

프로젝트 품질 보고서 for SonarQube 소개

이 문서는 CURVC Project Report for SonarQube 플러그인 정보를 공유하기 위해 작성되었다.

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Project Report for SonarQube

CURVC Project Report for SonarQube 플러그인은 커브에서 개발하고 유지보수하는 SonarQube 플러그인으로 현재 SonarQube 프로젝트의 품질 현황을 화면 혹은 PDF 형태로 Export하는 것을 지원하는 플러그인입니다.

주요 기능

- 프로젝트의 이슈 요약 정보
SonarQube 프로젝트 이슈의 요약 정보와 이슈의 룰 현황을 제공합니다.
- 프로젝트의 이슈 리스트 출력
전체 이슈를 PDF로 Export하고 룰과 설명, 이슈 코드 라인 정보를 제공합니다.
- 이슈 타입에 따른 필터 제공
SonarQube에 발견된 이슈 타입을 필터하여 원하는 보고서 생성을 지원합니다.
- 이슈 Severity에 따른 필터 제공
SonarQube에 발견된 이슈 Severity를 필터하여 원하는 보고서 생성을 지원합니다.

세부 기능

프로젝트 품질 리포트

품질 리포트 뷰는 현재 분석된 SonarQube 프로젝트의 현황을 기반으로 요약현황, 발견된 룰 현황, 발견된 버그 룰의 현황을 한페이지에 보고서 형식으로 출력합니다.

The screenshot displays the SonarQube web interface. The top navigation bar includes links for Projects, Issues, Rules, Quality Profiles, Quality Gates, and Administration. A search bar is present on the right. The main header shows the project name 'Sample Sonar Scanner' and a status 'Last analysis had 2 warnings' dated November 23, 2020. The left sidebar contains a 'Report filter' section with checkboxes for Issue Type (Reliability, Security, Maintainability) and Severity (Blocker, Critical, Major, Minor, Info). The main content area shows the 'SonarQube Report (Summary)' for the project 'Sample Sonar Scanner'. It includes a table with project details (Project, User, Date, Profile, Gate) and a 'Summary' table with various metrics (Quality Gate, Reliability, Security, Maintainability, Coverage, Duplications, Unresolved, Fixed, Language, Files, Classes, Functions, LoC, Lines, False Positive, Won't Fix). Below the summary is a 'Rules (10)' table listing specific rules and their counts.

Project	Sample Sonar Scanner		
User	Administrator	Date	2021-01-07 20:22:01
Profile	Sonar way (flex), Sonar way (js), Sonar way (kotlin), Sonar way (php), Sonar way (py), Sonar way (web), Sonar way (xml)		Gate Sonar way

Summary			
Quality Gate	Passed	Language	flex, kotlin, php, py, web, xml
Reliability	1 (C)	Files	16
Security	1 (B)	Classes	3
Maintainability	33 (A) - 0d 3h	Functions	14
Coverage	1.2%	LoC	629
Duplications	23.8%	Lines	1067
Unresolved	35	False Positive	0
Fixed	3	Won't Fix	0

Rules (10)			
Type	Rule	Severity	Total
Reliability	"<html>" element should have a language attribute	Major	1
Security	Credentials should not be hard-coded	Blocker	1
Maintainability	The "print" statement should not be used	Major	18
Maintainability	Unused local variables should be removed	Minor	8

PDF(Summary) - 요약 정보 출력

화면에 출력되는 SonarQube 분석 결과를 PDF 파일로 Export 합니다. 다음은 요약 리포트 출력 화면의 예시를 보여줍니다.

SonarQube Report

Project	Sample Sonar Scanner		
User	Administrator	Date	2021-01-07 20:26:19
Profile	Sonar way (flex), Sonar way (js), Sonar way (kotlin), Sonar way (php), Sonar way (py), Sonar way (web), Sonar way (xml)	Gate	Sonar way

Summary

Quality Gate	Passed	Language	flex, kotlin, php, py, web, xml
Reliability	1 (C)	Files	16
Security	1 (B)	Classes	3
Maintainability	33 (A) - 0d 3h	Functions	14
Coverage	1.2%	LoC	629
Duplications	23.8%	Lines	1067
Unresolved	35	False Positive	0
Fixed	3	Won't Fix	0

Rules (10)

Issue Type : Reliability, Security, Maintainability
Severity : Blocker, Critical, Major, Minor, Info

Type	Rule	Severity	Total
Reliability	"<html>" element should have a language attribute	Major	1
Security	Credentials should not be hard-coded	Blocker	1
Maintainability	The "print" statement should not be used	Major	18
Maintainability	Unused local variables should be removed	Minor	8
Maintainability	Sections of code should not be commented out	Major	2
Maintainability	Cognitive Complexity of functions should not be too high	Critical	1
Maintainability	Source files should not have any duplicated blocks	Major	1
Maintainability	Functions should not be empty	Critical	1
Maintainability	Methods should not have identical implementations	Major	1
Maintainability	Class names should comply with a naming convention	Minor	1

PDF(Issue) - 이슈 리스트 출력

SonarQube 분석을 통해 발견된 이슈 리스트를 PDF 파일로 Export 합니다. 다음은 이슈 리스트 리포트의 예시 화면을 보여줍니다.

Issue List (35)

Issue Type : Reliability, Security, Maintainability
Severity : Blocker, Critical, Major, Minor, Info

Type	Maintainability	Severity	Critical
Tag	brain-overload		
Rule Name	Cognitive Complexity of functions should not be too high		
Description	Cognitive Complexity is a measure of how hard the control flow of a function is to understand. Functions with high Cognitive Complexity will be difficult to maintain.		
Path / Line	src/samples/letters.py / 67		
Defect Code	65: # Play a single game 66: 67: def play_once(): 68: # Choose a random number between 0 and 26, inclusive. 69: choice=26*random.random()		

Type	Maintainability	Severity	Critical
Tag	suspicious		
Rule Name	Functions should not be empty		
Description	There are several reasons for a function not to have a function body:		
Path / Line	src/kotlin/sample.kt / 7		

Defect Code	5: 6: // Code Smell - Empty function 7: fun emptyFunction() { 8: } 9:
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Type	Maintainability	Severity	Major
Tag	obsolete, python3		
Rule Name	The "print" statement should not be used		
Description	The print statement was removed in Python 3.0. The built-in function should be used instead.		