## Code Quality Module Practical Task

## Necessary Tools

Java Development Kit 11+

Apache Maven 3.6.0+

Git 2.24+

Docker

##Task

(1 star)

##### 1.Run Sonarqube docker container

- Instruction: https://docs.sonarqube.org/latest/

##### 2. Login to Sonarqube web interface

- default password: admin

##### 3. Configure a new project with token

##### 4. Analyse your pet project with SonarQube. Use generated token for it (you can get project from previous modules)

- Instruction: https://docs.sonarqube.org/latest/analysis/scan/sonarscanner-for-maven/

##### 5. If there are any issues, correct it

##### 6. Prepare .doc report with screenshot for every step

(2-3 stars)

##### 7. Configure a new project with token

##### 8. Create a new maven project with a few (10+) issues, e.x. :

- Don't use method reference

- Use switch operator. Define 'default' in the top of operator

- etc.

##### 9. Analyse your project

##### 10. Try to skip all issues with @SuppressWarnings

##### 11. Prepare .doc report with screenshot for every step

(4 stars)

##### 12. Remove @SuppressWarnings for project from previous section

##### 13. Create a new Sonar java profile (copy it from default java profile)

##### 14. Deactivate rules for issues from previous section

##### 15. Link new profile to your project

16. Analyse your project

17. Prepare .doc report with screenshot for every step

(5 stars)

##### 18. Create a new Quality Gate with:

- Duplicated code (> 10)

- Issues (> 20)

- Code smells (> 40)

- Bugs (> 35)

- Unit test succsess (< 40)

##### 19. Link it to your project

##### 20. Analyse your project

##### 21. Prepare .doc report with screenshot for every step

## References

* [Clean Code](https://www.amazon.com/Clean-Code-Handbook-Software-Craftsmanship/dp/0132350882)
* [Agile Software Development: Code Quality](https://www.linkedin.com/learning/agile-software-development-code-quality/why-code-quality-is-important?u=2113185)
* [11 Best Practices and Tools to Improve the Java Code Quality](https://www.romexsoft.com/blog/improve-java-code-quality/)
* [S.O.L.I.D](https://www.baeldung.com/solid-principles)