



Sri Lanka Institute of Information Technology

2019

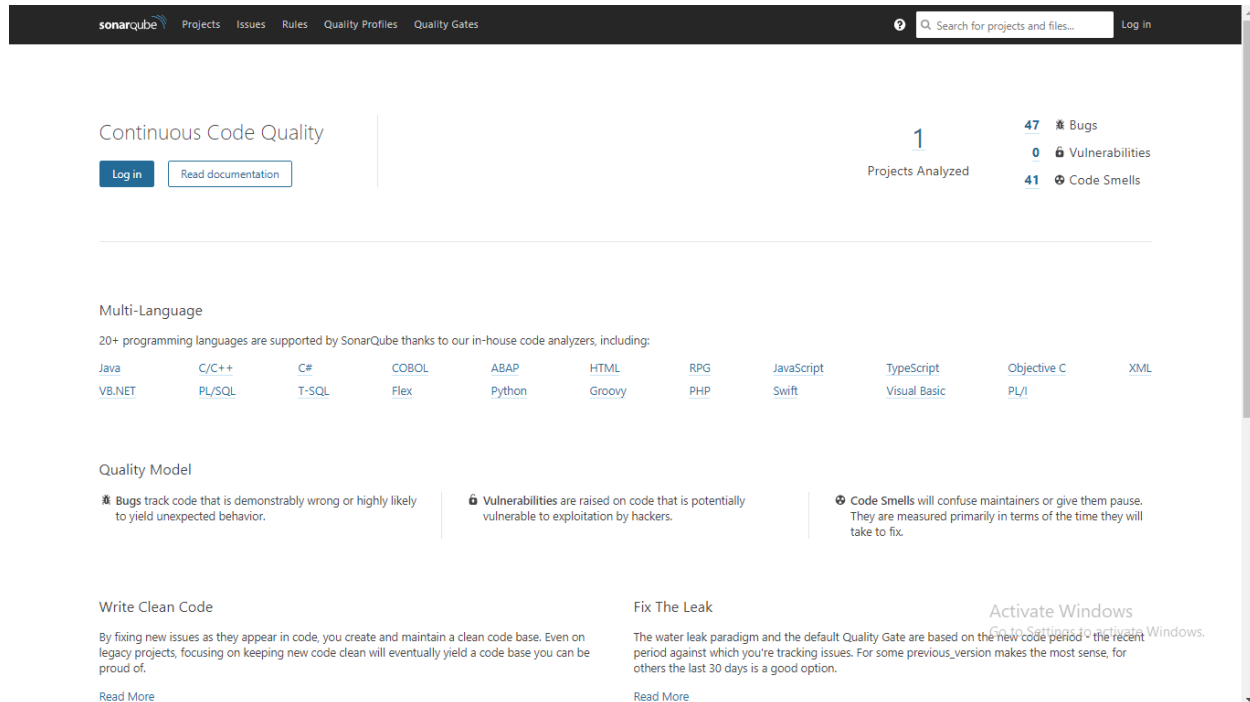
Learning Management System

WD_19_09

Sonar Qube Report

- 1) IT17080804 – Mahawela A.C
- 2) IT17101516 – Somakeerthi D.C.S
- 3) IT16144590 – De Silva G.W.I.U
- 4) IT16147638 – De Silva L.D.T
- 5) IT17026208 – Epa H.D
- 6) IT17015554 – B.G.L.A.Thilakawardhana

1. Overview status of projects analyzed



The dashboard provides a high-level overview of the code quality status. It includes a search bar at the top right and a 'Log in' button. The main section displays the 'Continuous Code Quality' status with a '1 Projects Analyzed' indicator. A summary of issues is shown: 47 Bugs, 0 Vulnerabilities, and 41 Code Smells. Below this, a 'Multi-Language' section lists supported programming languages: Java, VB.NET, C/C++, PL/SQL, C#, T-SQL, COBOL, Flex, ABAP, Python, HTML, Groovy, RPG, PHP, JavaScript, Swift, TypeScript, Visual Basic, Objective C, and XML. The 'Quality Model' section explains the metrics: Bugs track code that is demonstrably wrong or highly likely to yield unexpected behavior; Vulnerabilities are raised on code that is potentially vulnerable to exploitation by hackers; Code Smells will confuse maintainers or give them pause. They are measured primarily in terms of the time they will take to fix. The 'Write Clean Code' section encourages fixing new issues as they appear to maintain a clean code base. The 'Fix The Leak' section explains the water leak paradigm and the default Quality Gate. An 'Activate Windows' watermark is visible in the bottom right corner.

Continuous Code Quality

Log in Read documentation

1 Projects Analyzed

47 Bugs
0 Vulnerabilities
41 Code Smells

Multi-Language

20+ programming languages are supported by SonarQube thanks to our in-house code analyzers, including:

Java VB.NET C/C++ PL/SQL C# T-SQL COBOL Flex ABAP Python HTML Groovy RPG PHP JavaScript Swift TypeScript Visual Basic Objective C XML

Quality Model

- Bugs track code that is demonstrably wrong or highly likely to yield unexpected behavior.
- Vulnerabilities are raised on code that is potentially vulnerable to exploitation by hackers.
- Code Smells will confuse maintainers or give them pause. They are measured primarily in terms of the time they will take to fix.

Write Clean Code

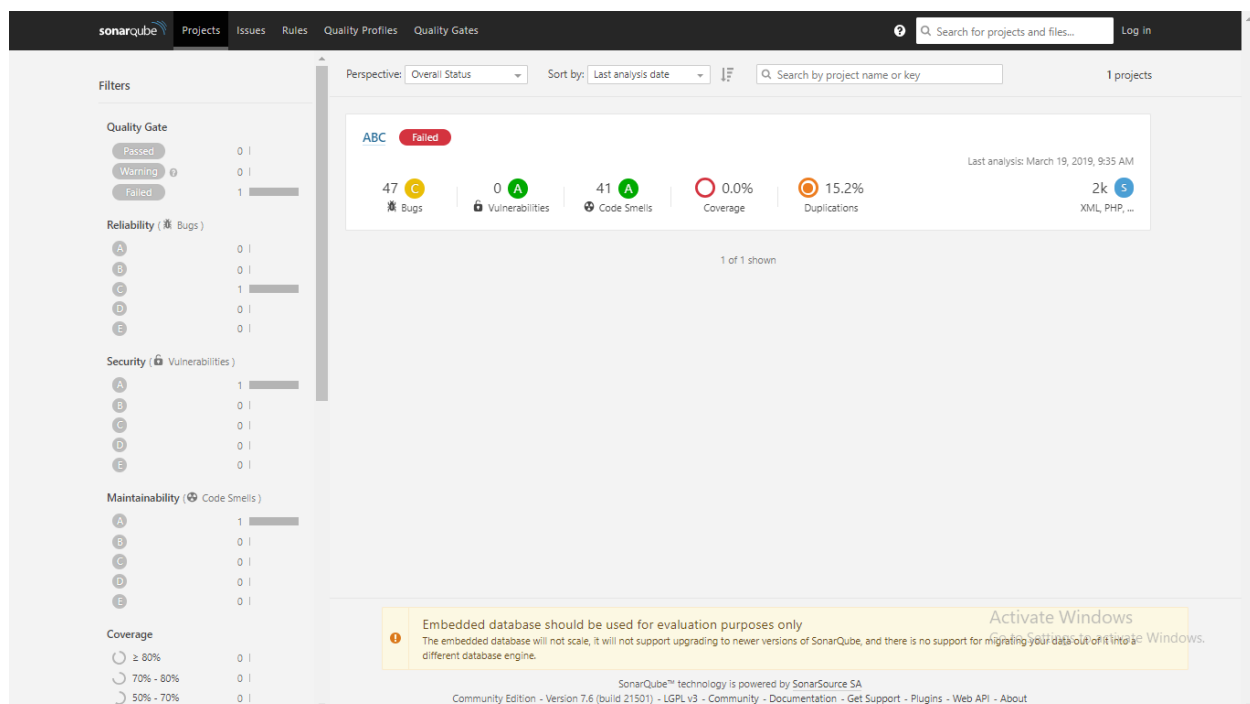
By fixing new issues as they appear in code, you create and maintain a clean code base. Even on legacy projects, focusing on keeping new code clean will eventually yield a code base you can be proud of.

[Read More](#)

Fix The Leak

The water leak paradigm and the default Quality Gate are based on the new code period - the recent period against which you're tracking issues. For some previous_version makes the most sense, for others the last 30 days is a good option.

[Read More](#)



The Projects page shows a list of projects. The project 'ABC' is selected, showing a 'Failed' status. The project details include a summary of issues: 47 Bugs, 0 Vulnerabilities, 41 Code Smells, 0.0% Coverage, and 15.2% Duplications. The last analysis was performed on March 19, 2019, at 9:35 AM. The project is associated with 2k issues. The left sidebar shows filters for Quality Gate, Reliability (Bugs), Security (Vulnerabilities), Maintainability (Code Smells), and Coverage. The bottom of the page features a warning message about the embedded database and a footer with SonarQube version information and links to documentation and support.

Perspective: Overall Status Sort by: Last analysis date Search by project name or key 1 projects

ABC Failed

47 Bugs 0 Vulnerabilities 41 Code Smells 0.0% Coverage 15.2% Duplications

Last analysis: March 19, 2019, 9:35 AM

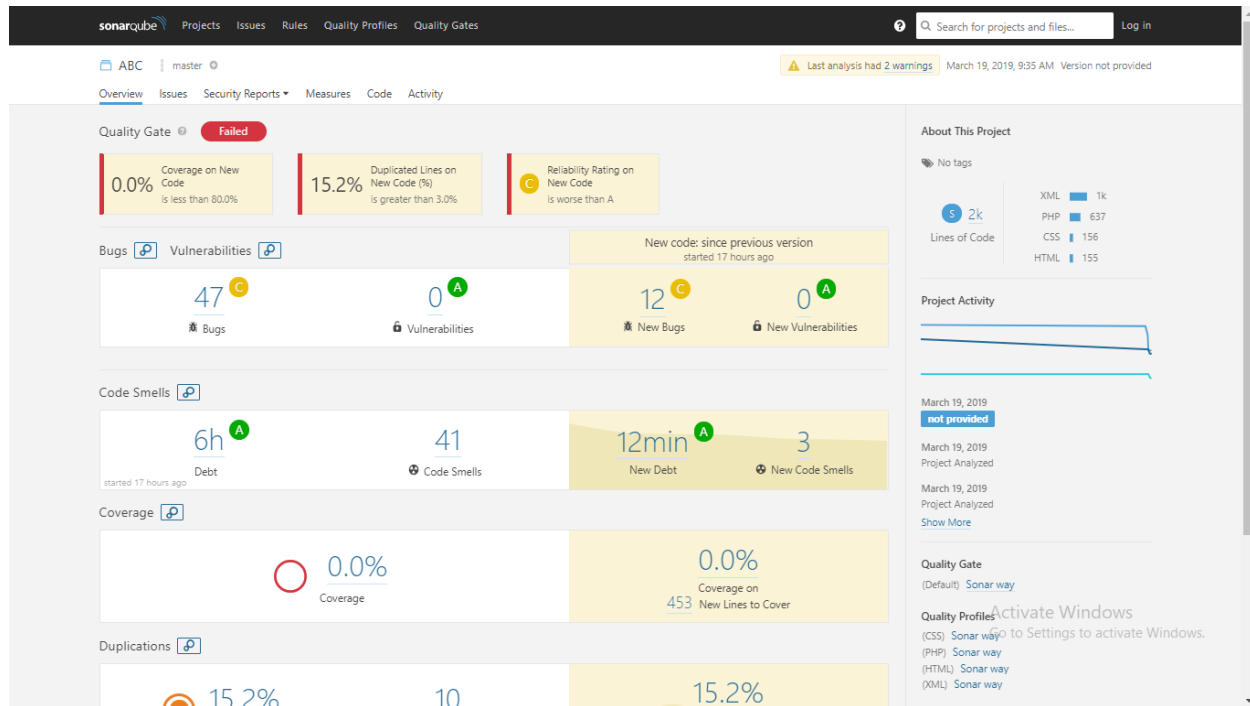
2k Issues XML, PHP, ...

1 of 1 shown

Embedded database should be used for evaluation purposes only
The embedded database will not scale, it will not support upgrading to newer versions of SonarQube, and there is no support for migrating your data out of it into a different database engine.

SonarQube™ technology is powered by SonarSource SA
Community Edition - Version 7.6 (build 21501) - LGPL v3 - Community - Documentation - Get Support - Plugins - Web API - About

2. Project Overview



3. Project Issues

sonarqube Projects Issues Rules Quality Profiles Quality Gates

Search for projects and files... Log in

ABC master

Last analysis had 2 warnings March 19, 2019, 9:35 AM Version not provided

Overview Issues Security Reports Measures Code Activity

Filters

Type

- Bug 47
- Vulnerability 0
- Code Smell 41
- Security Hotspot 17

Severity

- Blocker 0
- Critical 7
- Major 60
- Minor 21
- Info 0

Resolution

Status

Creation Date

Language

Rule

Standard

Tag

Directory

File

Assignee

Author

1 / 88 issues 2d effort

aboutus.php

Add an "alt" attribute to this image. ... 17 hours ago L49 accessibility

admin_manage.php

2 duplicated blocks of code must be removed. ... 17 hours ago pitfall

Define a constant instead of duplicating this literal "email" 3 times. ... 17 hours ago L12 design

Remove the literal "false" boolean value. ... 17 hours ago L30 clumsy

Define a constant instead of duplicating this literal "</td>" 3 times. ... 17 hours ago L106 design

contact.php

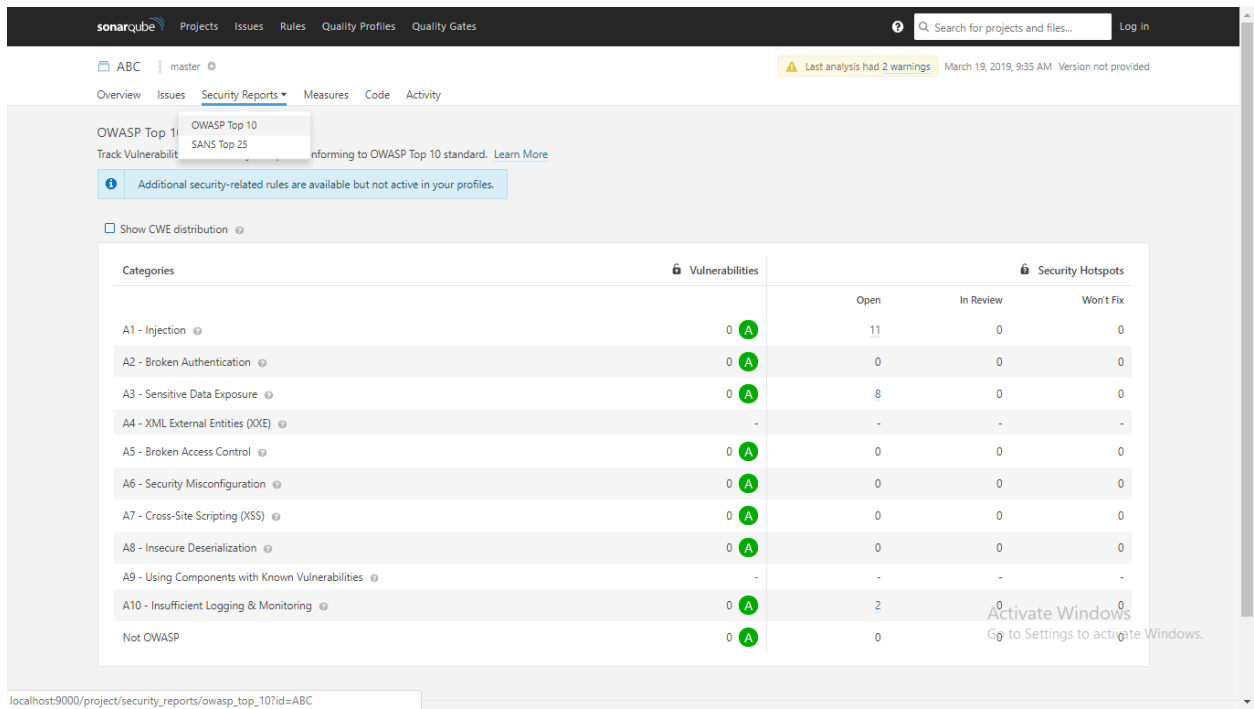
Remove this deprecated "align" attribute. ... 17 hours ago L51 html5, obsolete

Remove this deprecated "align" attribute. ... 17 hours ago L52 html5, obsolete










Replace this tag by 17 hours ago L53 accessibility

Add an "alt" attribute to this image. ... 17 hours ago L63 accessibility

4. OWASP Top 10 Security Report



The screenshot displays the SonarQube interface for a project named 'ABC' on the 'master' branch. The 'Security Reports' tab is active, showing the OWASP Top 10 standard. A dropdown menu is open, showing 'OWASP Top 10' and 'SANS Top 25'. A message indicates that additional security-related rules are available but not active in the profiles. The 'Show CWE distribution' checkbox is checked. The main table displays the OWASP Top 10 vulnerabilities, categorized by 'Categories', 'Vulnerabilities', and 'Security Hotspots' (Open, In Review, Won't Fix).

Categories	Vulnerabilities	Security Hotspots		
		Open	In Review	Won't Fix
A1 - Injection ⓘ	0 	11	0	0
A2 - Broken Authentication ⓘ	0 	0	0	0
A3 - Sensitive Data Exposure ⓘ	0 	8	0	0
A4 - XML External Entities (XXE) ⓘ	-	-	-	-
A5 - Broken Access Control ⓘ	0 	0	0	0
A6 - Security Misconfiguration ⓘ	0 	0	0	0
A7 - Cross-Site Scripting (XSS) ⓘ	0 	0	0	0
A8 - Insecure Deserialization ⓘ	0 	0	0	0
A9 - Using Components with Known Vulnerabilities ⓘ	-	-	-	-
A10 - Insufficient Logging & Monitoring ⓘ	0 	2	0	0
Not OWASP	0 	0	0	0

localhost:9000/project/security_reports/owasp_top_10?id=ABC

5. SANS Top 25 Security Report

sonarqube

ProjectsIssuesRulesQuality ProfilesQuality Gates

?

Search for projects and files...

Log in

ABCmaster

Last analysis had 2 warningsMarch 19, 2019, 9:35 AMVersion not provided

OverviewIssuesSecurity ReportsMeasuresCodeActivity

SANS Top 25

Track Vulnerability

OWASP Top 10

SANS Top 25

Informing to SANS Top 25 standard (25 CWE items in three categories). [Learn More](#)

Additional security-related rules are available but not active in your profiles.

Show CWE distribution

Categories	Vulnerabilities	Security Hotspots		
		Open	In Review	Won't Fix
Porous Defenses	0 A	6	0	0
Risky Resource Management	0 A	2	0	0
Insecure Interaction Between Components	0 A	9	0	0

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Activate Windows
Go to Settings to activate Windows.

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localhost:9000/project/security_reports/sans_top_25?id=ABC