

Static Analysis Report for current code

There is a 51 code smell issues categorized into 3 severities 2 critical , 11 major, 38 Minor

sonarqube Projects Issues Rules Quality Profiles Quality Gates Administration

Search for projects...

1 / 51 issues 5h 32min effort

Project / src/Course.java

Move this file to a named package. Why is this an issue? 19 hours ago L20 convention

Rename this field "TAsForEmailNotification" to match the regular expression "[a-z][a-zA-Z0-9]*\$". Why is this an issue? 19 hours ago L20 convention

Rename this field "TAsForSMSNotification" to match the regular expression "[a-z][a-zA-Z0-9]*\$". Why is this an issue? 19 hours ago L21 convention

Replace the type specification in this constructor call with the diamond operator ("<>"). (sonar.java.source not set. Assuming 7 or greater.) Why is this an issue? 19 hours ago L31 clumsy

Replace the type specification in this constructor call with the diamond operator ("<>"). (sonar.java.source not set. Assuming 7 or greater.) Why is this an issue? 19 hours ago L32 clumsy

Replace the type specification in this constructor call with the diamond operator ("<>"). (sonar.java.source not set. Assuming 7 or greater.) Why is this an issue? 19 hours ago L33 clumsy

Replace the type specification in this constructor call with the diamond operator ("<>"). (sonar.java.source not set. Assuming 7 or greater.) Why is this an issue? 19 hours ago L35 clumsy

Replace the type specification in this constructor call with the diamond operator ("<>"). (sonar.java.source not set. Assuming 7 or greater.) Why is this an issue? 19 hours ago L36 clumsy

Replace the type specification in this constructor call with the diamond operator ("<>"). (sonar.java.source not set. Assuming 7 or greater.) Why is this an issue? 19 hours ago L38 clumsy

Replace the type specification in this constructor call with the diamond operator ("<>"). (sonar.java.source not set. Assuming 7 or greater.) Why is this an issue? 19 hours ago L39 clumsy

Replace the type specification in this constructor call with the diamond operator ("<>"). (sonar.java.source not set. Assuming 7 or greater.) Why is this an issue? 19 hours ago L41 clumsy

Critical issues :

sonarqube Projects Issues Rules Quality Profiles Quality Gates Administration

Search for projects...

1 / 2 issues 10min effort

Project / src/Messages/TaskAddedEmailMessage.java

Add a nested comment explaining why this method is empty, throw an UnsupportedOperationException or complete the implementation. Why is this an issue? 19 hours ago L12 suspicious

Project / src/Messages/TaskAddedMobileMessage.java

Add a nested comment explaining why this method is empty, throw an UnsupportedOperationException or complete the implementation. Why is this an issue? 19 hours ago L11 suspicious

2 of 2 shown

Unused parameter user

The screenshot displays the SonarQube IDE interface. On the left, a sidebar lists several code quality issues, all categorized as 'Code Smell'. The main editor window shows the source code for `src/Gateways/EmailGateway.java`. A specific issue is highlighted: 'Remove this unused method parameter "user"'. The issue is marked as a 'Code Smell' with a severity of 'Major' and an effort of '5min'. The code snippet shows the `sendMessage` method, which takes an `Object message` and a `String user` parameter. The `user` parameter is not used within the method body. The code is as follows:

```
1 package Gateways;
2
3 import Messages.DailyNewsEmailMessage;
4 import Messages.GradesAnnouncementEmailMessage;
5 import Messages.TaskAddedEmailMessage;
6
7 public class EmailGateway {
8     public void sendMessage(Object message, String user) {
9
10         String[] placeholders = new String[] {}; // set some place holders here
11
12         if(message instanceof DailyNewsEmailMessage) {
13             DailyNewsEmailMessage dailyNewsEmailMessage = (DailyNewsEmailMessage) message;
14
15             dailyNewsEmailMessage.prepareMessage(placeholders);
16
17             // some code to send message
18         }
19
20         else if(message instanceof GradesAnnouncementEmailMessage) {
21             GradesAnnouncementEmailMessage announcementEmailMessage = (GradesAnnouncementEmailMessage) message;
22
23             announcementEmailMessage.prepareMessage(placeholders);
24
25             // some code to send message
26         }
27
28         else if(message instanceof TaskAddedEmailMessage) {
29             TaskAddedEmailMessage addedEmailMessage = (TaskAddedEmailMessage) message;
30
31             addedEmailMessage.prepareMessage(placeholders);
32
33             // some code to send message by email to user
34         }
35     }
36 }
37
38 }
```

Unused parameter placeholder

The screenshot displays the SonarQube IDE interface. On the left, a sidebar lists several code quality issues, all categorized as 'Code Smell'. The main editor window shows the source code for `src/Messages/DailyNewsMobileMessage.java`. A specific issue is highlighted: 'Remove this unused method parameter "placeholders"'. The issue is marked as a 'Code Smell' with a severity of 'Major' and an effort of '5min'. The code snippet shows the `prepareMessage` method, which takes a `String placeholders[]` parameter. The `placeholders` parameter is not used within the method body. The code is as follows:

```
1 package Messages;
2
3 public class DailyNewsMobileMessage {
4     public String prepareMessage(String placeholders[]) {
5
6         // code to replace place holders of this type
7         return "";
8     }
9 }
10 }
```

Duplicated blocks of code

sonarqube

Projects

Issues

Rules

Quality Profiles

Quality Gates

Administration

←

1

2

3

4

Remove this unused method parameter "placeholders".

Code Smell

.../GradesAnnouncementEmailMessage.java

Remove this unused method parameter "placeholders".

Code Smell

.../GradesAnnouncementMobileMessage.java

Remove this unused method parameter "placeholders".

Code Smell

src/Messages/TaskAddedEmailMessage.java

Remove this unused method parameter "placeholders".

Code Smell

.../Messages/TaskAddedMobileMessage.java

Remove this unused method parameter "placeholders".

Code Smell

src/Users/Professor.java

2 duplicated blocks of code must be removed.

Code Smell

src/Users/Student.java

1 duplicated blocks of code must be removed.

Code Smell

src/Users/TA.java

2 duplicated blocks of code must be removed.

Code Smell

11 of 11 shown

2 duplicated blocks of code must be removed. DEPRECATED

Code Smell

Major

Open

Not assigned

30min effort

Comment

Why is this an issue? 19 hours ago

pitfall

```

1 package Users;
2
3 import java.sql.Date;
4
5 public class Professor {
6     String name;
7     String department;
8     Date hiringDate;
9     String PhDTopic;
10    String email;
11    String phoneNumber;
12
13
14
15    public Professor(String name, String department, Date hiringDate, String PhDTopic, String email,
16                      String phoneNumber) {
17        super();
18        this.name = name;
19        this.department = department;
20        this.hiringDate = hiringDate;
21        PhDTopic = PhDTopic;
22        this.email = email;
23        this.phoneNumber = phoneNumber;
24    }
25
26    public String getEmail() {
27        return email;
28    }
29
30
31    public void setEmail(String email) {
32        this.email = email;
33    }
34
35
36    public String getPhoneNumber() {
37        return phoneNumber;
38    }
39
40
41    public void setPhoneNumber(String phoneNumber) {
42        this.phoneNumber = phoneNumber;
43    }
44
45
46    public String getName() {
47        return name;

```

Minor issues

My Issues

All

1 / 38 issues

3h 22min effort

Filters

Clear All Filters

Type

Bug

Vulnerability

Code Smell

0

0

38

Severity

MINOR

Clear

Blocker

Critical

Major

0

2

11

Minor

Info

38

0

Ctrl + click to add to selection

Scope

Resolution

Status

Security Category

Creation Date

Language

Rule

Tag

Project

Assignee

Author

Project / src/Course.java

Move this file to a named package.

Code Smell

Minor

Open

Not assigned

10min effort

Comment

Why is this an issue? 19 hours ago

convention

Rename this field "TasForEmailNotification" to match the regular expression "[a-z][a-zA-Z0-9]*\$".

Code Smell

Minor

Open

Not assigned

2min effort

Comment

Why is this an issue? 19 hours ago

L20

convention

Rename this field "TasForSMSNotification" to match the regular expression "[a-z][a-zA-Z0-9]*\$".

Code Smell

Minor

Open

Not assigned

2min effort

Comment

Why is this an issue? 19 hours ago

L21

convention

Replace the type specification in this constructor call with the diamond operator ("<>"). (sonar.java.source not set. Assuming 7 or greater.)

Code Smell

Minor

Open

Not assigned

1min effort

Comment

Why is this an issue? 19 hours ago

L31

clumsy

Replace the type specification in this constructor call with the diamond operator ("<>"). (sonar.java.source not set. Assuming 7 or greater.)

Code Smell

Minor

Open

Not assigned

1min effort

Comment

Why is this an issue? 19 hours ago

L32

clumsy

Replace the type specification in this constructor call with the diamond operator ("<>"). (sonar.java.source not set. Assuming 7 or greater.)

Code Smell

Minor

Open

Not assigned

1min effort

Comment

Why is this an issue? 19 hours ago

L33

clumsy

Replace the type specification in this constructor call with the diamond operator ("<>"). (sonar.java.source not set. Assuming 7 or greater.)

Code Smell

Minor

Open

Not assigned

1min effort

Comment

Why is this an issue? 19 hours ago

L35

clumsy

Replace the type specification in this constructor call with the diamond operator ("<>"). (sonar.java.source not set. Assuming 7 or greater.)

Code Smell

Minor

Open

Not assigned

1min effort

Comment

Why is this an issue? 19 hours ago

L36

clumsy

Replace the type specification in this constructor call with the diamond operator ("<>"). (sonar.java.source not set. Assuming 7 or greater.)

Code Smell

Minor

Open

Not assigned

1min effort

Comment

Why is this an issue? 19 hours ago

L38

clumsy

Replace the type specification in this constructor call with the diamond operator ("<>"). (sonar.java.source not set. Assuming 7 or greater.)

Code Smell

Minor

Open

Not assigned

1min effort

Comment

Why is this an issue? 19 hours ago

L39

clumsy

Replace the type specification in this constructor call with the diamond operator ("<>"). (sonar.java.source not set. Assuming 7 or greater.)

Code Smell

Minor

Open

Not assigned

1min effort

Comment

Why is this an issue? 19 hours ago

L41

clumsy

src/Course.java

Move this file to a named package.
Code Smell

Rename this field "TasForEmailNotification" to match the regular expression "[a-z][a-zA-Z0-9]*\$".
Code Smell

Rename this field "TasForSMSNotification" to match the regular expression "[a-z][a-zA-Z0-9]*\$".
Code Smell

Replace the type specification in this constructor call with the diamond operator ("<>"). (sonar.java.source not set. Assuming 7 or greater.)
Code Smell

Replace the type specification in this constructor call with the diamond operator ("<>"). (sonar.java.source not set. Assuming 7 or greater.)
Code Smell

Replace the type specification in this constructor call with the diamond operator ("<>"). (sonar.java.source not set. Assuming 7 or greater.)
Code Smell

Replace the type specification in this constructor call with the diamond operator ("<>"). (sonar.java.source not set. Assuming 7 or greater.)
Code Smell

Project src/Course.java See all issues in this file

Move this file to a named package. Why is this an issue? 19 hours ago convention

Code Smell Minor Open Not assigned 10min effort Comment

```
1 import java.util.ArrayList;
2
3 import Gateways.EmailGateway;
4 import Messages.TaskAddedEmailMessage;
5 import Users.Professor;
6 import Users.Student;
7 import Users.TA;
8
9 public class Course {
10
11     String name;
12     String code;
13     ArrayList<String> announcements;
14     ArrayList<String> exams;
15     ArrayList<String> grades;
16
17     ArrayList<Professor> professorsForEmailNotification;
18     ArrayList<Professor> professorsForSMSNotification;
19
20     ArrayList<TA> TasForEmailNotification;
21
22     ArrayList<TA> TasForSMSNotification;
23
24     ArrayList<Student> studentsForEmailNotification;
25     ArrayList<Student> studentsForSMSNotification;
26
27     public Course(String name, String code) {
28         super();
29         this.name = name;
30         this.code = code;
31
32         announcements = new ArrayList<String>();
```

Replace type specification

src/Course.java

Move this file to a named package.
Code Smell

Rename this field "TasForEmailNotification" to match the regular expression "[a-z][a-zA-Z0-9]*\$".
Code Smell

Rename this field "TasForSMSNotification" to match the regular expression "[a-z][a-zA-Z0-9]*\$".
Code Smell

Replace the type specification in this constructor call with the diamond operator ("<>"). (sonar.java.source not set. Assuming 7 or greater.)
Code Smell

Replace the type specification in this constructor call with the diamond operator ("<>"). (sonar.java.source not set. Assuming 7 or greater.)
Code Smell

Replace the type specification in this constructor call with the diamond operator ("<>"). (sonar.java.source not set. Assuming 7 or greater.)
Code Smell

Replace the type specification in this constructor call with the diamond operator ("<>"). (sonar.java.source not set. Assuming 7 or greater.)
Code Smell

Code Smell Minor Open Not assigned 2min effort Comment convention

```
21     ArrayList<TA> TasForSMSNotification;
22
23     ArrayList<Student> studentsForEmailNotification;
24     ArrayList<Student> studentsForSMSNotification;
25
26     public Course(String name, String code) {
27         super();
28         this.name = name;
29         this.code = code;
30
31         announcements = new ArrayList<String>();
32
33         exams = new ArrayList<String>();
34
35         grades = new ArrayList<String>();
36
37         professorsForEmailNotification = new ArrayList<Professor>();
38
39         professorsForSMSNotification = new ArrayList<Professor>();
40
41         TasForEmailNotification = new ArrayList<TA>();
42         TasForSMSNotification = new ArrayList<TA>();
```

Replace the type specification in this constructor call with the diamond operator ("<>"). (sonar.java.source not set. Assuming 7 or greater.) Why is this an issue? 19 hours ago L31 clumsy

Code Smell Minor Open Not assigned 1min effort Comment

Replace the type specification in this constructor call with the diamond operator ("<>"). (sonar.java.source not set. Assuming 7 or greater.) Why is this an issue? 19 hours ago L32 clumsy

Code Smell Minor Open Not assigned 1min effort Comment

Replace the type specification in this constructor call with the diamond operator ("<>"). (sonar.java.source not set. Assuming 7 or greater.) Why is this an issue? 19 hours ago L33 clumsy

Code Smell Minor Open Not assigned 1min effort Comment

Replace the type specification in this constructor call with the diamond operator ("<>"). (sonar.java.source not set. Assuming 7 or greater.) Why is this an issue? 19 hours ago L35 clumsy

Code Smell Minor Open Not assigned 1min effort Comment

Replace the type specification in this constructor call with the diamond operator ("<>"). (sonar.java.source not set. Assuming 7 or greater.) Why is this an issue? 19 hours ago L36 clumsy

Code Smell Minor Open Not assigned 1min effort Comment

Acti
Go to

A
G

Rename package name:

sonarqube Projects Issues Rules Quality Profiles Quality Gates Administration

Q Search for projects... A

Project src/Messages/DailyNewsEmailMessage.java See all issues in this file

1 - package Messages;

Rename this package name to match the regular expression `^[a-z_]+([a-z_][a-z0-9_]*)$`. Why is this an issue? 19 hours ago L1 Code Smell Minor Open Not assigned 10min effort Comment convention

2 public class DailyNewsEmailMessage {

3

4 public String prepareMessage(String placeholders[]) {

5

6 // code to replace place holders of this type

7 return "";

8 }

9 }

10

Move the array designators [] to the type. Why is this an issue? 19 hours ago L5 Code Smell Minor Open Not assigned 5min effort Comment convention

Remove this method and declare a constant for this value. Why is this an issue? 19 hours ago L7 Code Smell Minor Open Not assigned 5min effort Comment confusing

src/Gateways/EmailGateway.java

Rename this package name to match the regular expression `^[a-z_]+([a-z_][a-z0-9_]*)$`. Code Smell

src/Gateways/SMSGateway.java

Rename this package name to match the regular expression `^[a-z_]+([a-z_][a-z0-9_]*)$`. Code Smell

src/Messages/DailyNewsEmailMessage.java

Rename this package name to match the regular expression `^[a-z_]+([a-z_][a-z0-9_]*)$`. Code Smell

Move the array designators [] to the type. Code Smell

Remove this method and declare a constant for this value. Code Smell

src/Messages/DailyNewsMobileMessage.java

Rename this package name to match the regular expression `^[a-z_]+([a-z_][a-z0-9_]*)$`. Code Smell

Remove this method and declare a constant

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Q Search for projects... A

Project src/Messages/TaskAddedMobileMessage.java See all issues in this file

1 - package Messages;

Rename this package name to match the regular expression `^[a-z_]+([a-z_][a-z0-9_]*)$`. Why is this an issue? 20 hours ago L1 Code Smell Minor Open Not assigned 10min effort Comment convention

2

3 public class TaskAddedMobileMessage {

4

5 public String prepareMessage(String placeholders[]) {

6

7 // code to replace place holders of this type

8 return "";

9 }

10

11 public void addTeamDescription() {

12

13 }

14 }

15

Move the array designators [] to the type. Why is this an issue? 20 hours ago L5 Code Smell Minor Open Not assigned 5min effort Comment convention

Remove this method and declare a constant for this value. Why is this an issue? 20 hours ago L7 Code Smell Minor Open Not assigned 5min effort Comment confusing

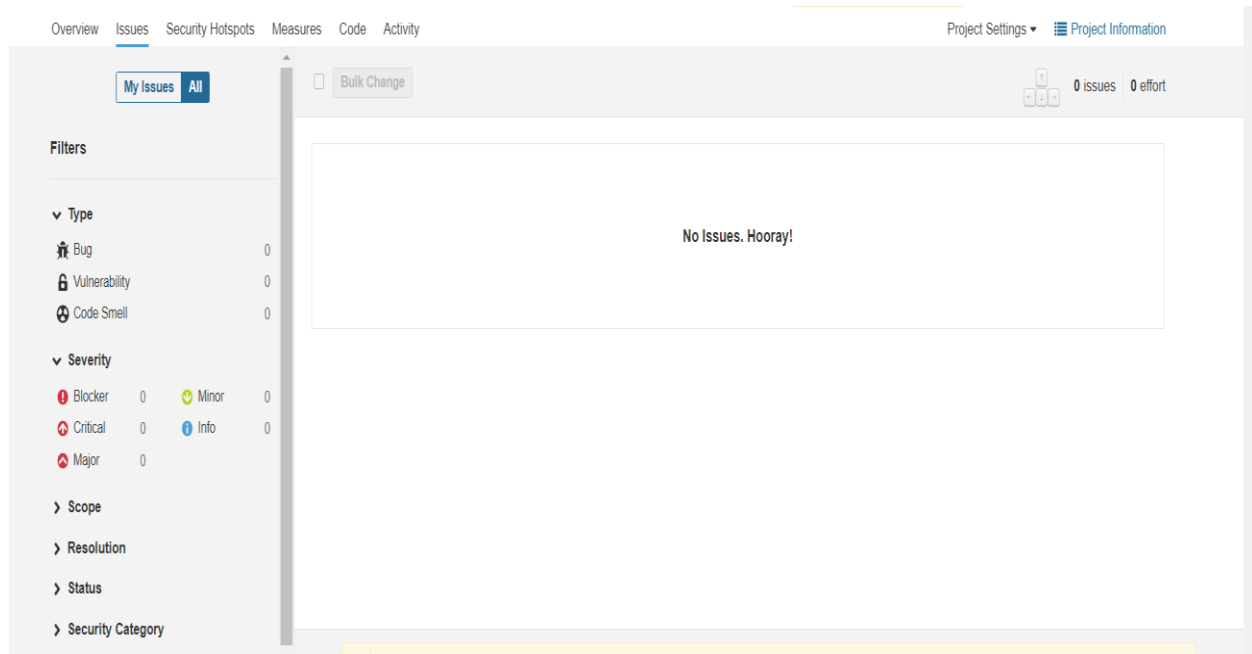
src/Users/Professor.java

Rename this package name to match the regular expression `^[a-z_]+([a-z_][a-z0-9_]*)$`. Code Smell

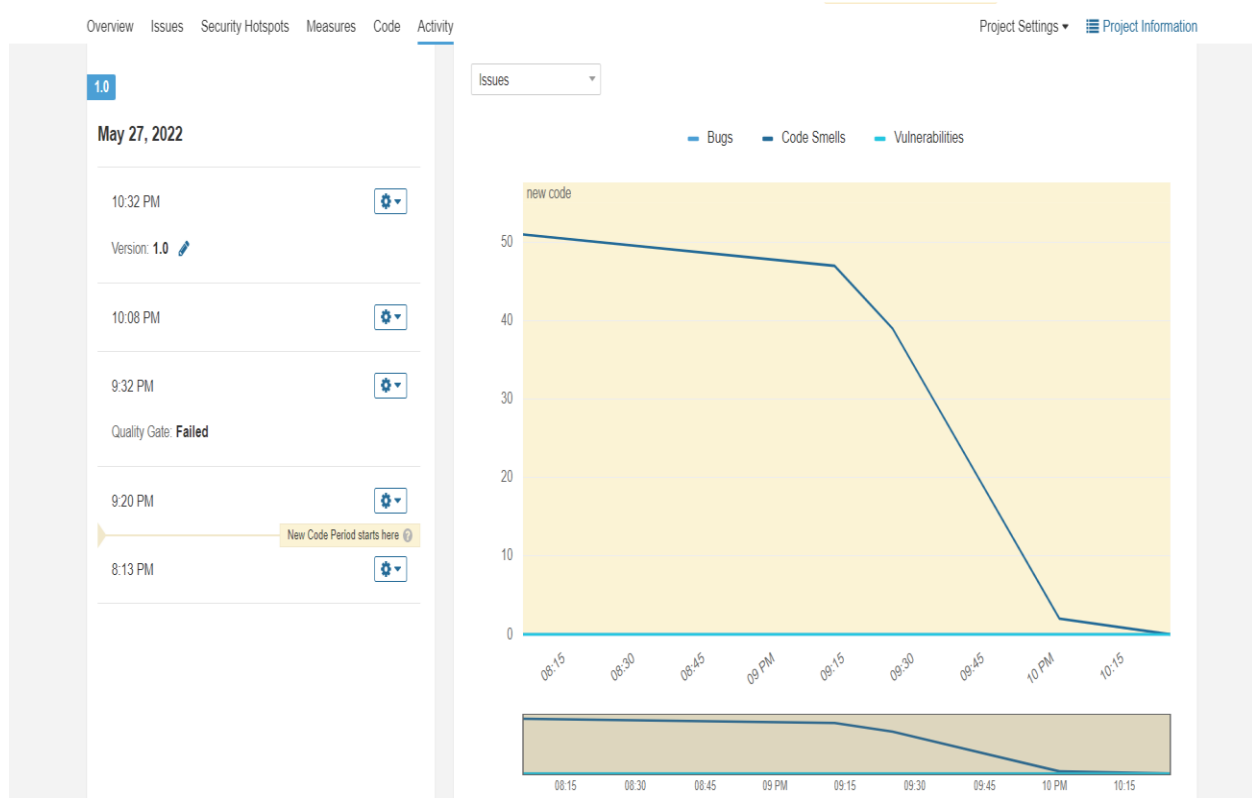
Rename this field "PhDTopic" to match the regular expression `^[a-z][a-zA-Z0-9_]*$`. Code Smell

Static Analysis Report after refactoring

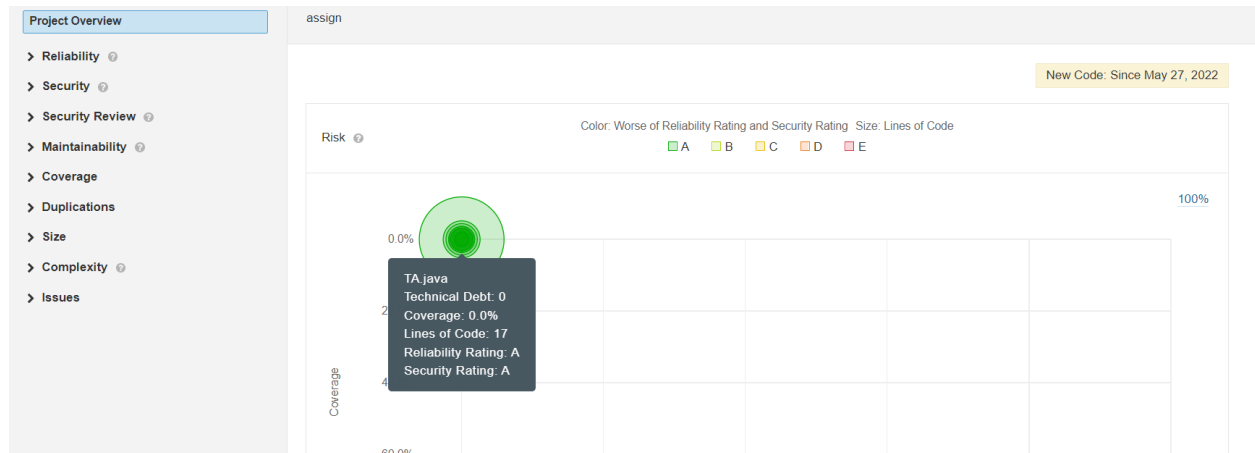
We solved all issues introduced above



Here is the activity diagram :



Measures :



Trello

Issues

The image shows a Trello board titled 'Notification'. The board has a dark blue header with a 'Board' dropdown, a star icon, and a 'Project' tab. Below the header, there are three columns: 'Fixed (Closed Issues)', 'Not Fixed (Open Issues)', and a third column with a plus icon and 'Add a card'. The 'Fixed (Closed Issues)' column contains six cards, each with a description of a task and a label 'H2'. The 'Not Fixed (Open Issues)' column is empty. The third column is also empty. The cards in the 'Fixed (Closed Issues)' column are:

- Move this file to a named package. (Label: H2)
- Rename this field "TAsForEmailNotification" to match the regular expression '^[a-z][a-zA-Z0-9]*\$'. (Label: H2)
- Rename this field "TAsForSMSNotification" to match the regular expression '^[a-z][a-zA-Z0-9]*\$'. (Label: H2)
- Replace the type specification in this constructor call with the diamond operator ("<>"). (sonar.java.source not set. Assuming 7 or greater.) (Label: H2)
- Rename this method name to match the regular expression '^[a-z][a-zA-Z0-9]*\$'. (Label: H2)
- Rename this package name to match the regular expression '^([a-z_]+)([a-z_][a-z0-9_]*)*\$'. (Label: MS)

Issues continue

The screenshot shows a Kanban board with three columns: 'Issues List', 'Fixed (Closed Issues)', and 'Not Fixed (Open Issues)'. The 'Issues List' column contains six cards, each with a description, a progress bar, and a status label (H2, MS, or AH). The 'Fixed (Closed Issues)' and 'Not Fixed (Open Issues)' columns are currently empty, each with a '+ Add a card' button.

Issues List	Fixed (Closed Issues)	Not Fixed (Open Issues)
<p>Rename this package name to match the regular expression <code>^[a-z_](\.[a-z_][a-z0-9_]*)*\$</code>.</p> <p>MS</p>		
<p>Remove this unused method parameter "user".</p> <p>MS</p>		
<p>Rename this package name to match the regular expression <code>^[a-z_](\.[a-z_][a-z0-9_]*)*\$</code>.</p> <p>MS</p>		
<p>Remove this unused method parameter "user".</p> <p>MS</p>		
<p>Add a nested comment explaining why this method is empty, throw an <code>UnsupportedOperationException</code> or complete the implementation.</p> <p>MS</p>		
<p>Rename this package name to match the regular expression <code>^[a-z_](\.[a-z_][a-z0-9_]*)*\$</code>.</p> <p>AH</p>		

Issues continue

The screenshot shows a Kanban board with three columns: 'Issues List', 'Fixed (Closed Issues)', and 'Not Fixed (Open Issues)'. The 'Issues List' column contains seven cards, each with a description, a progress bar, and a status label (MS, AH, or MT). The 'Fixed (Closed Issues)' and 'Not Fixed (Open Issues)' columns are currently empty, each with a '+ Add a card' button.

Issues List	Fixed (Closed Issues)	Not Fixed (Open Issues)
<p>Rename this package name to match the regular expression <code>^[a-z_](\.[a-z_][a-z0-9_]*)*\$</code>.</p> <p>AH</p>		
<p>Remove this unused method parameter "placeholders".</p> <p>AH</p>		
<p>Move the array designators <code>[]</code> to the type.</p> <p>AH</p>		
<p>Remove this method and declare a constant for this value.</p> <p>AH</p>		
<p>creating class observer</p> <p>AH</p>		
<p>Add a nested comment explaining why this method is empty, throw an <code>UnsupportedOperationException</code> or complete the implementation.</p> <p>MT</p>		
<p>2 duplicated blocks of code must be removed. DEPRECATED</p> <p>MT</p>		

Issues continue

Issues List

the regular expression `^[a-z]+\([a-z_][a-z0-9_]*\)$`.

MT

Rename this field "PhDTopic" to match the regular expression `^[a-z][a-zA-Z0-9]*$`.

MT

1 duplicated blocks of code must be removed. DEPRECATED

MT

Rename this package name to match the regular expression `^[a-z]+\([a-z_][a-z0-9_]*\)$`.

MT

Rename this field "Id" to match the regular expression `^[a-z][a-zA-Z0-9]*$`.

MT

2 duplicated blocks of code must be removed. DEPRECATED

MT

Rename this package name to match the regular expression `^[a-z]+\([a-z_][a-z0-9_]*\)$`.

MT

+ Add a card

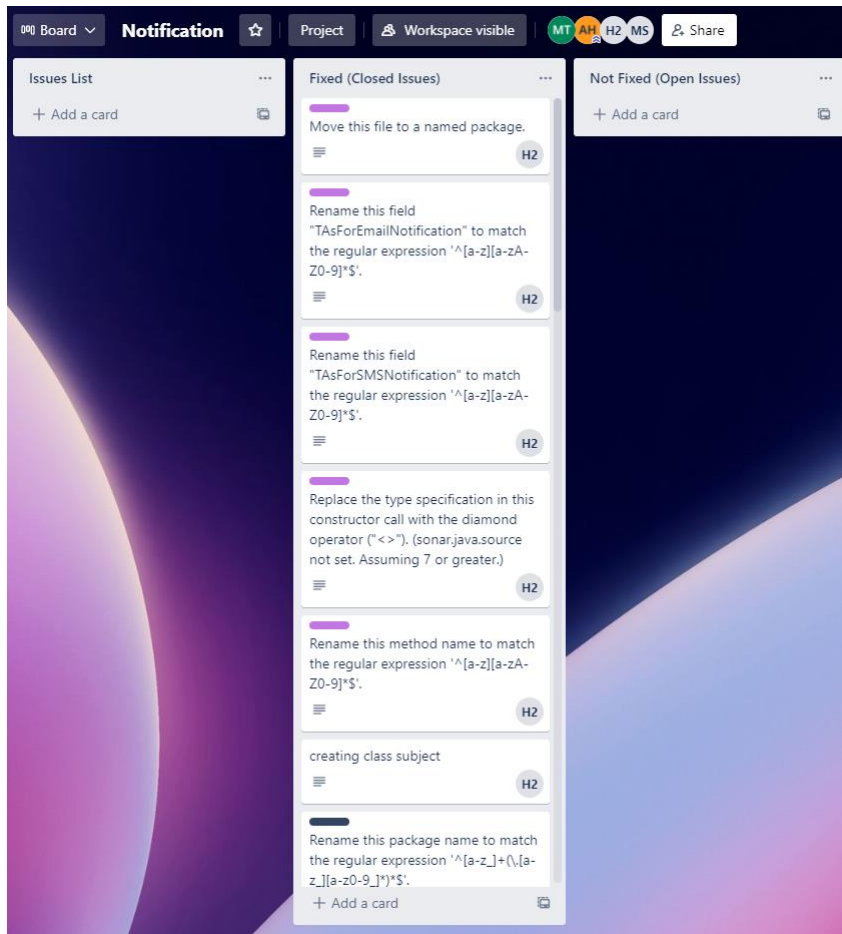
Fixed (Closed Issues)

+ Add a card

Not Fixed (Open Issues)

+ Add a card

all issues are fixed



There is no unfixed list because all issues are fixed

If you want to check trello use this link : [trello](#)

If you want to check the github repository : [github](#)

Name	ID
Mohamed Tarek Mohamed	20196046
Abdallah Hassan Magdy	20196034
Mohamed Samir Mohamed	20196045
Hussien Ahmed Hamed	20196074