Static Analysis Report for Team B4

Project Team

Team 4

Latest update on:

2020-06-17

Team Information

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1.1   Overview

22 🐞 Bugs   Reliability Ⓔ

69 🔒 Vulnerabilities   Security Ⓓ

1 🛡 Security Hotspots ⓘ   ⬭ 0.0%   Reviewed   Security Review Ⓔ

47d Debt   1.1k 💀 Code Smells   Maintainability Ⓐ

⌄ Type BUG	Clear
🐞 Bug	22
🔒 Vulnerability	69
💀 Code Smell	1.4k
Ctrl + click to add to selection	

⌄ Severity

❗ Blocker	2	⬇ Minor	3
⊘ Critical	0	ⓘ Info	0
⬆ Major	17		

⌄ Type VULNERABILITY	Clear
🐞 Bug	22
🔒 Vulnerability	69
💀 Code Smell	1.4k
Ctrl + click to add to selection	

⌄ Severity

❗ Blocker	0	⬇ Minor	66
⊘ Critical	3	ⓘ Info	0
⬆ Major	0		

⌄ Type CODE SMELL	Clear
🐞 Bug	22
🔒 Vulnerability	69
💀 Code Smell	1.4k
Ctrl + click to add to selection	

⌄ Severity

❗ Blocker	3	⬇ Minor	398
⊘ Critical	106	ⓘ Info	28
⬆ Major	846		

New Code: Since May 26, 2020

Risk ⓘ   Color: Worse of Reliability Rating and Security Rating Size: Lines of Code

☐A ☐B ☐C ☐D ☐E

100%

0.0%

20.0%
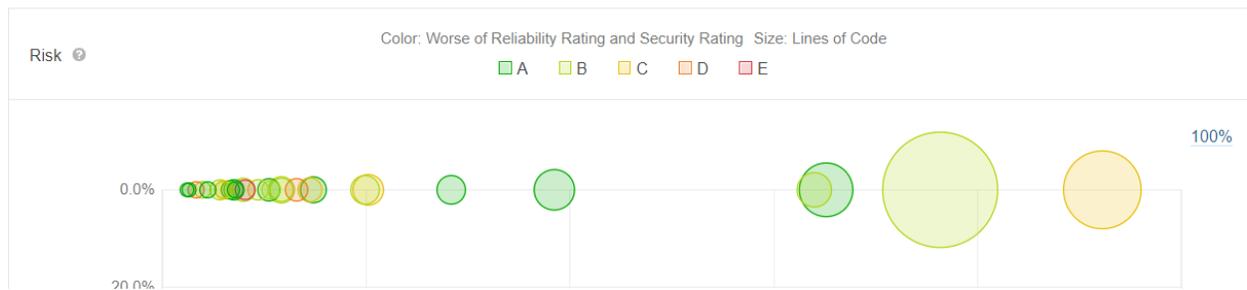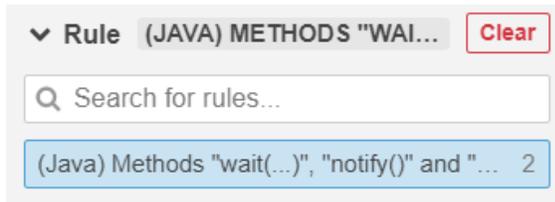
- 위 결과에서 Blocker-Critical-Major issue 를 중심으로 false positive / duplicated rule 을
확인하며 static analysis 를 진행.

1.2 Bugs

Sonarqube url:

- Blocker(2)

(예시)

src/main/java/view/template/Buzzer.java

Refactor the synchronisation mechanism to not use a Thread instance as a monitor Why is this an issue?   yesterday ▾ L36 🔗 ▼▾
🐞 Bug ▾ ❶ Blocker ▾ ◯ Open ▾ Not assigned ▾ 30min effort Comment   multi-threading ▾

Refactor the synchronisation mechanism to not use a Thread instance as a monitor Why is this an issue?   yesterday ▾ L43 🔗 ▼▾
🐞 Bug ▾ ❶ Blocker ▾ ◯ Open ▾ Not assigned ▾ 30min effort Comment   multi-threading ▾

- Thread 동기화 관련 위험성이 존재한다.

- Major(17)
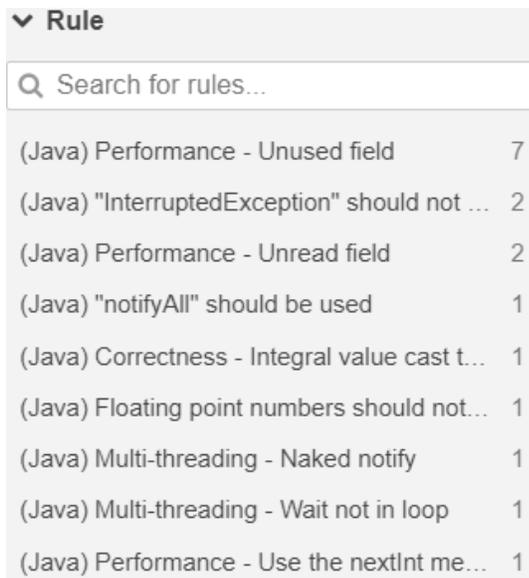
Rule	
(Java) Performance - Unused field	7
(Java) "InterruptedException" should not ...	2
(Java) Performance - Unread field	2
(Java) "notifyAll" should be used	1
(Java) Correctness - Integral value cast t...	1
(Java) Floating point numbers should not...	1
(Java) Multi-threading - Naked notify	1
(Java) Multi-threading - Wait not in loop	1
(Java) Performance - Use the nextInt me...	1

(예시)


```
public int checkTimer(long systemTime){
    if(this.state == 2){
        // System.out.println(this.settedTime + " " + this.stackedTime + " " + this.startTime + " " + systemTime);
        // System.out.println(Math.ceil(this.settedTime/1000) + "  " + Math.ceil((systemTime - this.startTime + this.stackedTime
        if(Math.ceil(this.settedTime/1000) == Math.ceil((systemTime - this.startTime + this.stackedTime)/1000)){
```

Equality tests should not be made with floating point values. Why is this an issue?   9 days ago ▾ L68 🔗
🐞 Bug ▾   🔴 Major ▾   ◑ Reopened ▾   Not assigned ▾   5min effort   Comment   🏷 No tags ▾
UN User Name 반올림 함수> 항상 float형식의 정수값 리턴   23 hours ago ✏ 🗑

Integral value cast to double and then passed to Math.ceil in controller.mode.Timer.checkTimer(long)   9 days ago ▾ L68 🔗
Why is this an issue?
🐞 Bug ▾   🔴 Major ▾   ○ Open ▾   Not assigned ▾   1h effort   Comment   🏷 correctness ▾

- 정수형 데이터 타입인 long/int 의 결과값은 항상 정수형 데이터 타입 long 이다.

src/main/java/controller/tempSystem.java

Unused field: controller.tempSystem.functionList Why is this an issue?   8 hours ago ▾ L1 🔗 ⊽
🐞 Bug ▾ 🔴 Major ▾ ○ Open ▾ Not assigned ▾ 30min effort Comment   🏷 performance ▾

Unused field: controller.tempSystem.alarms Why is this an issue?   8 hours ago ▾ L1 🔗 ⊽
🐞 Bug ▾ 🔴 Major ▾ ○ Open ▾ Not assigned ▾ 30min effort Comment   🏷 performance ▾

Unused field: controller.tempSystem.globalTime Why is this an issue?   8 hours ago ▾ L1 🔗 ⊽
🐞 Bug ▾ 🔴 Major ▾ ○ Open ▾ Not assigned ▾ 30min effort Comment   🏷 performance ▾

Unused field: controller.tempSystem.sleepingTime Why is this an issue?   8 hours ago ▾ L1 🔗 ⊽
🐞 Bug ▾ 🔴 Major ▾ ○ Open ▾ Not assigned ▾ 30min effort Comment   🏷 performance ▾

Unused field: controller.tempSystem.stopWatch Why is this an issue?   8 hours ago ▾ L1 🔗 ⊽
🐞 Bug ▾ 🔴 Major ▾ ○ Open ▾ Not assigned ▾ 30min effort Comment   🏷 performance ▾

Unused field: controller.tempSystem.timeKeeping Why is this an issue?   8 hours ago ▾ L1 🔗 ⊽
🐞 Bug ▾ 🔴 Major ▾ ○ Open ▾ Not assigned ▾ 30min effort Comment   🏷 performance ▾

Unused field: controller.tempSystem.timer Why is this an issue?   8 hours ago ▾ L1 🔗 ⊽
🐞 Bug ▾ 🔴 Major ▾ ○ Open ▾ Not assigned ▾ 30min effort Comment   🏷 performance ▾

Unread field: controller.tempSystem.clock Why is this an issue?   8 hours ago ▾ L18 🔗 ⊽
🐞 Bug ▾ 🔴 Major ▾ ○ Open ▾ Not assigned ▾ 30min effort Comment   🏷 performance ▾

src/main/java/view/ButtonHandler.java

Unread field: view.ButtonHandler.test Why is this an issue?   14 days ago ▾ L13 🔗 ⊽
🐞 Bug ▾ 🔴 Major ▾ ○ Open ▾ Not assigned ▾ 30min effort Comment   🏷 performance ▾

- 사용하지 않는 필드들이 존재한다.

src/main/java/view/template/Buzzer.java

Wait not in loop in view.template.Buzzer.threadWait() Why is this an issue? 18 hours ago ▾ L36 ⚲ ▼ ▾
🐞 Bug ▾ 🔻 Major ▾ ◯ Open ▾ Not assigned ▾ 1h effort Comment 🏷 multi-threading ▾

Either re-interrupt this method or rethrow the "InterruptedException". Why is this an issue? yesterday ▾ L37 ⚲ ▼ ▾
🐞 Bug ▾ 🔻 Major ▾ ◯ Open ▾ Not assigned ▾ 15min effort Comment 🏷 cwe, error-handling, multi-threading ▾

"notify" may not wake up the appropriate thread. Why is this an issue? yesterday ▾ L43 ⚲ ▼ ▾
🐞 Bug ▾ 🔻 Major ▾ ◯ Open ▾ Not assigned ▾ 2min effort Comment 🏷 cert, multi-threading ▾

Naked notify in view.template.Buzzer.threadNotify() Why is this an issue? 18 hours ago ▾ L43 ⚲ ▼ ▾
🐞 Bug ▾ 🔻 Major ▾ ◯ Open ▾ Not assigned ▾ 1h effort Comment 🏷 multi-threading ▾

Either re-interrupt this method or rethrow the "InterruptedException". Why is this an issue? 6 days ago ▾ L57 ⚲ ▼ ▾
🐞 Bug ▾ 🔻 Major ▾ ◯ Open ▾ Not assigned ▾ 15min effort Comment 🏷 cwe, error-handling, multi-threading ▾

- Thread 동기화 관련 위험성이 존재한다.

- Minor (3)

∨ Rule

🔍 Search for rules...

(Java) JEE applications should not "getC...   3

(예시)

src/main/java/view/DisplayManager.java

Use "Thread.currentThread().getContextClassLoader()" instead. Why is this an issue? 6 days ago ▾ L268 ⚲ ▼ ▾
🐞 Bug ▾ 🟢 Minor ▾ ◯ Open ▾ Not assigned ▾ 5min effort Comment 🏷 jee ▾

Use "Thread.currentThread().getContextClassLoader()" instead. Why is this an issue? 6 days ago ▾ L269 ⚲ ▼ ▾
🐞 Bug ▾ 🟢 Minor ▾ ◯ Open ▾ Not assigned ▾ 5min effort Comment 🏷 jee ▾

Use "Thread.currentThread().getContextClassLoader()" instead. Why is this an issue? 6 days ago ▾ L289 ⚲ ▼ ▾
🐞 Bug ▾ 🟢 Minor ▾ ◯ Open ▾ Not assigned ▾ 5min effort Comment 🏷 jee ▾

- 올바른 ClassLoader 관련

1.2 Vulnerability

Sonarqube url:

http://34.204.179.138/project/issues?id=B4Project&resolved=false&resolved=false&types=VULNERABILITY

- Critical (3)

(예시)

- multi-thread system 에서 인자를 직접 넘겨줄 때, 값이 변하지 않는지 주의해야 한다.

- Minor (66)

(예시)

src/main/java/view/DisplayManager.java

Explicitly declare the visibility for "cheeringMessages". Why is this an issue?		9 days ago ▾ L11
🔒 Vulnerability ▾ 😀 Minor ▾ ○ Open ▾ Not assigned ▾ 5min effort Comment		No tags ▾
Explicitly declare the visibility for "selector". Why is this an issue?		12 days ago ▾ L224
🔒 Vulnerability ▾ 😀 Minor ▾ ○ Open ▾ Not assigned ▾ 5min effort Comment		No tags ▾
Explicitly declare the visibility for "btnNames". Why is this an issue?		14 days ago ▾ L227
🔒 Vulnerability ▾ 😀 Minor ▾ ○ Open ▾ Not assigned ▾ 5min effort Comment		No tags ▾
Explicitly declare the visibility for "buttons". Why is this an issue?		14 days ago ▾ L228
🔒 Vulnerability ▾ 😀 Minor ▾ ○ Open ▾ Not assigned ▾ 5min effort Comment		No tags ▾
Explicitly declare the visibility for "btnX". Why is this an issue?		3 days ago ▾ L229
🔒 Vulnerability ▾ 😀 Minor ▾ ○ Open ▾ Not assigned ▾ 5min effort Comment		No tags ▾
Explicitly declare the visibility for "btnY". Why is this an issue?		14 days ago ▾ L230
🔒 Vulnerability ▾ 😀 Minor ▾ ○ Open ▾ Not assigned ▾ 5min effort Comment		No tags ▾
Explicitly declare the visibility for "outerPanel". Why is this an issue?		14 days ago ▾ L233
🔒 Vulnerability ▾ 😀 Minor ▾ ○ Open ▾ Not assigned ▾ 5min effort Comment		No tags ▾

...

- 접근 제한자를 설정하지 않았다.

src/main/java/view/template/Buzzer.java

Use a logger to log this exception. Why is this an issue?		yesterday ▾ L38
🔒 Vulnerability ▾ 😀 Minor ▾ ○ Open ▾ Not assigned ▾ 10min effort Comment		🏷 cwe, error-handling, owasp-a3 ▾

- e.printStackTrace() 대신 logger 사용.

1.4 Code smell

Sonarqube url:

- Blocker (3)

(예시)

- Catch 하지 않는 exception

- Critical (106)

Rule

Search for rules...

(Java) Control flow statements "if", "for",...	37
(Java) "if ... else if" constructs should en...	29
(Java) Wildcard imports should not be u...	12
(Java) String literals should not be duplic...	5
(Java) Cognitive Complexity of methods ...	4
(Java) Empty If Stmt	4
(Java) Methods should not be empty	4
(Java) "static" base class members shoul...	3
(Java) Methods should not be too complex	2
(Java) "Object.wait(...)" and "Condition.a...	1
(Java) @FunctionalInterface annotation ...	1
(Java) Constant names should comply wi...	1
(Java) Constructors should only call non-...	1
(Java) Expressions should not be too co...	1
(Java) Fields in a "Serializable" class sho...	1

(예시)

src/main/java/view/ButtonHandler.java

Avoid empty if statements Why is this an issue?	14 days ago ▾ L26 % ▾
⊗ Code Smell ▾ ⊙ Critical ▾ ○ Open ▾ Not assigned ▾ 10min effort Comment	🏷 No tags ▾
Avoid empty if statements Why is this an issue?	14 days ago ▾ L29 % ▾
⊗ Code Smell ▾ ⊙ Critical ▾ ○ Open ▾ Not assigned ▾ 10min effort Comment	🏷 No tags ▾
Avoid empty if statements Why is this an issue?	14 days ago ▾ L31 % ▾
⊗ Code Smell ▾ ⊙ Critical ▾ ○ Open ▾ Not assigned ▾ 10min effort Comment	🏷 No tags ▾
Avoid empty if statements Why is this an issue?	14 days ago ▾ L33 % ▾
⊗ Code Smell ▾ ⊙ Critical ▾ ○ Open ▾ Not assigned ▾ 10min effort Comment	🏷 No tags ▾

4 of 4 shown

- 빈 if 문이 존재함.

src/main/java/controller/Utility.java

"if ... else if" constructs should end with "else" clauses. Why is this an issue?   12 days ago ▾ L47 % ▼▾
☒ Code Smell ▾ 🔴 Critical ▾ ○ Open ▾ Not assigned ▾ 5min effort Comment   🏷 cert ▾

"if ... else if" constructs should end with "else" clauses. Why is this an issue?   13 days ago ▾ L82 % ▼▾
☒ Code Smell ▾ 🔴 Critical ▾ ○ Open ▾ Not assigned ▾ 5min effort Comment   🏷 cert ▾

src/main/java/controller/mode/SleepingTime.java

"if ... else if" constructs should end with "else" clauses. Why is this an issue?   10 days ago ▾ L80 % ▼▾
☒ Code Smell ▾ 🔴 Critical ▾ ○ Open ▾ Not assigned ▾ 5min effort Comment   🏷 cert ▾

"if ... else if" constructs should end with "else" clauses. Why is this an issue?   9 days ago ▾ L92 % ▼▾
☒ Code Smell ▾ 🔴 Critical ▾ ○ Open ▾ Not assigned ▾ 5min effort Comment   🏷 cert ▾

src/main/java/controller/mode/Timer.java

"if ... else if" constructs should end with "else" clauses. Why is this an issue?   13 days ago ▾ L95 % ▼▾
☒ Code Smell ▾ 🔴 Critical ▾ ○ Open ▾ Not assigned ▾ 5min effort Comment   🏷 cert ▾

"if ... else if" constructs should end with "else" clauses. Why is this an issue?   13 days ago ▾ L112 % ▼▾
☒ Code Smell ▾ 🔴 Critical ▾ ○ Open ▾ Not assigned ▾ 5min effort Comment   🏷 cert ▾

src/main/java/view/ButtonHandler.java

"if ... else if" constructs should end with "else" clauses. Why is this an issue?   14 days ago ▾ L31 % ▼▾
☒ Code Smell ▾ 🔴 Critical ▾ ○ Open ▾ Not assigned ▾ 5min effort Comment   🏷 cert ▾

src/main/java/view/ModeManager.java

"if ... else if" constructs should end with "else" clauses. Why is this an issue?   3 days ago ▾ L309 % ▼▾
☒ Code Smell ▾ 🔴 Critical ▾ ○ Open ▾ Not assigned ▾ 5min effort Comment   🏷 cert ▾

src/main/java/view/UI.java

"if ... else if" constructs should end with "else" clauses. Why is this an issue?   10 days ago ▾ L113 % ▼▾
☒ Code Smell ▾ 🔴 Critical ▾ ○ Open ▾ Not assigned ▾ 5min effort Comment   🏷 cert ▾

"if ... else if" constructs should end with "else" clauses. Why is this an issue?   10 days ago ▾ L119 % ▼▾
☒ Code Smell ▾ 🔴 Critical ▾ ○ Open ▾ Not assigned ▾ 5min effort Comment   🏷 cert ▾

"if ... else if" constructs should end with "else" clauses. Why is this an issue?   6 days ago ▾ L197 % ▼▾
☒ Code Smell ▾ 🔴 Critical ▾ ○ Open ▾ Not assigned ▾ 5min effort Comment   🏷 cert ▾

"if ... else if" constructs should end with "else" clauses. Why is this an issue?   6 days ago ▾ L256 % ▼▾
☒ Code Smell ▾ 🔴 Critical ▾ ○ Open ▾ Not assigned ▾ 5min effort Comment   🏷 cert ▾

"if ... else if" constructs should end with "else" clauses. Why is this an issue?   6 days ago ▾ L322 % ▼▾
☒ Code Smell ▾ 🔴 Critical ▾ ○ Open ▾ Not assigned ▾ 5min effort Comment   🏷 cert ▾

"if ... else if" constructs should end with "else" clauses. Why is this an issue?   9 days ago ▾ L395 % ▼▾
☒ Code Smell ▾ 🔴 Critical ▾ ○ Open ▾ Not assigned ▾ 5min effort Comment   🏷 cert ▾

"if ... else if" constructs should end with "else" clauses. Why is this an issue?   9 days ago ▾ L407 % ▼▾
☒ Code Smell ▾ 🔴 Critical ▾ ○ Open ▾ Not assigned ▾ 5min effort Comment   🏷 cert ▾

"if ... else if" constructs should end with "else" clauses. Why is this an issue?   6 days ago ▾ L437 % ▼▾
☒ Code Smell ▾ 🔴 Critical ▾ ○ Open ▾ Not assigned ▾ 5min effort Comment   🏷 cert ▾

src/main/java/view/template/Flag.java

- If … else if 문은 else 문으로 끝나야 한다. (exception 처리)

```
static final String customize = "customize your own watch";
```

- final 인 constant 의 이름은 대문자로 표시해야 함.

```java
        if(pressed.equals("A")) {
```

```java
            this.exitingSub();
        }
        if(pressed.equals("B")) {
            //System.out.println("pressedB");
            long updateValue = Flag.getTimeValue(displayManager.getSelector(), curTime, 1);
            system.setTime(updateValue);
            lastPressedTime += updateValue; // 시간이 변하는 만큼 LastPressedTime을 같이 맞춰 주어야 back to base가

        }
```

- depth 가 3 을 넘어가는 코드는 지양해야 함.

- Major (846)

∨ Rule

Q Search for rules...

(Java) Law Of Demeter	237
(Java) Dataflow Anomaly Analysis	195
(Java) Equals Avoid Null	69
(Java) Bean Members Should Serialize	68
(Java) Visibility Modifier	51
(Java) Standard outputs should not be ...	22
(Java) Missing Constructor	17
(Java) At Least One Constructor	14
(Java) Enum values should be compare...	14
(Java) Immutable Field	10
(Java) Unused "private" fields should be ...	8
(Java) Unused Private Field	8
(Java) Methods should not have too man...	7
(Java) Std Cyclomatic Complexity	7
(Java) Code size - cyclomatic complexity	6

(예시)

src/main/java/Main.java

src/main/java/Main.java

☐ **Utility classes should not have a public or default constructor.** Why is this an issue?　　17 days ago ▾ L3 🔗 ▼
🌐 Code Smell ▾ 🔻 Major ▾ ○ Open ▾ Not assigned ▾ 30min effort Comment　　🏷 No tags ▾

src/main/java/controller/Utility.java

☐ **Utility classes should not have a public or default constructor.** Why is this an issue?　　20 days ago ▾ L5 🔗 ▼
🌐 Code Smell ▾ 🔻 Major ▾ ○ Open ▾ Not assigned ▾ 30min effort Comment　　🏷 No tags ▾

- static value 만 포함하는 utility class 는 public constructor 를 가질 필요가 없음.

src/main/java/Main.java

☐ **A method/constructor should not explicitly throw java.lang.Exception** Why is this an issue?　　14 days ago ▾ L4 🔗 ▼
🌐 Code Smell ▾ 🔻 Major ▾ ○ Open ▾ Not assigned ▾ 20min effort Comment　　🏷 error-handling ▾

…

- Exception 을 throw 하면 handling 을 해주어야 함.

src/main/java/Main.java

☐ **Class should define a constructor.** Why is this an issue?　　17 days ago ▾ L3 🔗 ▼
🌐 Code Smell ▾ 🔻 Major ▾ ○ Open ▾ Not assigned ▾ 30min effort Comment　　🏷 No tags ▾

src/main/java/controller/Utility.java

☐ **Class should define a constructor.** Why is this an issue?　　20 days ago ▾ L5 🔗 ▼
🌐 Code Smell ▾ 🔻 Major ▾ ○ Open ▾ Not assigned ▾ 30min effort Comment　　🏷 No tags ▾

src/main/java/controller/tempSystem.java

☐ **Class should define a constructor.** Why is this an issue?　　9 days ago ▾ L9 🔗 ▼
🌐 Code Smell ▾ 🔻 Major ▾ ○ Open ▾ Not assigned ▾ 30min effort Comment　　🏷 No tags ▾

src/main/java/view/ModeManager.java

☐ **Class should define a constructor.** Why is this an issue?　　14 days ago ▾ L10 🔗 ▼
🌐 Code Smell ▾ 🔻 Major ▾ ○ Open ▾ Not assigned ▾ 30min effort Comment　　🏷 No tags ▾

src/main/java/view/handler/DisplayManager.java

☐ **Class should define a constructor.** Why is this an issue?　　14 days ago ▾ L3 🔗 ▼
🌐 Code Smell ▾ 🔻 Major ▾ ○ Open ▾ Not assigned ▾ 30min effort Comment　　🏷 No tags ▾

src/main/java/view/template/Buzzer.java

☐ **Class should define a constructor.** Why is this an issue?　　6 days ago ▾ L7 🔗 ▼
🌐 Code Smell ▾ 🔻 Major ▾ ○ Open ▾ Not assigned ▾ 30min effort Comment　　🏷 No tags ▾

src/main/java/view/template/RoundJButton.java

☐ **Class should define a constructor.** Why is this an issue?　　17 days ago ▾ L6 🔗 ▼
🌐 Code Smell ▾ 🔻 Major ▾ ○ Open ▾ Not assigned ▾ 30min effort Comment　　🏷 No tags ▾

src/main/java/view/template/RoundJPanel.java

☐ **Class should define a constructor.** Why is this an issue?　　17 days ago ▾ L6 🔗 ▼
🌐 Code Smell ▾ 🔻 Major ▾ ○ Open ▾ Not assigned ▾ 30min effort Comment　　🏷 No tags ▾

- Class 에는 constructor 가 존재해야 함.

- Minor (172)

Rule	
Search for rules...	
(Java) Default Package	48
(Java) Method names should comply wi...	27
(Java) The members of an interface or ...	23
(Java) Avoid Star Import	12
(Java) Interface Member Implied Modifier	12
(Java) Unnecessary Parentheses	9
(Java) Avoid Static Import	5
(Java) Methods should not return constants	5
(Java) Collapsible If Statements	3
(Java) Unnecessary imports should be re...	3
(Java) Avoid Inline Conditionals	2
(Java) Avoid instantiating objects in loops	2
(Java) Fields should not be initialized to ...	2
(Java) Local variables should not be decl...	2
(Java) Multiple variables should not be d...	2
(Java) The default unnamed package sh...	2

(Java) Array Type Style	1
(Java) Array designators "[]" should be o...	1
(Java) Boolean checks should not be inv...	1
(Java) Boxed "Boolean" should be avoid...	1
(Java) Class Member Implied Modifier	1
(Java) Class names should comply with ...	1
(Java) Class variable fields should not ha...	1
(Java) Classes should not be empty	1
(Java) Logic Inversion	1
(Java) Loops should not contain more th...	1
(Java) Methods of "Random" that return f...	1
(Java) Simplify boolean returns	1
(Java) Unused local variables should be ...	1

(예시)

```
public class SleepingTime {
    private LocalTime sleepTime;    //수면시간 (최대 12시간)
    private LocalTime wakeUpTime;   //기상시각
    private int status;             //0이면 inactive, 1이면 active상태.글 (1이면 cheering message를 받는 상태임)

    static final long SECOND_LONG = 1000L;
```

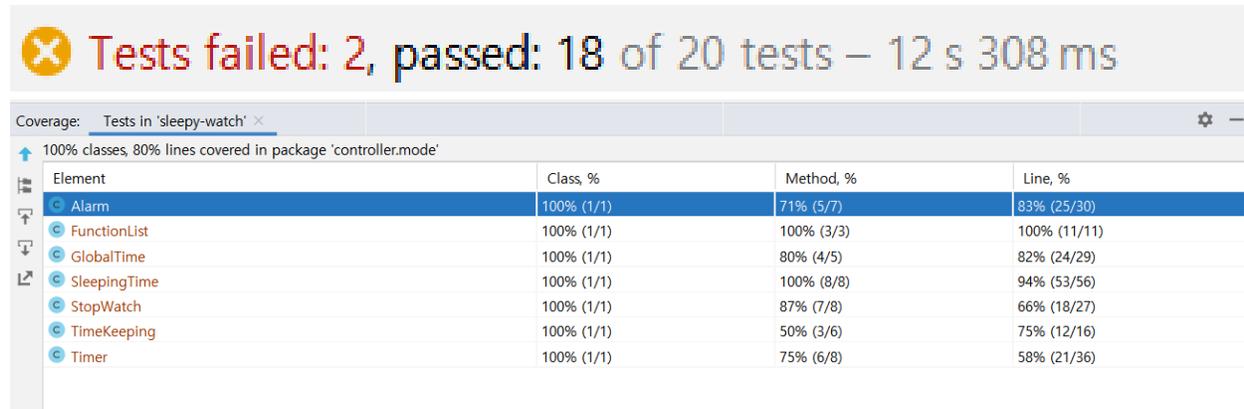**Use explicit scoping instead of the default package private level** Why is this an issue?   9 days ago ▾ L12 ⚭
⊗ Code Smell ▾   ⚈ Minor ▾   ○ Open ▾   Not assigned ▾   15min effort   Comment   🏷 No tags ▾

```
static final long MINUTE_LONG = 60000L;
```

- Static final value 를 package private level scope 에 선언한다.

1.5 Code Coverage

1) intelliJ > junit

- SleepingTime 을 제외한 모든 class 에서 cover 되지 않은 method 가 하나 이상 존재.

2) jenkins > jacoco

- Sonarqube 의 xmlfinder 가 jacoco report 의 위치를 찾지 못해 직접 index.html 파일에 접근함.

Failed tests

- StopWatchTest. 스탑워치_상태_테스트()
- StopWatchTest. 스탑워치_재시작_테스트()

Packages

Package	Tests	Failures	Ignored	Duration	Success rate
controller.mode	20	2	0	12.477s	90%

Classes

Class	Tests	Failures	Ignored	Duration	Success rate
controller.mode.AlarmTest	2	0	0	0.091s	100%
controller.mode.FunctionListTest	1	0	0	0.027s	100%
controller.mode.GlobalTimeTest	1	0	0	0.006s	100%
controller.mode.SleepingTimeTest	7	0	0	0.291s	100%
controller.mode.StopWatchTest	5	2	0	0.035s	60%
controller.mode.TimeKeepingTest	1	0	0	0.004s	100%
controller.mode.TimerTest	3	0	0	12.023s	100%