|-------------|------------|----------|--------|
| Name   | Description | Туре       | Severity | Number |
| Loops should not be infinite                                 |             | BUG        | BLOCKER  | 2      |
| Cognitive Complexity of methods should not be too high       |             | CODE_SMELL | CRITICAL | 2      |
| Standard outputs should not be used directly to log anything |             | CODE_SMELL | MAJOR    | 16     |

## SECURITY HOTSPOTS

| SECURITY HOTSPOTS COUNT BY CATEGORY AND PRIORITY |     |        |      |  |  |
|--|-----|--------|------|--|--|
| Category / Priority                              | LOW | MEDIUM | HIGH |  |  |
| LDAP Injection                                   | 0   | 0      | 0    |  |  |
| Object Injection                                 | 0   | 0      | 0    |  |  |
| Server-Side Request Forgery (SSRF)               | 0   | 0      | 0    |  |  |
| XML External Entity (XXE)                        | 0   | 0      | 0    |  |  |
| Insecure Configuration                           | 1   | 0      | 0    |  |  |
| XPath Injection                                  | 0   | 0      | 0    |  |  |
| Authentication                                   | 0   | 0      | 0    |  |  |
| Weak Cryptography                                | 0   | 1      | 0    |  |  |
| Denial of Service (DoS)                          | 0   | 0      | 0    |  |  |
| Log Injection                                    | 0   | 0      | 0    |  |  |
| Cross-Site Request Forgery (CSRF)                | 0   | 0      | 0    |  |  |
| Open Redirect                                    | 0   | 0      | 0    |  |  |
| Permission                                       | 0   | 0      | 0    |  |  |
| SQL Injection                                    | 0   | 0      | 0    |  |  |
| Encryption of Sensitive Data                     | 0   | 0      | 0    |  |  |
| Traceability                                     | 0   | 0      | 0    |  |  |
| Buffer Overflow                                  | 0   | 0      | 0    |  |  |
| File Manipulation                                | 0   | 0      | 0    |  |  |
| Code Injection (RCE)                             | 0   | 0      | 0    |  |  |

#### zad2

| Cross-Site Scripting (XSS) | 0 | 0 | 0 |
|----------------------------|---|---|---|
| Command Injection          | 0 | 0 | 0 |
| Path Traversal Injection   | 0 | 0 | 0 |
| HTTP Response Splitting    | 0 | 0 | 0 |
| Others                     | 0 | 0 | 0 |

| SECURITY HOTSPOTS LIST    |   |          |          |       |  |  |  |
|---------------------------|---|----------|----------|-------|--|--|--|
| Category                  | Name  | Priority | Severity | Count |  |  |  |
| Insecure<br>Configuration | Delivering code in production with debug features activated is security-sensitive | LOW      | MINOR    | 1     |  |  |  |
| Weak Cryptography         | Using pseudorandom number generators (PRNGs) is security-<br>sensitive            | MEDIUM   | CRITICAL | 1     |  |  |  |