

CTIP 환경 구축 (2)

T6

201513205 송승현

201511273 여찬종

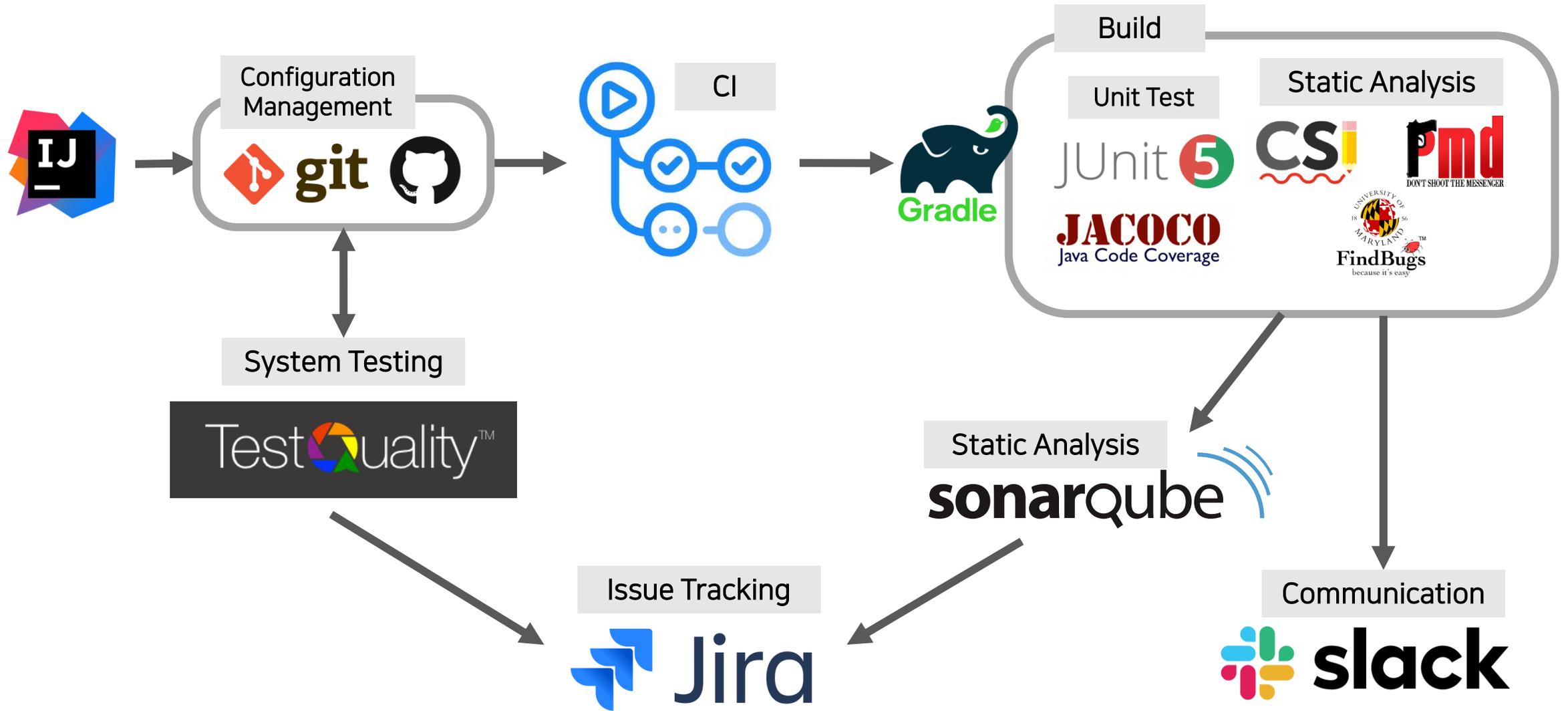
201612368 이지우

201811301 한지희

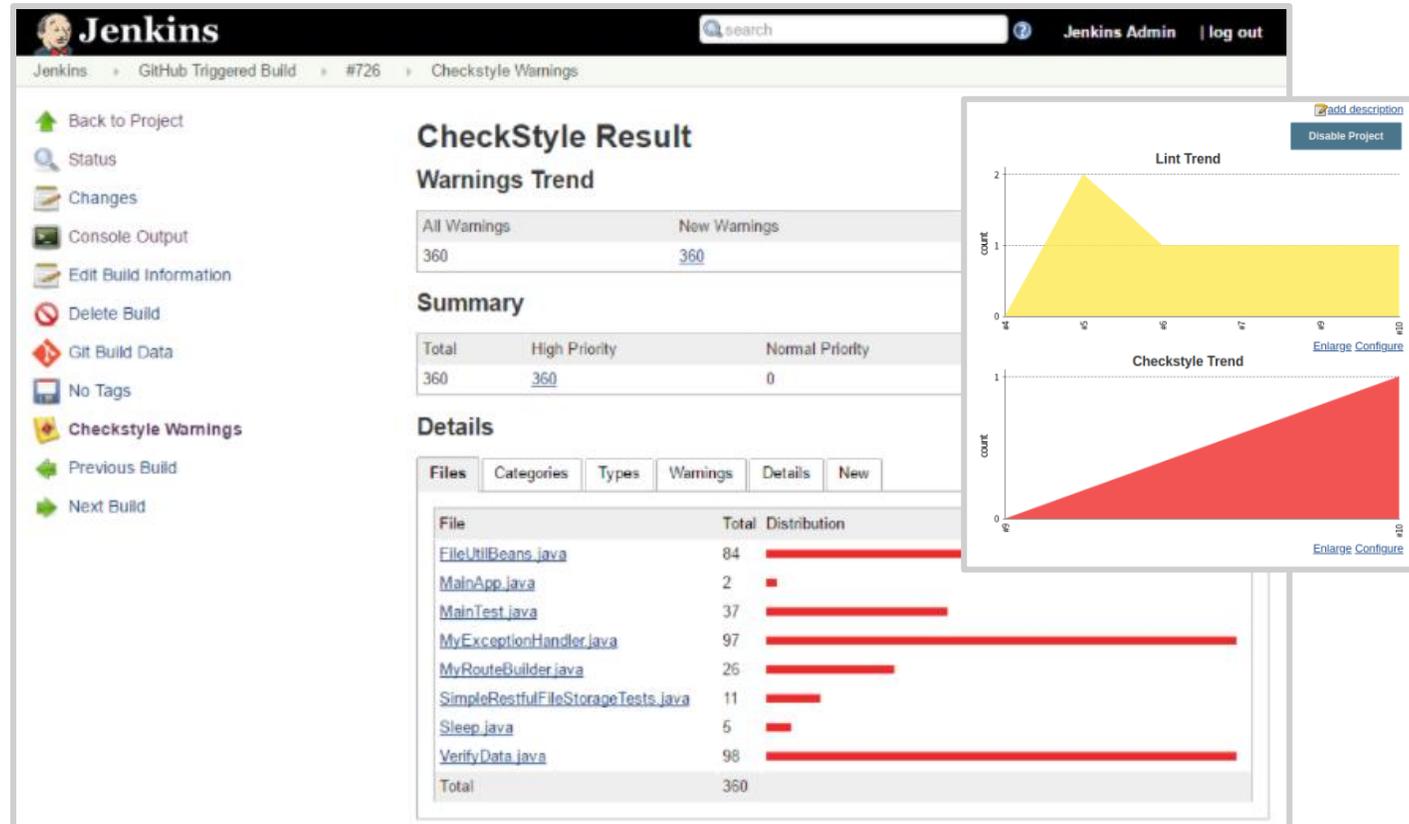
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- 04 Issue Tracking - Jira
- 05 CTIP Traceability

01 Overall

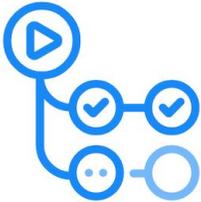


02 Static Analysis / Unit Test Report 개선



Jenkins 및 기타 CI/CD는 친숙한 HTML 형식으로 보고서를 표기

02 Static Analysis / Unit Test Report 개선



```
GitHub Actions / testtool
succeeded 2 days ago in 0s

reviewdog [testtool] report

reported by reviewdog 🐶

▶ Findings (0)

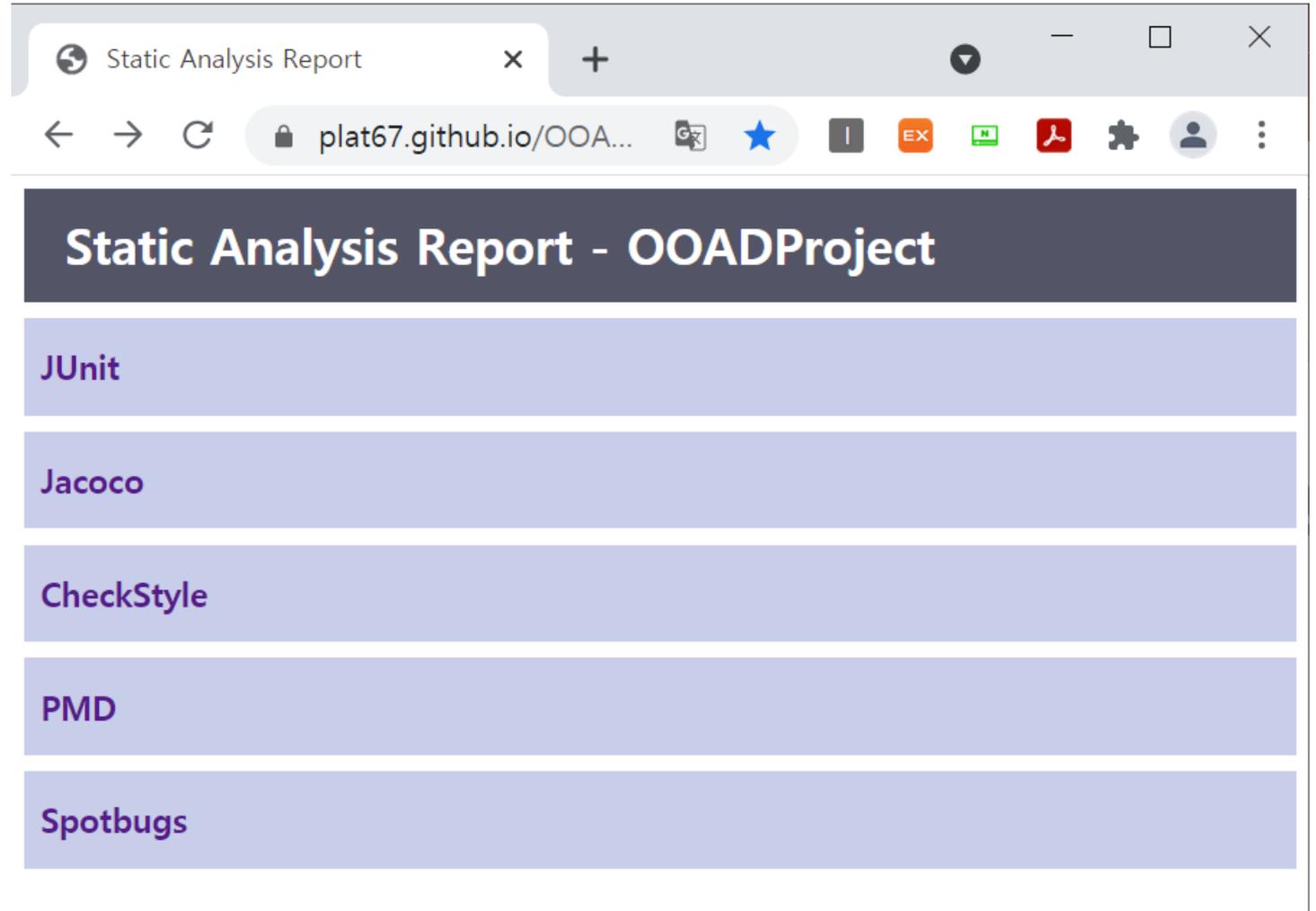
▼ Filtered Findings (64)
src/test/java/MainTest.java|6| 'method def modifier' has incorrect indentation level 4, expected level should be 2.
src/test/java/MainTest.java|8| 'method def rcurly' has incorrect indentation level 4, expected level should be 2.
src/test/java/MainTest.java|10| 'method def modifier' has incorrect indentation level 4, expected level should be 2.
src/test/java/MainTest.java|12| 'method def rcurly' has incorrect indentation level 4, expected level should be 2.
src/test/java/MainTest.java|14| 'method def modifier' has incorrect indentation level 4, expected level should be 2.
src/test/java/MainTest.java|16| 'method def rcurly' has incorrect indentation level 4, expected level should be 2.
src/test/java/MainTest.java|18| 'method def modifier' has incorrect indentation level 4, expected level should be 2.
src/test/java/MainTest.java|20| 'method def rcurly' has incorrect indentation level 4, expected level should be 2.
src/test/java/MainTest.java|22| 'method def modifier' has incorrect indentation level 4, expected level should be 2.
src/test/java/MainTest.java|24| 'method def rcurly' has incorrect indentation level 4, expected level should be 2.
src/test/java/MainTest.java|26| 'method def modifier' has incorrect indentation level 4, expected level should be 2.
src/test/java/MainTest.java|28| 'method def rcurly' has incorrect indentation level 4, expected level should be 2.
src/test/java/MainTest.java|30| 'method def modifier' has incorrect indentation level 4, expected level should be 2.
src/test/java/MainTest.java|32| 'method def rcurly' has incorrect indentation level 4, expected level should be 2.
src/main/java/Main.java|2| 'member def modifier' has incorrect indentation level 4, expected level should be 2.
src/main/java/Main.java|3| 'member def modifier' has incorrect indentation level 4, expected level should be 2.
src/main/java/Main.java|4| 'member def modifier' has incorrect indentation level 4, expected level should be 2.
src/main/java/Main.java|6| 'ctor def modifier' has incorrect indentation level 4, expected level should be 2.
src/main/java/Main.java|7| 'ctor def' child has incorrect indentation level 8, expected level should be 4.
src/main/java/Main.java|8| 'ctor def rcurly' has incorrect indentation level 4, expected level should be 2.
src/main/java/Main.java|10| 'ctor def modifier' has incorrect indentation level 4, expected level should be 2.
```

- GitHub Actions은 환경 구성 시 작성하는 workflow에 있어 매우 개방적이고 다양하게 구현 가능
=> 즉, 원하면 다 구현 필수
- workflow의 시간이 제한되므로
각 분석 도구들의 Report(.html)를 따로 보여
줄 수 있는 workflow 외부의 호스팅 필요

02 Static Analysis / Unit Test Report 개선



- GitHub와 연동하여 Public Repository에 한해 무료 Website Hosting 제공
- GitHub Actions을 통해 Build시 발생하는 Report를 즉각적으로 반영하여 보여줄 수 있음.



JUnit Report

Test Summary

8	1	0	0.023s
tests	failures	ignored	duration

87%
successful

Failed tests

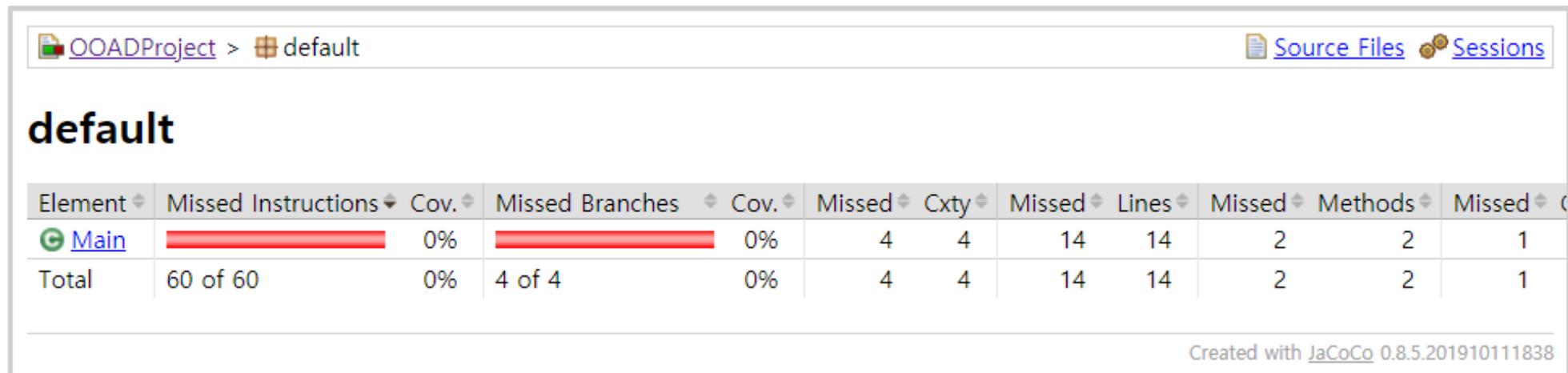
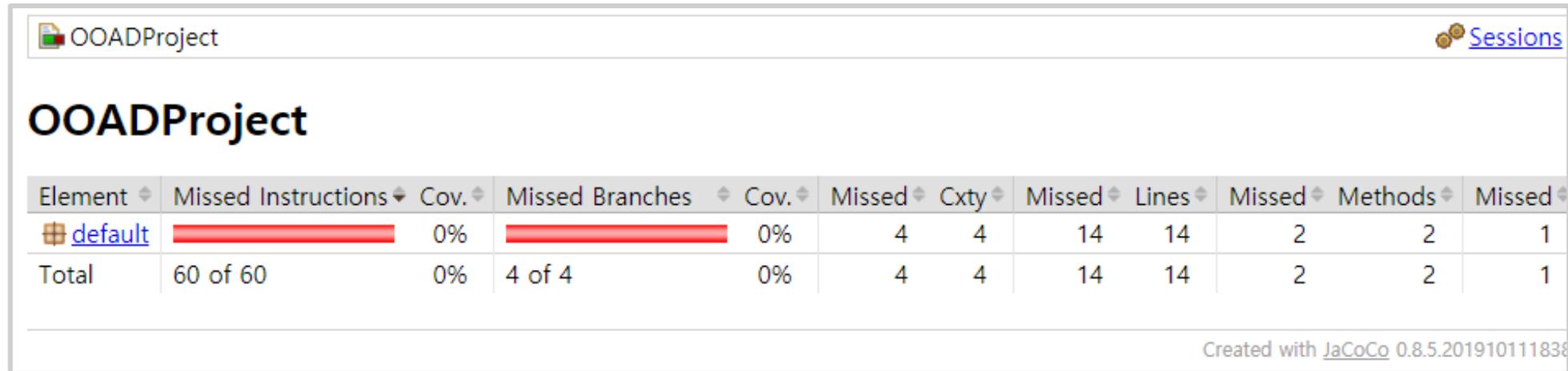
Packages

Classes

MainTest. retError()

Generated by [Gradle 6.1.1](#) at 2021. 4. 28. 오후 12:39:27

Jacoco Report



SpotBugs Report

Warnings

Click on a warning row to see full context information.

Internationalization Warnings

Code Warning

Dm Found reliance on default encoding in Main.main(String[]): new java.io.InputStreamReader(InputStream)

Dodgy code Warnings

Code Warning

DLS Dead store to N in Main.main(String[])

NP Dereference of the result of readLine() without nullcheck in Main.main(String[])

NP Immediate dereference of the result of readLine() in Main.main(String[])

Details

DLS_DEAD_LOCAL_STORE: Dead store to local variable

Summary

Warning Type	Number
Internationalization Warnings	1
Dodgy code Warnings	3
Total	4

Checkstyle Report

CheckStyle Audit

Designed for use with [CheckStyle](#) and [Ant](#).

Summary

Files	Errors
1	39

Error Description	Line
Missing a Javadoc comment.	6
'method def modifier' has incorrect indentation level 4, expected level should be 2.	8
Missing a Javadoc comment.	8
'method def' child has incorrect indentation level 8, expected level should be 4.	9
WhitespaceAround: '=' is not preceded with whitespace.	9
'method def' child has incorrect indentation level 8, expected level should be 4.	10
'method def' child has incorrect indentation level 8, expected level should be 4.	11
Local variable name 'N' must match pattern <code>^[a-z]([a-z0-9][a-zA-Z0-9]*)?\$</code> .	11

03 System Testing TestQuality



- MileStones (Cycle 기간 설정 가능)
- Test Suite, Test Case 설정
- Test Plan, Test Plan Run 설정
- Run에 따른 결과 확인 가능
- Git 연동으로 코드 바로 접근 가능,
빠른 결함 관리 가능

The screenshot displays the TestQuality web interface. At the top, there's a "Test Plans" section with a summary table and a progress chart. The summary table shows the following counts:

Pass	3 / 5
Fail	1 / 5
Skip	1 / 5
Pending	0 / 5
Block	0 / 5
Retest	0 / 5

The progress chart shows a green area representing passed tests and a red area representing failed tests over time. Below the chart are filters for Pass, Pending, Fail, Block, Retest, and Skip.

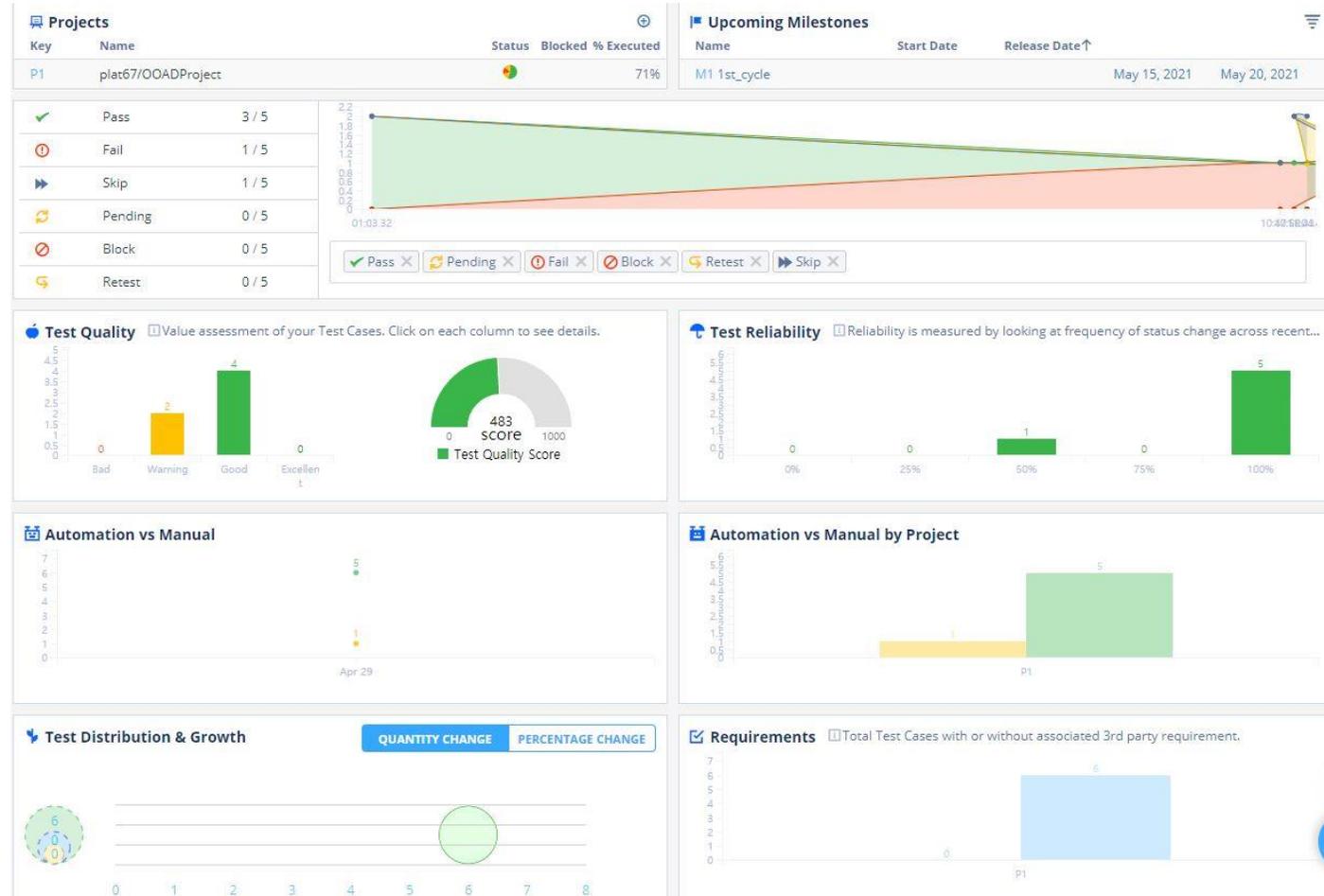
The main section is titled "Test Plans" and contains a table with the following data:

Key	Name	Description	Updated At
TP7	Calculate Price (Cash)	시스템이 선택된 상품들의 가격을 계산하고 ...	about 10 hours ago
TP6	Pay by Card	사용자가 상품의 가격합을 카드로 결제한다.	about 10 hours ago
TP5	Pay by Cash	사용자가 상품의 가격합을 현금으로 결제한다.	about 10 hours ago
TP4	Choose Item	사용자가 자판기에서 구입할 상품을 고른다.	about 10 hours ago
TP3	Show Item	시스템이 현재 자판기에서 판매중인 제품 및 ...	about 10 hours ago

Below this is the "Test Plan Runs" section with a table showing the status of individual test runs:

Key	Name	Complete	Created At	Status	Blocked	% Executed
TPR4	Pay by Cash Run	☑	less than a minute ago	🟡		50%
TPR3	Choose Item Run		9 minutes ago	🟡		50%
TPR2	Choose Item Run	☑	17 minutes ago	🔴		100%
TPR1	Show Item Test Run	☑	about 10 hours ago	🟢		100%

Testquality Board



04 Issue Tracking Jira



- OOAD에 적합
(스프린트, 스크럼 별 이슈 관리)
- Issue 관리에 대한 History를 통해
비슷한 Issue 발생 시의 처리 용이

프로젝트 / konkuk_VV_t_6_2021 / KVT62 보드

칸반 보드

릴리즈 ▾

🔍 👤 내 이슈만 최근 업데이트됨

백로그 2

- Tests should include assertions
KVT62-9
- Standard outputs should not be used directly to log anything
KVT62-10

개발하기로 선택됨 0

진행 중 1

- CTIP 구축
KVT62-2

완료 1

- gradle 구성
KVT62-3

최근에 수정된 이슈만 표시하고 있습니다.
🔍 오래된 이슈를 찾으시니까?

Jira - Testquality, SonarQube 연동

The screenshot shows the Jira project page for 'konkuk_VV_t_6_2021'. The left sidebar contains a list of project items, with 'SonarQube' highlighted in a red box. The main content area displays the project name 'Project: teamvv_testing' and the SonarQube ID 'teamvv_testing (2021)'. A 'Quality Gate: FAILED' status is shown in a red box. Below this, four circular gauges represent different quality metrics: Size (XS, 23 lines of code), Reliability (A, 0 bugs), Security (A, 0 vulnerabilities), and Maintainability (C, 11 code smells, +10 technical debt, 1h 21min technical debt, 11.7% technical debt ratio). At the bottom, two more gauges show 'Duplications' at 0% and 'Coverage' at 0%. A red box highlights the 'Test Quality' button in the top navigation bar.

konkuk_VV_t_6_2021
소프트웨어 프로젝트

KVT62 보드 보드

로드맵

칸반 보드

보고서

이슈

컴포넌트

코드

릴리스

프로젝트 페이지

OOADProject

Slack integration

SonarQube

항목 추가

회사에서 관리하는 프로젝트에 참여하고

Project: teamvv_testing

SonarQube id: teamvv_testing (2021)

Quality Gate: **FAILED**

Size XS 23 lines of code

Reliability A 0 bugs

Security A 0 vulnerabilities

Maintainability C 11 code smells (+10) 1h 21min technical debt 11.7% technical debt ratio

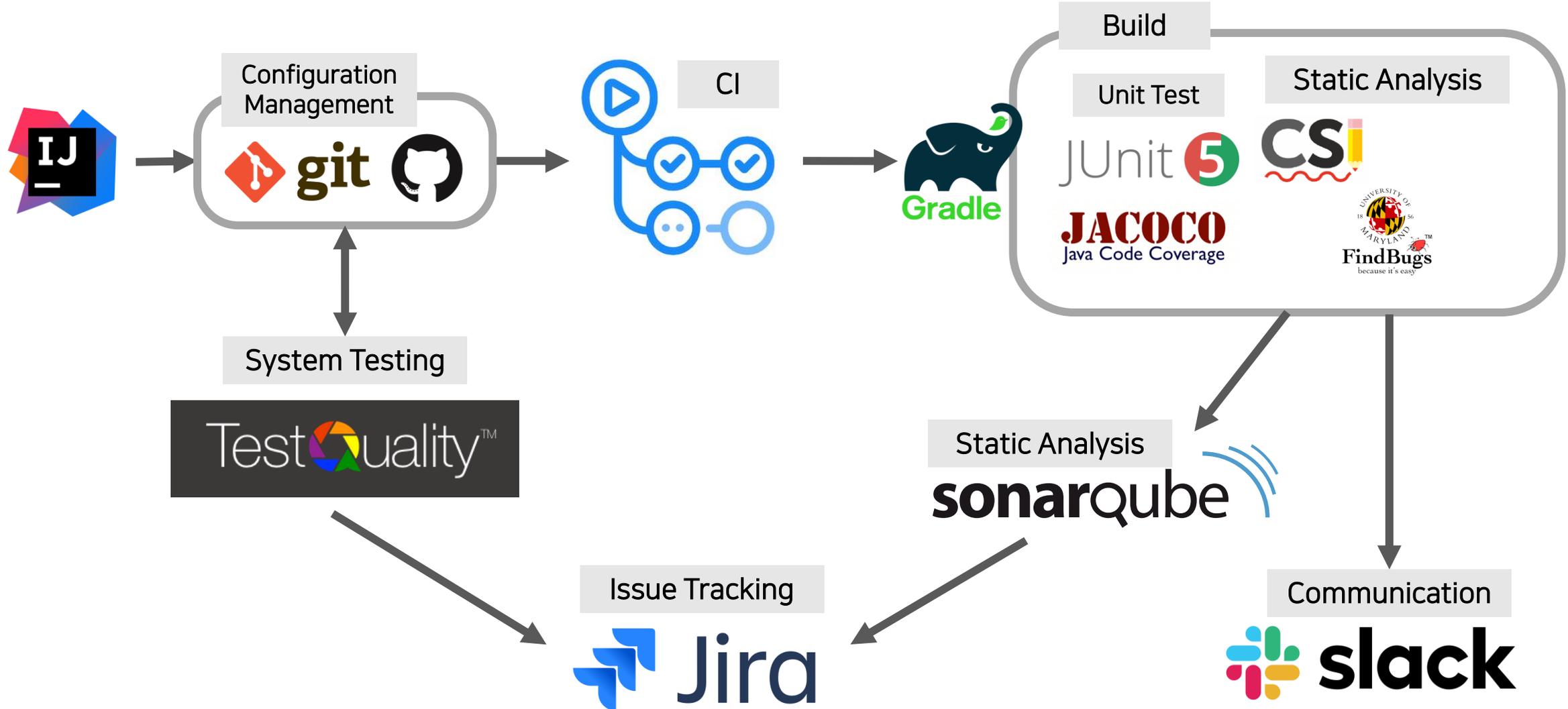
Duplications 0%

Coverage 0%

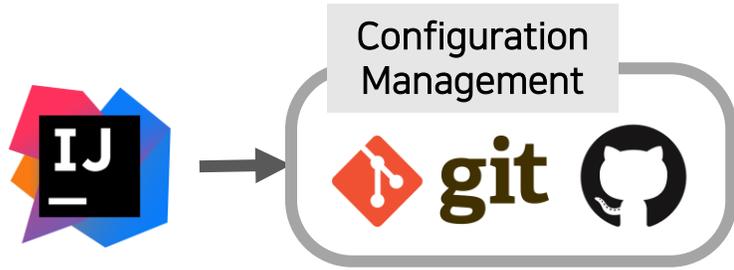
Test Quality

새 앱 찾기

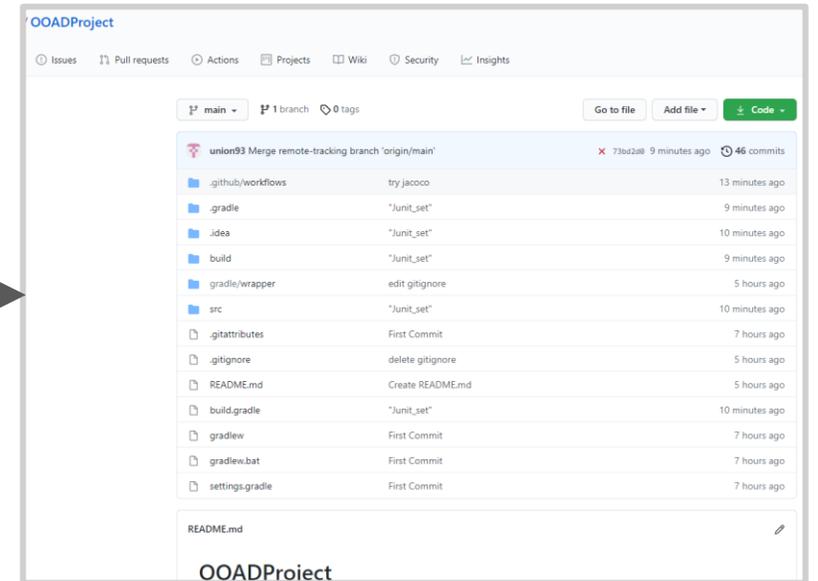
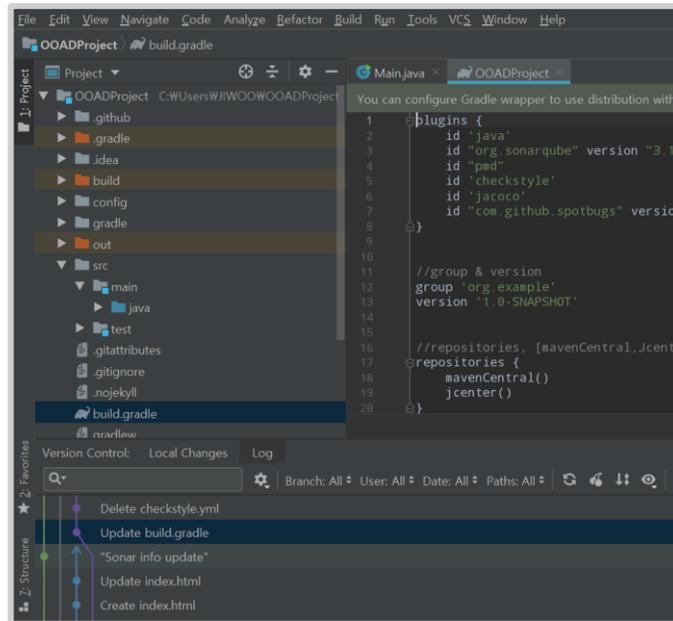
05 CTIP Traceability



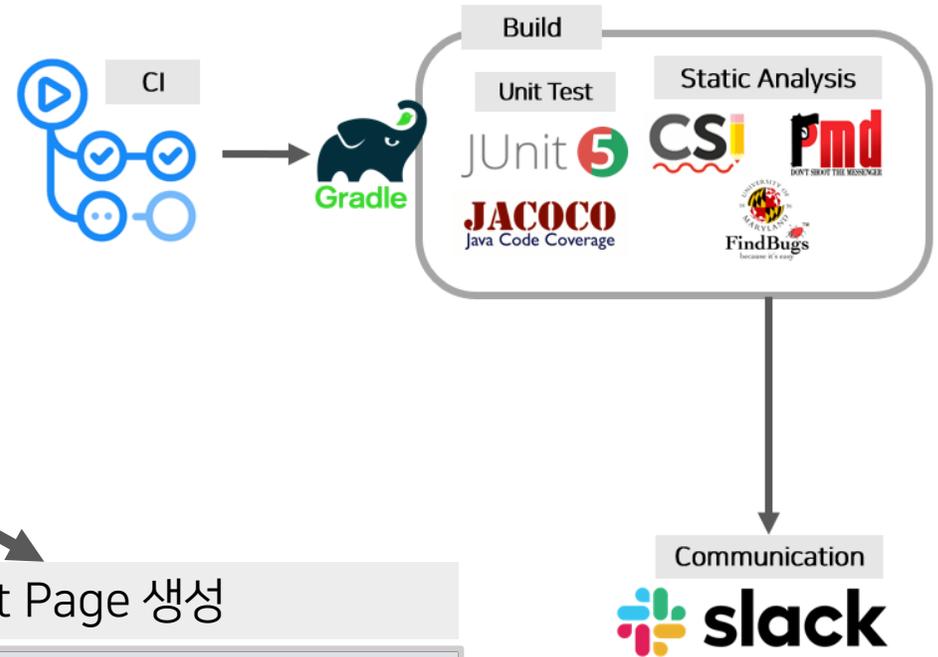
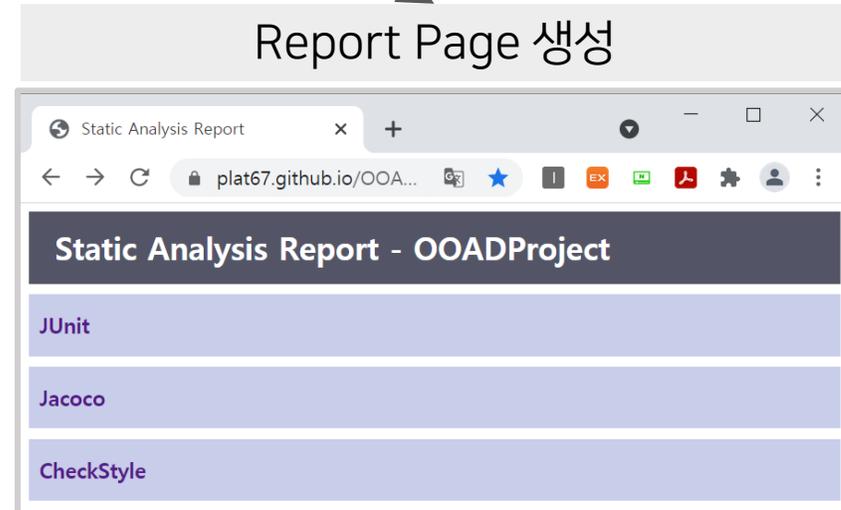
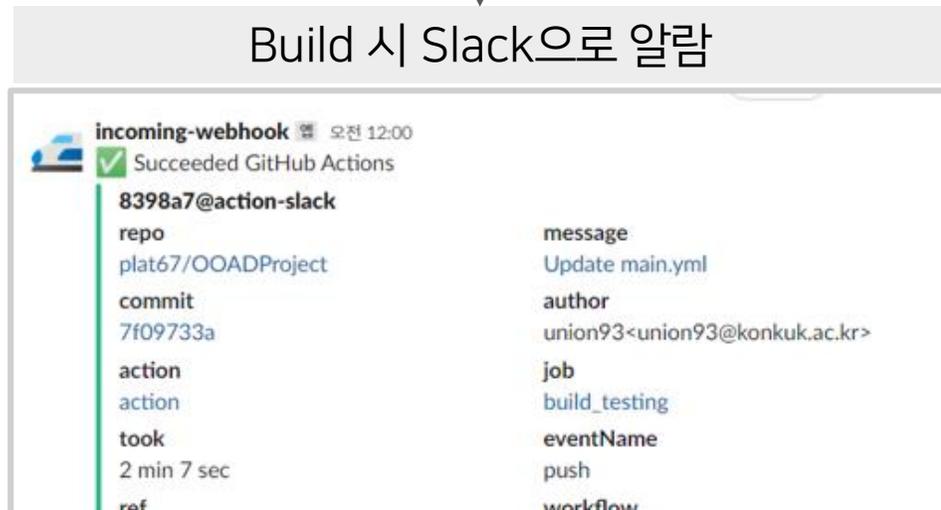
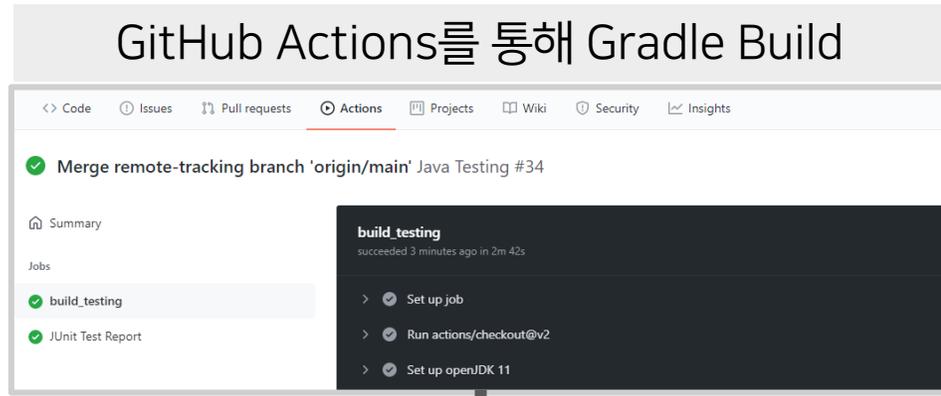
IntelliJ(IDE) → GitHub Develop branch로 pull request



IntelliJ에서 Commit



GitHub Actions Build 후 Slack으로 알림 + Report 생성



Jira에 발생한 Issue 등록 후 관리

Sonar/Testquality를 통해 분석된 Code Smell 등의 문제를 Jira Issue에 추가

Tests should include assertions	Java	1	+	KVT62-9
Standard outputs should not be used directly to log anything	Java	2	+	KVT62-10
Assertion arguments should be passed in the correct order	Java	1	+	

Jira의 칸반 보드를 통한 Issue 관리

프로젝트 / konkuk_VV_t_6_2021 / KVT62 보드

칸반 보드

백로그 2

- Tests should include assertions
KVT62-9
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개발하기로 선택됨 0

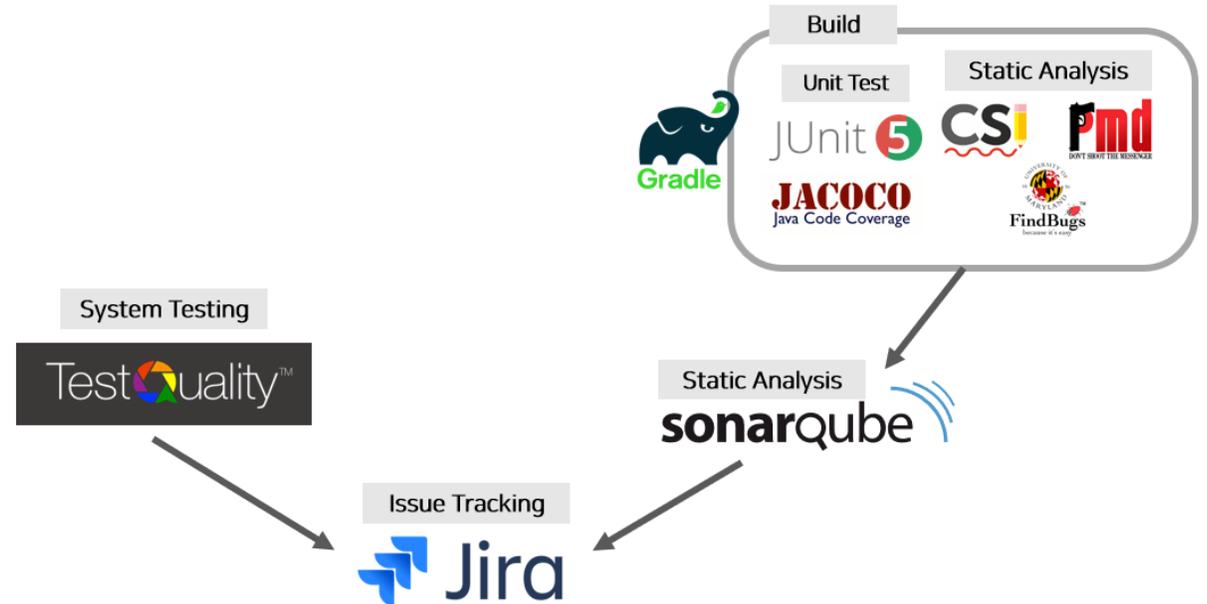
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오래된 이슈를 찾으시니까?



Overall

