

# SONARQUBE!

# HELLO!

Let's have a little discuss about the great benefit of SonarQube!





## STATIC ANALYSIS!

Let's start with static analysis!



### >: WHAT IS STATIC ANALYSIS?

Static analysis is best described as a method of debugging by automatically examining source code before a program is run and been deployed.

It's done by analyzing a set of code against a set (or multiple sets) of coding rules.



### >: WHEN WE USE STATIC ANALYSIS?

Static code analysis is performed early in development, before software testing begins. For organizations practicing DevOps, static code analysis takes place during the "Create" phase.

Static code analysis also supports DevOps by creating an automated feedback loop. Developers will know early on if there are any problems in their code. And it will be easier to fix those problems.



### STATIC ANALYSIS BENEFITS!

#### Speed

It takes time for developers to do manual code reviews. Automated tools are much faster.

#### Depth

Testing can't cover every possible code execution path. But a static code analyzer can.

#### **Accuracy**

Manual code reviews are prone to human error. Automated tools are not.





## SONARQUBE!



## **\*\*: WHAT IS SONARQUBE?**

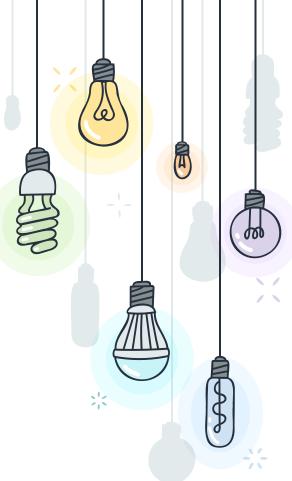
SonarQube is an open-source platform developed by SonarSource for continuous inspection of code quality. Sonar does static code analysis, which provides a detailed report of bugs, code smells, vulnerabilities, code duplications.

It supports 25+ major programming languages through built-in rulesets and can also be extended with various plugins.



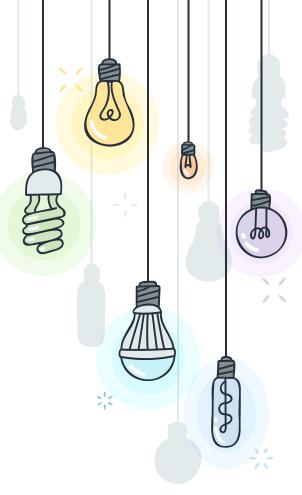
## SONARQUBE BENEFITS?

- Sustainability Reduces complexity, possible vulnerabilities, and code duplications, optimising the life of applications.
- 2. Increase productivity Reduces the scale, cost of maintenance, and risk of the application; as such, it removes the need to spend more time changing the code.
- 3. **Quality code** Code quality control is an inseparable part of the process of software development.



## SONARQUBE BENEFITS? CONT'D

- 4. Detect Errors Detects errors in the code and alerts developers to fix them automatically before submitting them for output.
- 5. **Increase consistency** Determines where the code criteria are breached and enhances the quality.
- **6. Business scaling** No restriction on the number of projects to be evaluated
- 7. Enhance developer skills Regular feedback on quality problems helps developers to improve their coding skills.



## **\*\*: WHY SONARQUBE?**

In order to achieve continuous code integration and deployment, developers need a tool that not only works once to check and tell them the problems in the code but also to track and control the code to check continuous code quality. To satisfy all these requirements, here comes SonarQube in the picture.

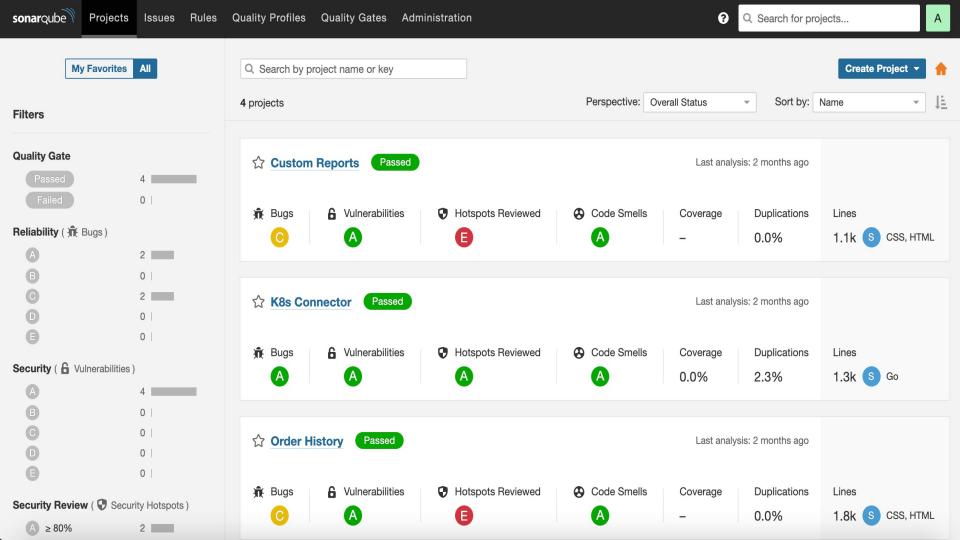
It supports many built-in programming languages quality gates support.





## INSTALLING SONARQUBE!





# THANKS!

Any questions?

