SonarQube

SonarQube is a **static analysis** tool for controlling **technical debt**

Static Analysis

Analyzing a program without running it

Usually it is done by another program

Technical Debt

Extra work needed to recover from past "quick and dirty" fixes.

Usually it is fixed by **refactoring**
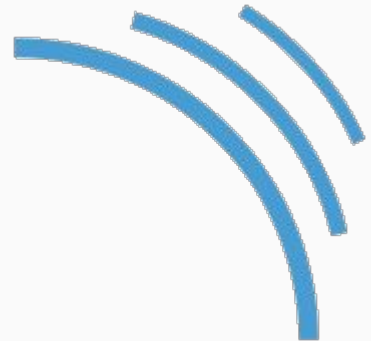
Technical debt isn't always bad

Sometimes, it allows you to move quickly and meet business goals

But a big amount of technical debt **is** bad

- Makes development slow
- Makes developers unhappy 😣

SonarQube

- Free and Open Source by SonarSource
    - Supports C#, Java, Python, JavaScript
- Scans your source code, and finds problems

Jetabroad's dev process

GitHub Pull Request

Continuous Integration
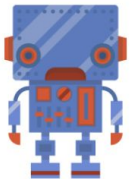(by teamcity)

Pull Request Review
(by a human)

Jetabroad's dev process

GitHub Pull Request

Continuous Integration
(by teamcity)

Pull Request Review
(by a bot!)

Pull Request Review
(by a human)

How we use it

- Integrate it with TeamCity

- Runs on every pull request automatically (fast)

    - Uses a free plugin from SonarQube

- Nightly "full analysis" on code base (slow)

- Developers can install a free [SonarLint Visual Studio extension](#)

    - Nobody is surprised by the analysis

Demo