

## Task 1

### Run SonarQube docker container

Следующие вольюмы Докера нужны для хранения информации о работе Сонара, которая может быть потеряна в процессе обновления или еще чего-то такого:

```
C:\Users\Uliana_Shafatova>docker volume create --name sonarqube_data
sonarqube_data

C:\Users\Uliana_Shafatova>docker volume create --name sonarqube_logs
sonarqube_logs

C:\Users\Uliana_Shafatova>docker volume create --name sonarqube_extensions
sonarqube_extensions

C:\Users\Uliana_Shafatova>_
```

`sonarqube_data` – всякое по работе с данными (индексы эластике, которым он пользуется; H2, которой он пользуется по умолчанию, если ничего больше нет)

`sonarqube_logs` – логи по всем процессам и взаимодействиям

`sonarqube_extensions` – плагины (как частный случай – драйвер Oracle JDBC).

Теперь можно запустить контейнер Сонара с созданными вольюмами:

`docker run -d --name sonarqube`

`-p 9000:9000`

`-v sonarqube_data:/opt/sonarqube/data`




`-v sonarqube_extensions:/opt/sonarqube/extensions`

`-v sonarqube_logs:/opt/sonarqube/logs`

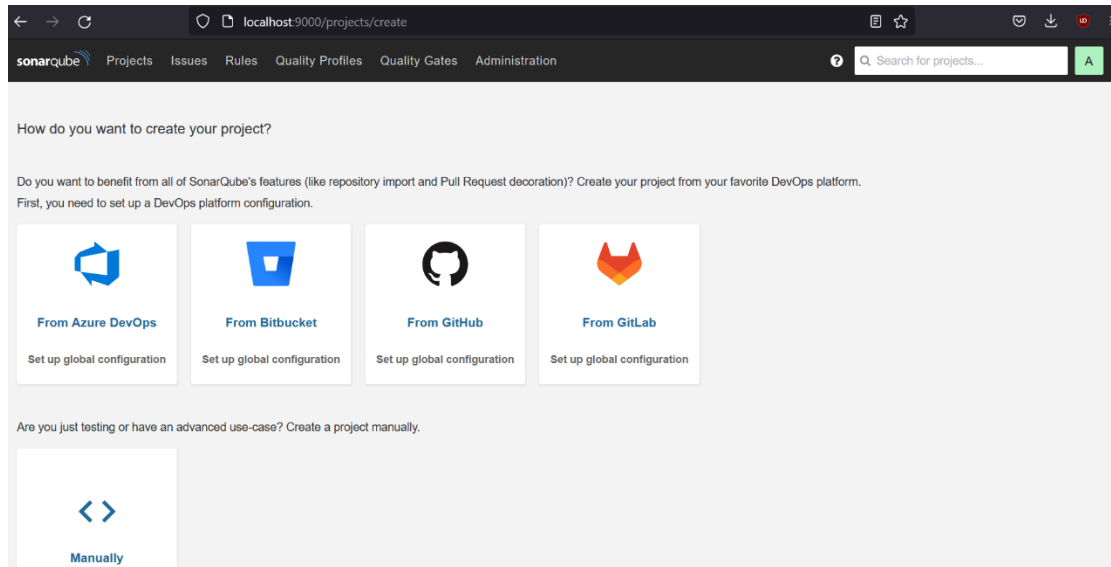
`sonarqube`

```
C:\Users\Uliana_Shafatova>docker run -d --name sonarqube -p 9000:9000 -v sonarqube_d
ata:/opt/sonarqube/data -v sonarqube_extensions:/opt/sonarqube/extensions -v sonarqu
be_logs:/opt/sonarqube/logs sonarqube
3bf553677830ad9bf89856059a6803dd6533c0182d814dec55df2dc9f465e08d

C:\Users\Uliana_Shafatova>_
```

<input type="checkbox"/>	sonarqube_data	in use	2 minutes ago	175.7 MB	
<input type="checkbox"/>	sonarqube_extensions	in use	2 minutes ago	32 kB	
<input type="checkbox"/>	sonarqube_logs	in use	1 minute ago	76 kB	

## Login to Sonarqube web interface




## Configure a new project with token

### Create a project


All fields marked with \* are required

**Project display name \***

Up to 255 characters. Some scanners might override the value you provide.

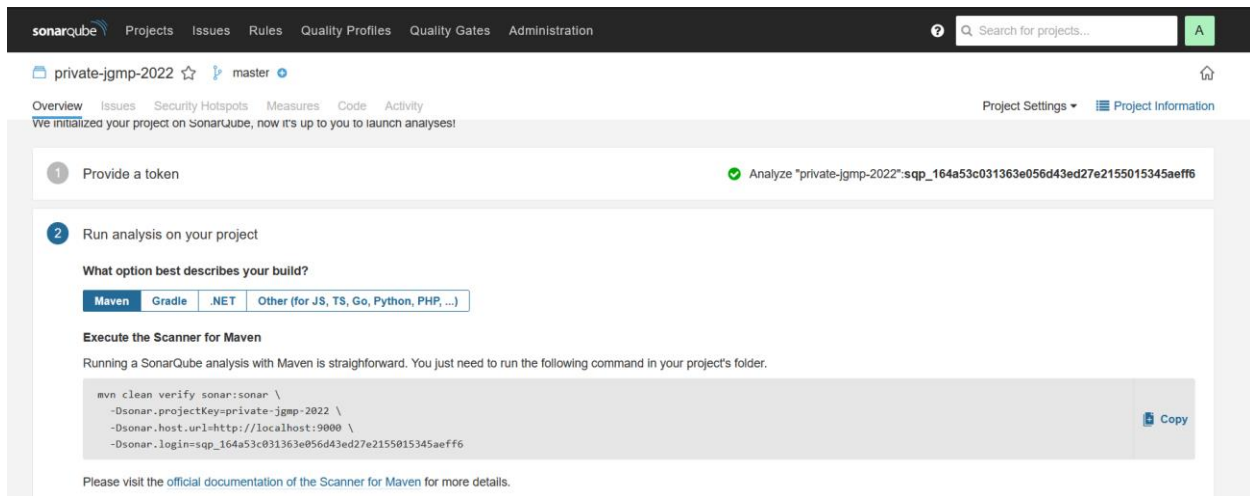
**Project key \***

The project key is a unique identifier for your project. It may contain up to 400 characters. Allowed characters are alphanumeric, '-' (dash), '\_' (underscore), '.' (period) and ':' (colon), with at least one non-digit.

[Set Up](#)

Теперь проект может использовать сгенерированный токен, чтобы пройти осмотр в Сонаре:



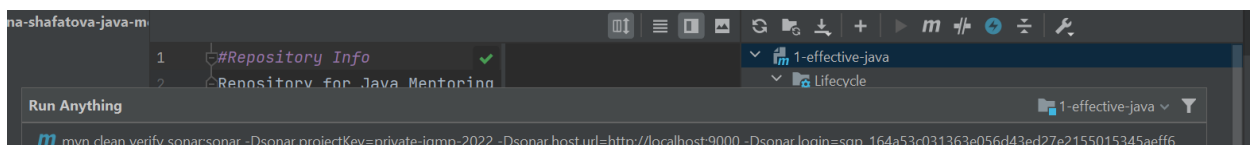
**Analyse your pet project with SonarQube. Use generated token for it (you can get project from previous modules)**

```
mvn clean verify sonar:sonar
```

```
-Dsonar.projectKey=private-jgmp-2022
```

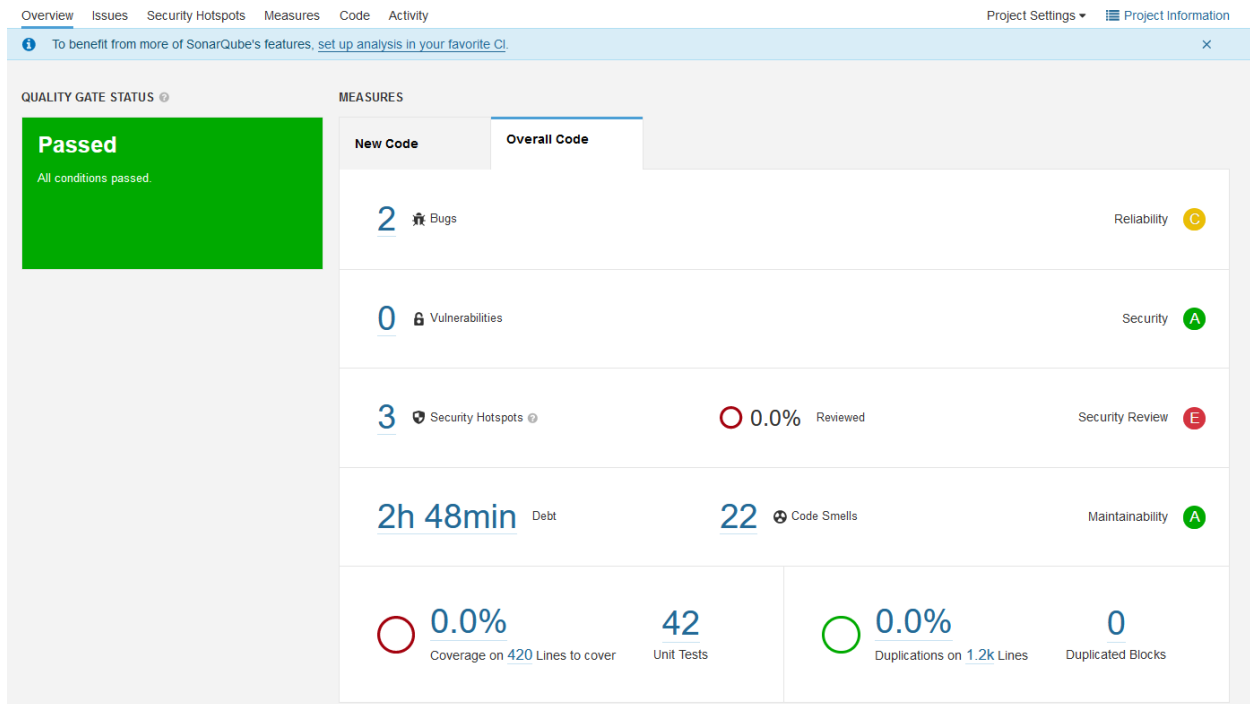
```
-Dsonar.host.url=http://localhost:9000
```

```
-Dsonar.login=sqp_164a53c031363e056d43ed27e2155015345aeff6
```

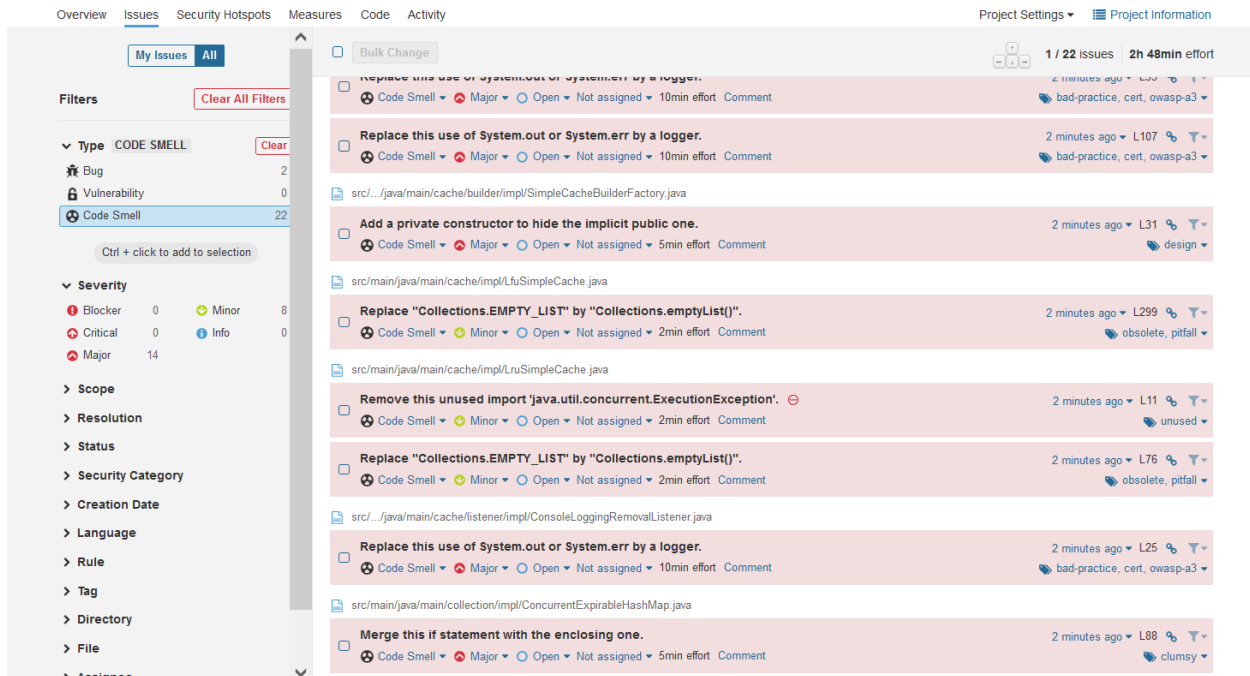


Я запустила проекты с прошлого менторинга, где было побольше кода, и он выглядел съедобно

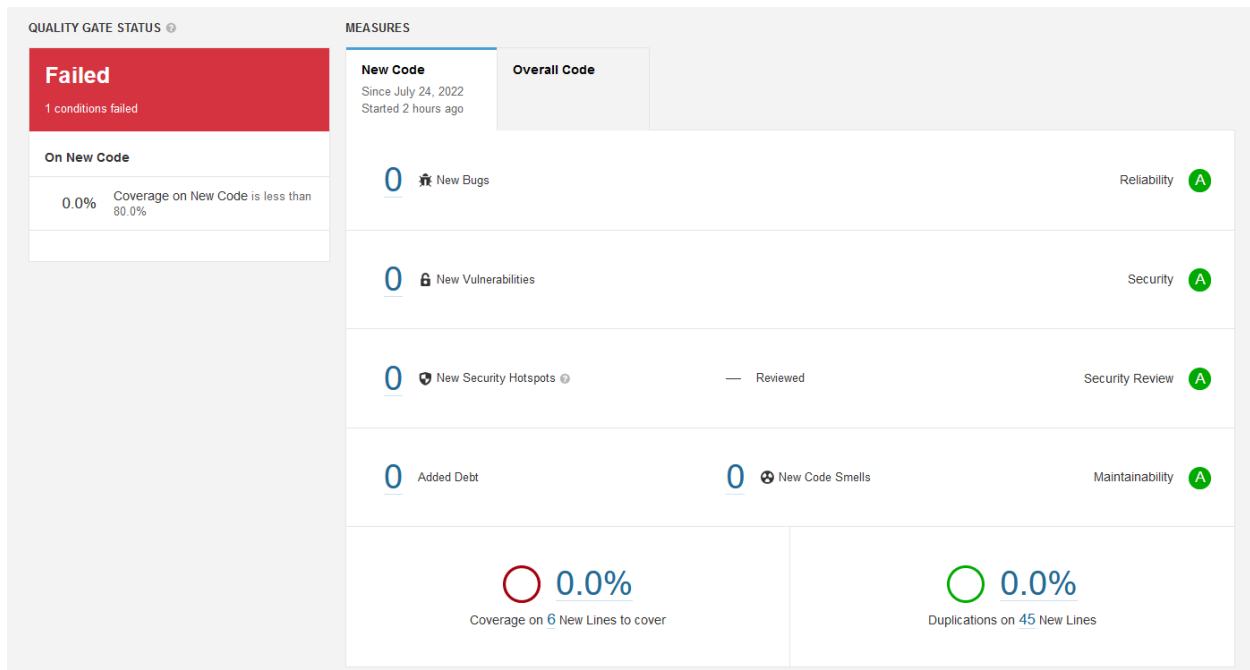
## If there are any issues, correct it



Ну, видимо, не очень съедобно по мнению Сонара :С



Потыкала замечания Сонара в коде, он утомился:



## Task 2

### Configure a new project with token

sonarqube Projects Issues Rules Quality Profiles Quality Gates Administration

very-terrible-project-1 master

Overview Issues Security Hotspots Measures Code Activity Project Settings ▾ Project Information

Analyze your project

We initialized your project on SonarQube, now it's up to you to launch analyses!

1 Provide a token

Analyze "very-terrible-project-1" 1: `sqp_be08ee7b92f29c4ce85d0efd07cca8106f81f070`

2 Run analysis on your project

What option best describes your build?

**Maven** Gradle .NET Other (for JS, TS, Go, Python, PHP, ...)

**Execute the Scanner for Maven**

Running a SonarQube analysis with Maven is straightforward. You just need to run the following command in your project's folder.

```
mvn clean verify sonar:sonar \
-Dsonar.projectKey=very-terrible-project-1 \
-Dsonar.host.url=http://localhost:9000 \
-Dsonar.login=sqp_be08ee7b92f29c4ce85d0efd07cca8106f81f070
```

Copy

Please visit the [official documentation of the Scanner for Maven](#) for more details.

**Is my analysis done?** If your analysis is successful, this page will automatically refresh in a few moments.

You can set up Pull Request Decoration under the project settings. To set up analysis with your favorite CI tool, see the tutorials.

Check these useful links while you wait: [Branch Analysis](#), [Pull Request Analysis](#).

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

- Don't use method reference

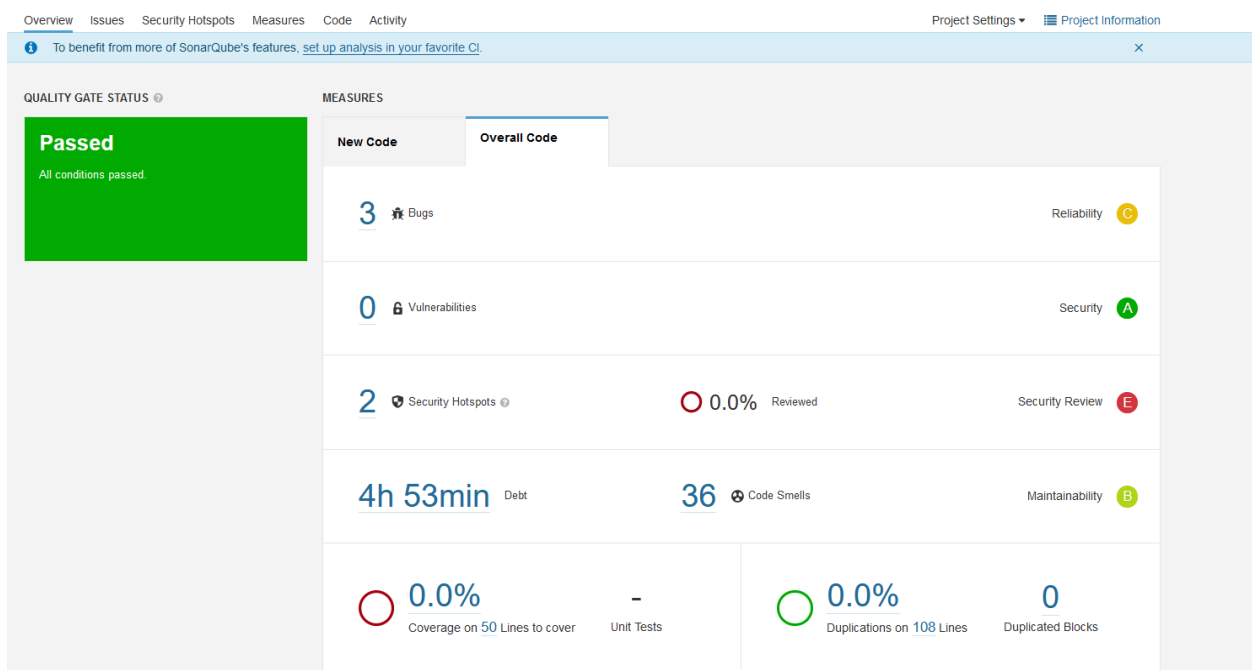
- Use switch operator. Define 'default' in the top of operator

- etc.

Я написала абсолютно хтонический, не поддающийся рациональному описанию код и дала его сонару:

```
Run Anything
mvn clean verify sonar:sonar -Dsonar.projectKey=very-terrible-project-1 -Dsonar.host.url=http://localhost:9000 -Dsonar.login=sqp_be08ee7b92f29c4ce85d0efd07cca8106f81f070
```

## Analyse your project



Я надеялась, что будет хуже, но ладно:

Overview Issues Security Hotspots Measures Code Activity

Project Settings Project Information

1 / 36 issues 4h 53min effort

Filters Clear All Filters

Type CODE SMELL Clear

Bug 3

Vulnerability 0

Code Smell 36

Ctrl + click to add to selection

Severity

Blocker 1 Minor 19

Critical 5 Info 0

Major 11

Scope

Resolution

Status

Security Category

Creation Date

Language

Rule

Tag

Directory

File

Assignee

Bulk Change

Rename this constant name to match the regular expression `^[A-Z][A-Z0-9]*(_[A-Z0-9]+)?$`. 2 minutes ago L4 convention

Rename this constant name to match the regular expression `^[A-Z][A-Z0-9]*(_[A-Z0-9]+)?$`. 2 minutes ago L4 convention

src/.../code/quality/terrible\_service/honor\_factory\_service.java

Rename this class name to match the regular expression `^[A-Z][a-zA-Z0-9]*$`. 2 minutes ago L11 convention

Make `cr_coef` a static final constant or non-public and provide accessors if needed. 2 minutes ago L13 cwe

Make this "public static `cr_coef`" field final 2 minutes ago L13 cert, cwe

Rename this field "cr\_coef" to match the regular expression `^[a-z][a-zA-Z0-9]*$`. 2 minutes ago L13 convention

Reorder the modifiers to comply with the Java Language Specification. 2 minutes ago L13 convention

Rename this field "next\_creature\_hash" to match the regular expression `^[a-z][a-zA-Z0-9]*$`. 2 minutes ago L15 convention

Provide the parametrized type for this generic. 2 minutes ago L17 pitfall

Provide the parametrized type for this generic. 2 minutes ago L17 pitfall

Try to skip all issues with @SuppressWarnings

Overview Issues Security Hotspots Measures Code Activity

Project Settings Project Information

QUALITY GATE STATUS

Passed

All conditions passed.

MEASURES

New Code Since July 25, 2022 Started 6 minutes ago

Overall Code

0 New Bugs Reliability A

0 New Vulnerabilities Security A

0 New Security Hotspots Reviewed Security Review A

0 Added Debt 0 New Code Smells Maintainability A

Coverage on 0 New Lines to cover

0.0% Duplications on 5 New Lines

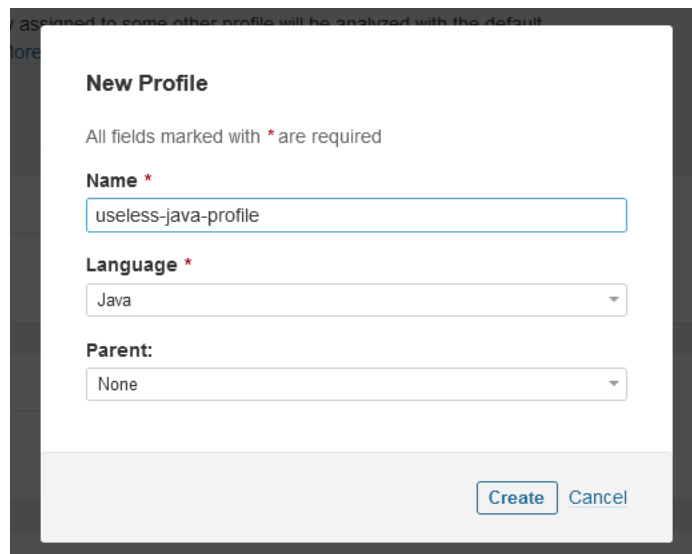
Сонар для Java может есть @SuppressWarnings для отключения какого-то своего правила локально зависимости от местоположения аннотации. В

аннотацию нужно поместить айдишник правила из Сонара, которое будет глушиться или просто «all», чтобы он игнорировал все.

### Task 3

**Remove @SuppressWarnings for project from previous section**

**Create a new Sonar java profile (copy it from default java profile)**



**New Profile**

All fields marked with \* are required

**Name \***

useless-java-profile

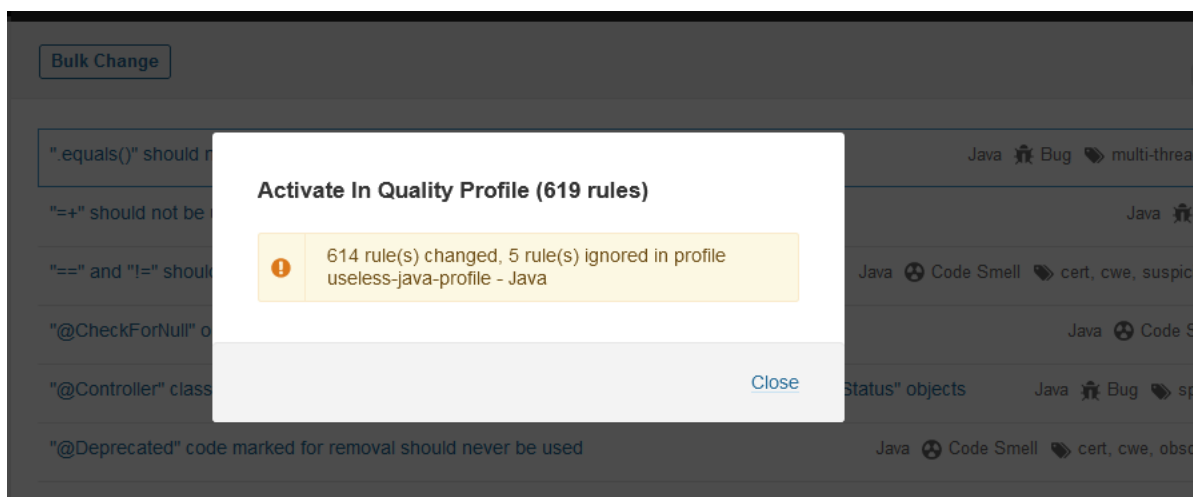
**Language \***

Java

**Parent:**

None

Create Cancel



Если бы я унаследовала от сонарского пакета, он бы не дал удалять от туда правила, поэтому пришлось создать профиль и пачкой занести их все туда.



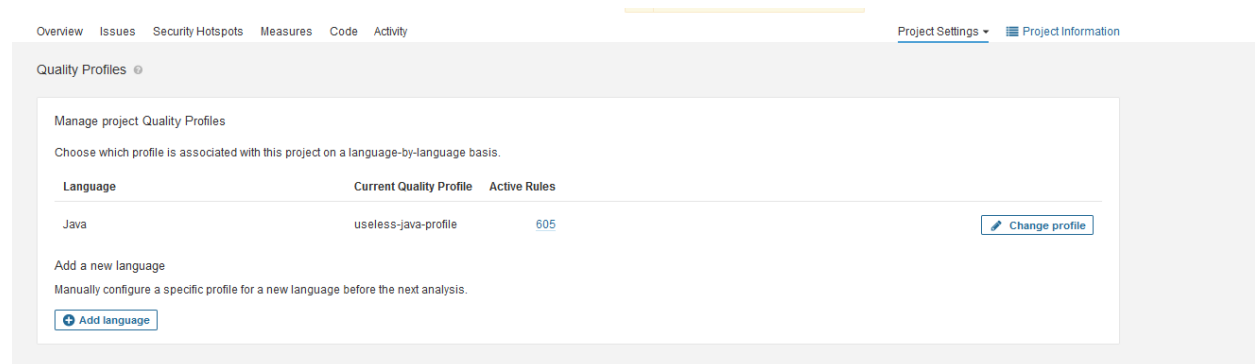
## Deactivate rules for issues from previous section

Были отключены следующие правила:

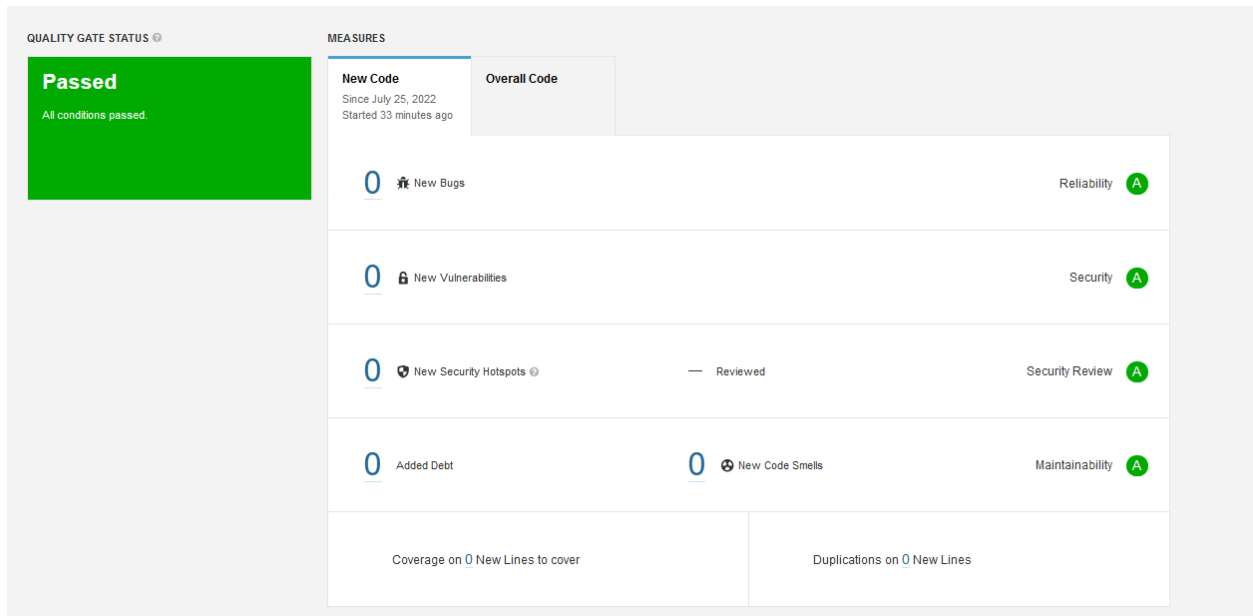
- Method names should comply with a naming convention
- Local constants should follow naming conventions for constants
- Field names should comply with a naming convention
- Class names should comply with a naming convention
- Package names should comply with a naming convention
- Static non-final field names should comply with a naming convention
- Standard outputs should not be used directly to log anything
- Class variable fields should not have public accessibility

Еще он удобненько подсвечивал в окошке правила, в каких проектах и профилях оно используется С:

## Link new profile to your project



## Analyse your project



Это чистейшее, но теперь все зеленое.

### Task 4

Create a new Quality Gate with:

- Duplicated code (> 10)
- Issues (> 20)
- Code smells (> 40)
- Bugs (> 35)
- Unit test success (< 40)

Quality Gates	Create	my-quality-gate	Rename	Copy	Set as Default	Delete
Sonar way	DEFAULT	BUILT-IN	Add Condition			
my-quality-gate						
Conditions						
Conditions on New Code						
Metric	Operator	Value	Edit	Delete		
Condition Coverage	is less than	40.0%				
Duplicated Lines (%)	is greater than	10.0%				
Bugs	is greater than	35				
Code Smells	is greater than	40				
Issues	is greater than	20				

## Link it to your project

3-41-code-quality ☆ 🔒 master

Overview Issues Security Hotspots Measures Code Activity

### Quality Gate

Manage project Quality Gate

Choose which quality gate is associated with this project.

☐ Always use the instance default Quality Gate  
Current: Sonar way **BUILT-IN**

☒ Always use a specific Quality Gate

Changes will be applied after the next analysis.

Save

## Analyse your project

Чтобы он свалился, я просто скопировала весь посредственный код из сервиса и создала такой же, но с циферкой в названии :Д

