

# Devops - Assignment - 08

RollNo: 21111036

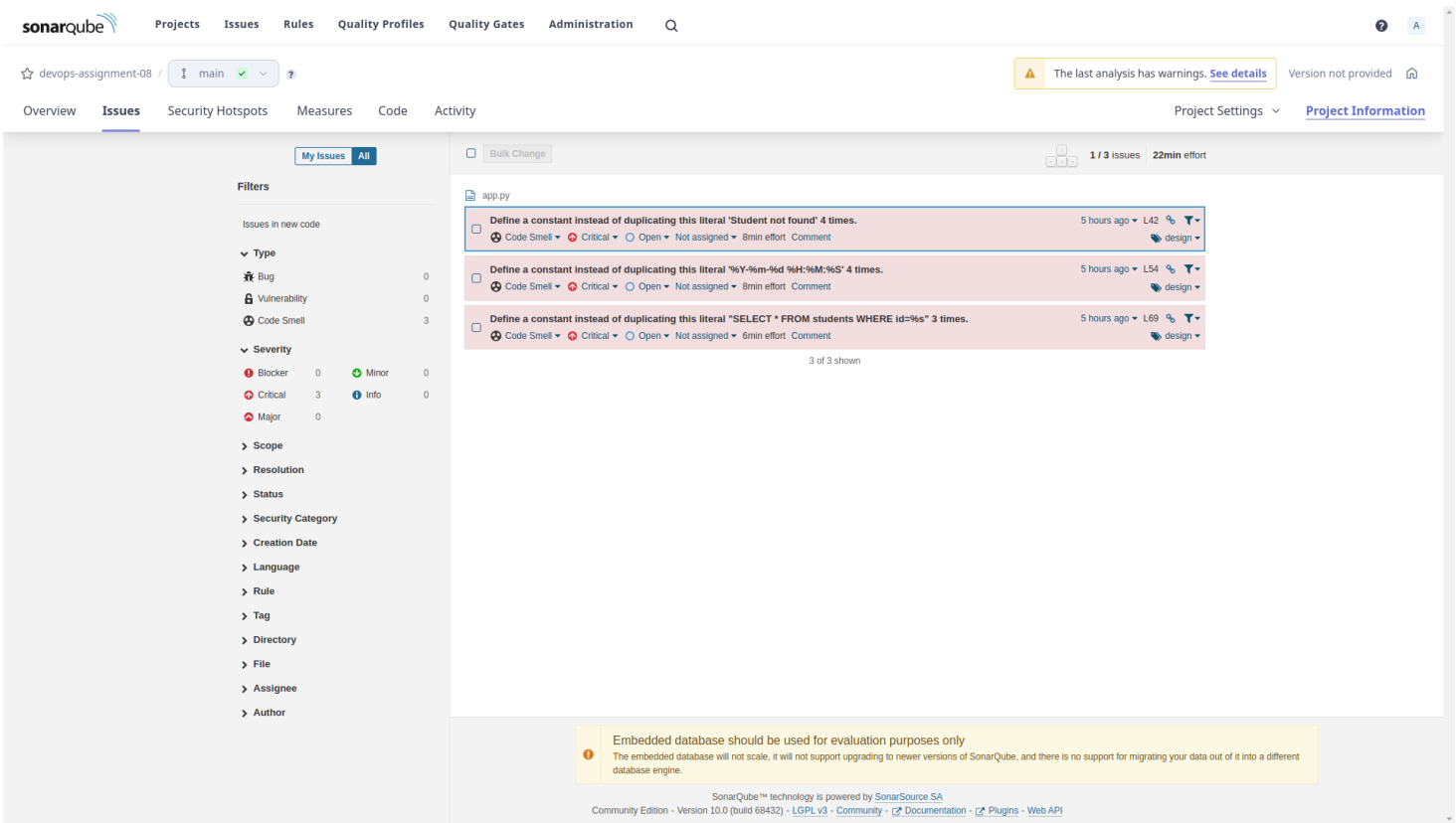
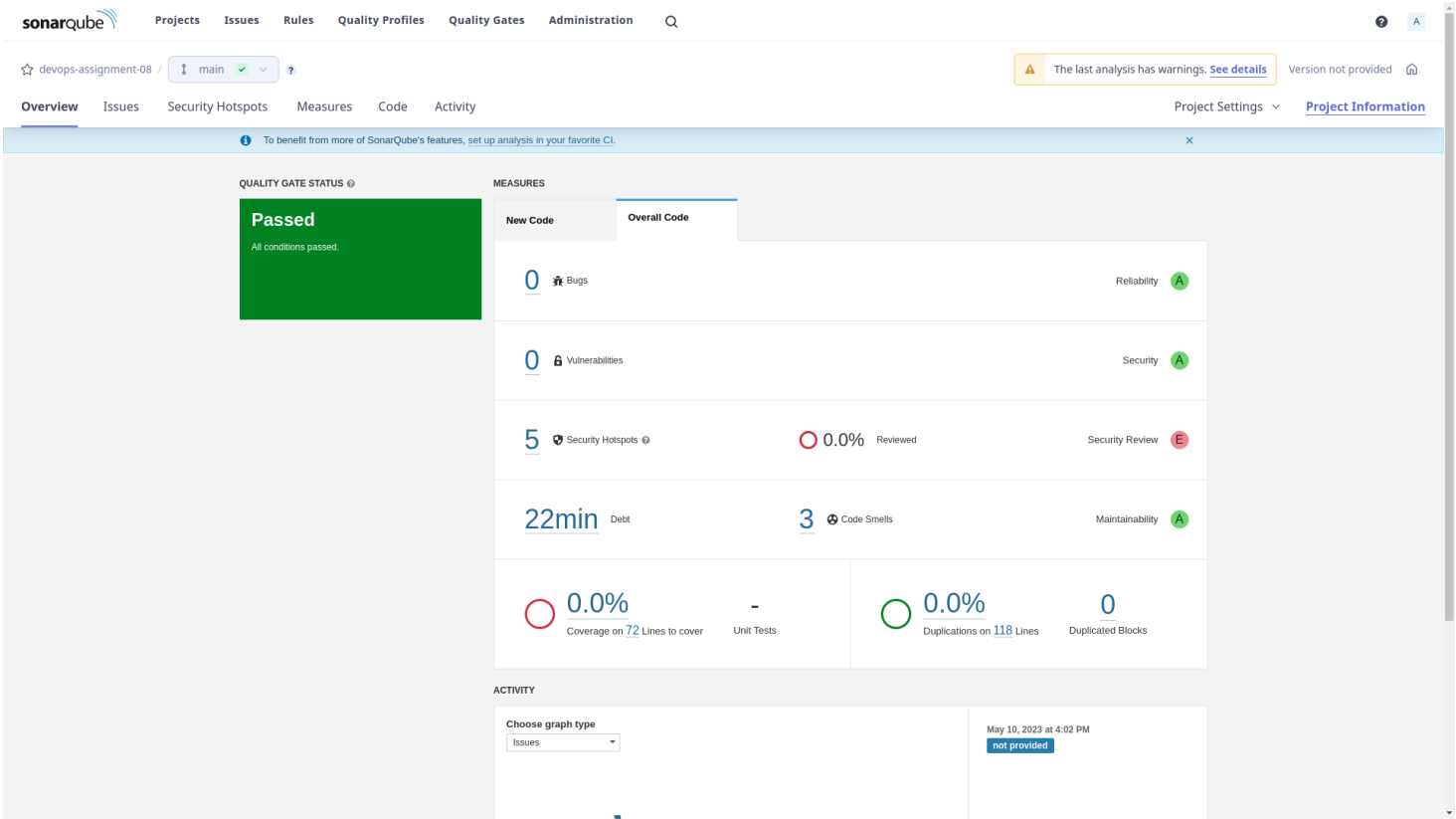
Class: MSc. C.S. B-21

## 1. Explain DevSecOps and all the terms.

DevSecOps (short for development, security, and operations) is a development practice that integrates security initiatives at every stage of the software development lifecycle to deliver robust and secure applications. DevSecOps infuses security into the continuous integration and continuous delivery (CI/CD) pipeline, allowing development teams to address some of today's most pressing security challenges at DevOps speed.

- **Security:** Security refers to the measures taken to protect a software system from threats, such as hackers, malware, and other attacks.
- **Continuous Integration (CI):** Continuous Integration is a practice that involves continuously integrating and testing code changes to ensure that the software system remains functional and stable.
- **Continuous Deployment (CD):** Continuous Deployment is a practice that involves automatically deploying code changes to production after passing a set of automated tests.
- **Vulnerability Scanning:** Vulnerability Scanning is the process of scanning a software system for vulnerabilities and weaknesses that could be exploited by attackers.
- **Code Analysis:** Code Analysis is the process of analyzing code to identify potential security issues and vulnerabilities.

2. Send the screenshot of SonarQube SAST analysis of code written in Assignment number 6.



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ProjectsIssuesRulesQuality ProfilesQuality GatesAdministration

devops-assignment-08 / main

The last analysis has warnings. See detailsVersion not provided

OverviewIssuesSecurity HotspotsMeasuresCodeActivity

Project SettingsProject Information

FiltersAssigned to meAllStatusTo reviewOverall code

5 Security Hotspots to review

Review priority: HIGH

Authentication2

Make sure that using ENV to handle a secret is safe here.

Dockerfile

Review priority: MEDIUM

Cross-Site Request Forgery (CSRF)1

Review priority: LOW

Permission1

Review priority: LOW

Others1

5 of 5 shown

Make sure that using ENV to handle a secret is safe here.

Using ENV or ARG to handle secrets is security-sensitive docker:56472

Status: TO REVIEW

This security hotspot needs to be reviewed to assess whether the code poses a risk.

Change status

Assignee: Not assigned

Where is the risk?What's the risk?Assess the riskHow can I fix it?

/Dockerfile

Open in IDE

Get Permalink

1FROM mysql:debian

2

3# WORKDIR /srv

4

5COPY requirements.txt /srv

6COPY app-run.sh /bin

7# COPY - /app

8ENV MYSQL\_DATABASE="students"

9ENV MYSQL\_USER="admin"

10ENV MYSQL\_PASSWORD="admin@123"

11

12ENV MYSQL\_ROOT\_PASSWORD="secret"

13ENV MYSQL\_PORT="3306"

14ENV MYSQL\_HOST="localhost"

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16ENV FLASK\_APP=/srv/api.py

17ENV FLASK\_DEBUG=0

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19EXPOSE 3306

20EXPOSE 5000

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The last analysis has warnings. [See details](#)Version not provided

OverviewIssuesSecurity HotspotsMeasuresCodeActivityProject SettingsProject Information

Search for files...

↑ ↓ to select files

← → to navigate

	Lines of Code	Bugs	Vulnerabilities	Code Smells	Security Hotspots	Coverage	Duplications
devops-assignment-08							
app.py	96	0	0	3	1	0.0%	0.0%
Dockerfile	22	0	0	0	4	—	0.0%

2 of 2 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 10.0 (build 68432) - [LGPL v3](#) - [Community](#) - [Documentation](#) - [Plugins](#) - [Web API](#)

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The last analysis has warnings. [See details](#)Version not provided

OverviewIssuesSecurity HotspotsMeasuresCodeActivityProject SettingsProject Information

Filter events

Select...

Start Date

Start Date

to

End Date

End Date

Reset dates

not provided

May 10, 2023

4:02 PM

Version: not provided

Choose graph type

Issues

There isn't enough data to generate an activity graph.