

# READERSANDWRITERS - MULTITHREADING IN JAVA

Branch : main

VERSION 1.0

## Code analysis

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## INTRODUCTION

This document contains results of the code analysis of ReadersAndWriters - multithreading in Java.

## CONFIGURATION

- Quality Profiles
  - Names: Sonar way [Java]; Sonar way [XML];
  - Files: 2195c5a0-fe74-4a29-9ad3-b78de8c67617.json; 064202f4-bc3d-4f47-9c51-b50a43bfc747.json;
- Quality Gate
  - Name: Sonar way
  - File: Sonar way.xml

SYNTHESIS

ANALYSIS STATUS

| Reliability | Security | Security Review | Maintainability |
|-------------|----------|-----------------|-----------------|
| A           | A        | A               | A               |

QUALITY GATE STATUS

|                     |        |
|---------------------|--------|
| Quality Gate Status | Passed |
|---------------------|--------|

| Metric                           | Value |
|----------------------------------|-------|
| Coverage on New Code             | OK    |
| Duplicated Lines (%) on New Code | OK    |
| New Issues                       | OK    |

METRICS

| Coverage | Duplication | Comment density | Median number of lines of code per file | Adherence to coding standard |
|----------|-------------|-----------------|---|------------------------------|
| 89.0 %   | 0.0 %       | 17.5 %          | 136.5                                   | 100.0 %                      |

TESTS

| Total | Success Rate | Skipped | Errors | Failures |
|-------|--------------|---------|--------|----------|
| 32    | 100.0 %      | 0       | 0      | 0        |

| DETAILED TECHNICAL DEBT |          |                 |             |
|-------------------------|----------|-----------------|-------------|
| Reliability             | Security | Maintainability | Total       |
| -                       | -        | 0d 0h 20min     | 0d 0h 20min |

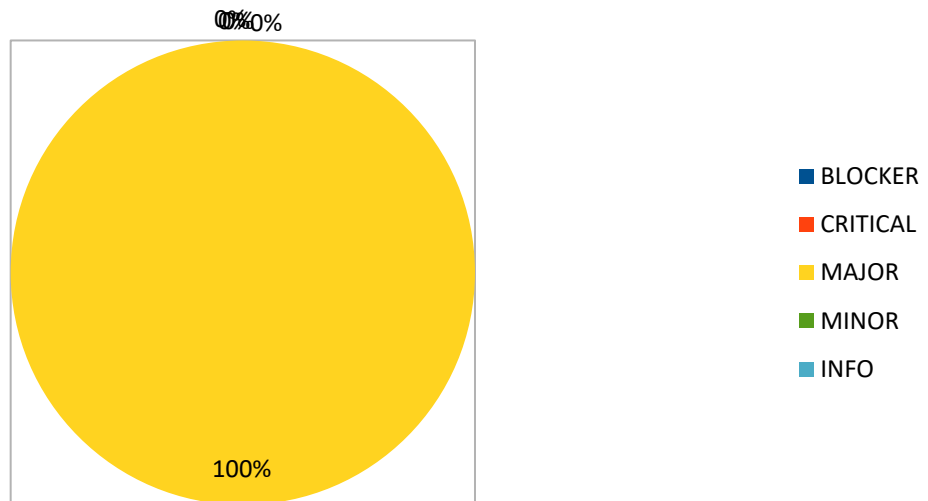
| METRICS RANGE |                       |                      |                        |                     |          |                 |
|---------------|-----------------------|----------------------|------------------------|---------------------|----------|-----------------|
|               | Cyclomatic Complexity | Cognitive Complexity | Lines of code per file | Comment density (%) | Coverage | Duplication (%) |
| Min           | 1.0                   | 0.0                  | 8.0                    | 1.6                 | 80.0     | 0.0             |
| Max           | 43.0                  | 14.0                 | 435.0                  | 63.6                | 100.0    | 0.0             |

| VOLUME   |        |
|----------|--------|
| Language | Number |
| Java     | 261    |
| XML      | 648    |
| Total    | 909    |

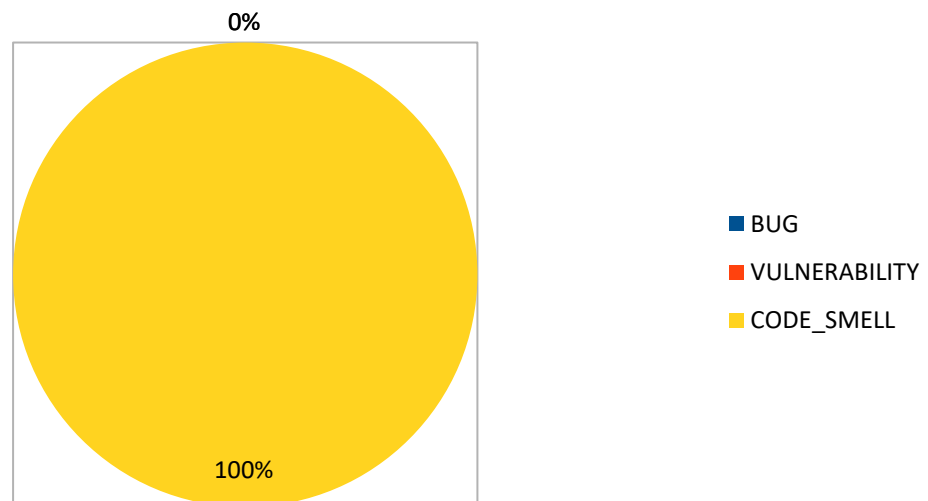
## ISSUES

### CHARTS

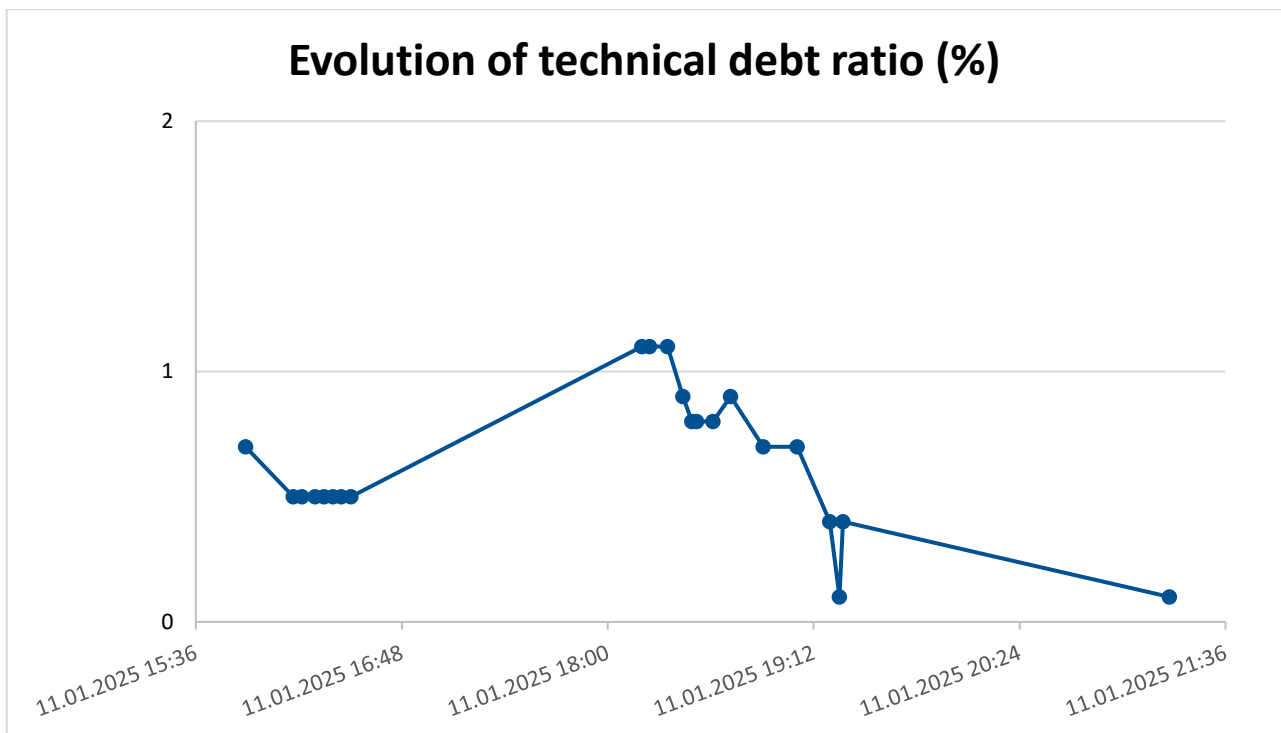
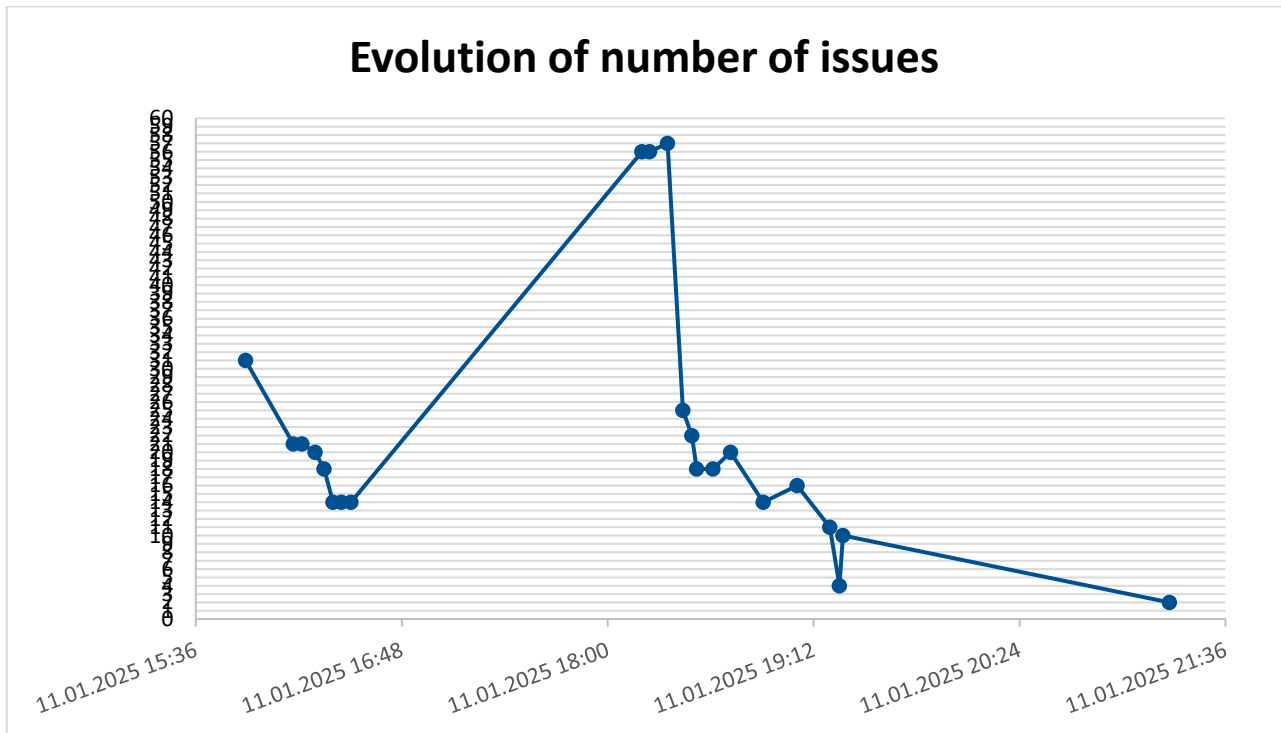
#### Number of issues by severity



#### Number of issues by type







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

| ISSUES LIST  |             |            |          |        |
|--|-------------|------------|----------|--------|
| Name   | Description | Type       | Severity | Number |
| Standard outputs should not be used directly to log anything |             | CODE_SMELL | MAJOR    | 2      |

## 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             | 0   | 0      | 0    |
| XPath Injection                    | 0   | 0      | 0    |
| Authentication                     | 0   | 0      | 0    |
| Weak Cryptography                  | 0   | 0      | 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    |

|                            |   |   |   |
|----------------------------|---|---|---|
| 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