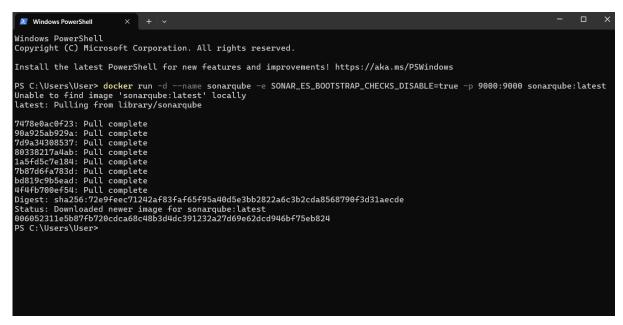
Anuprita Mhapankar D15A 29

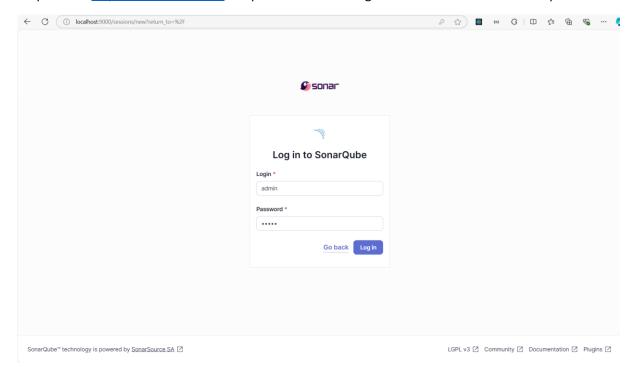
EXPERIMENT 7

Aim: To understand Static Analysis SAST process and learn to integrate Jenkins SAST to SonarQube/GitLab.

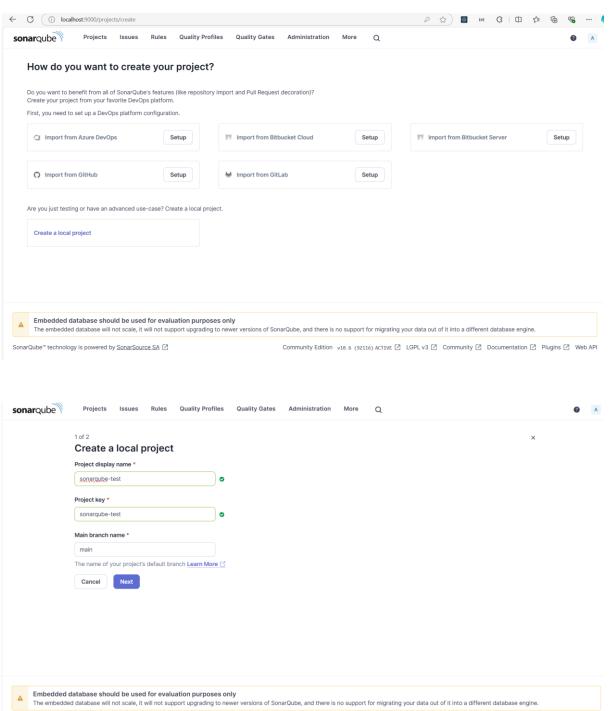
Step 1: Open Windows PowerShell and run the following command — docker run -d --name sonarqube -e SONAR_ES_BOOTSTRAP_CHECKS_DISABLE=true -p 9000:9000 sonarqube:latest WARNING: Run the following command only once

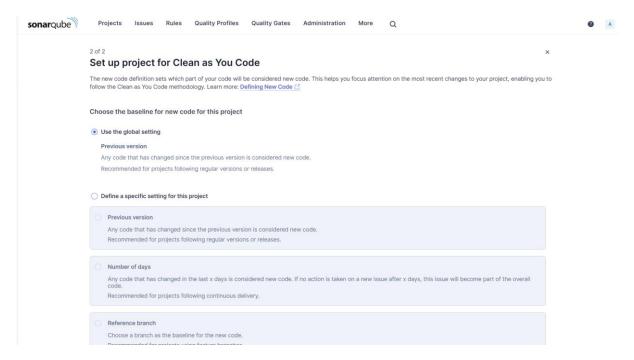


Step 2: Visit http://localhost:9000/ to open SonarQube. Login with username: admin and password: admin.

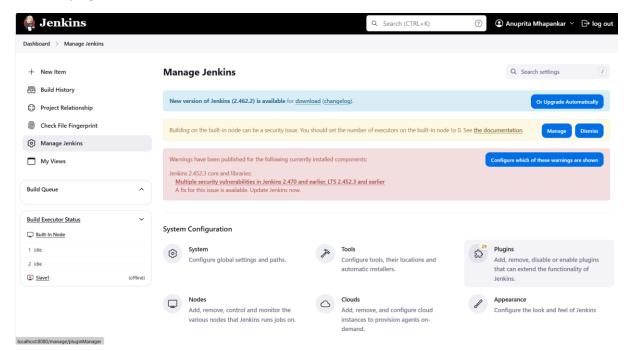


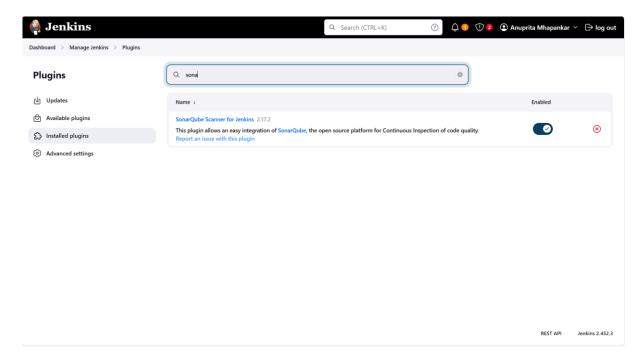
Step 3: Click on create a local project and name the project as sonarqube-test and key as sonarqube-test and click on the next button. In the next step select the "Use the global setting" option and click on create project.



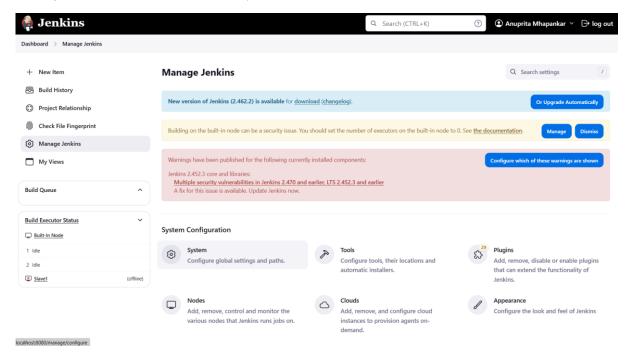


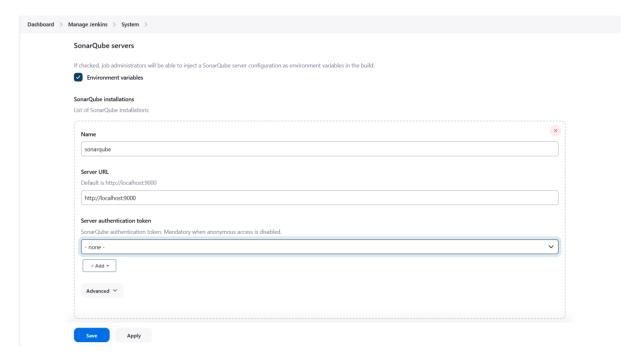
Step 4: Open Jenkins using http://localhost:8080/ and select Manage Jenkins, then select the Plugins and select available plugins from sidebar and search for SonarQube Scanner and install it. Once installed you can view the installed plugin in installed plugins section in sidebar.



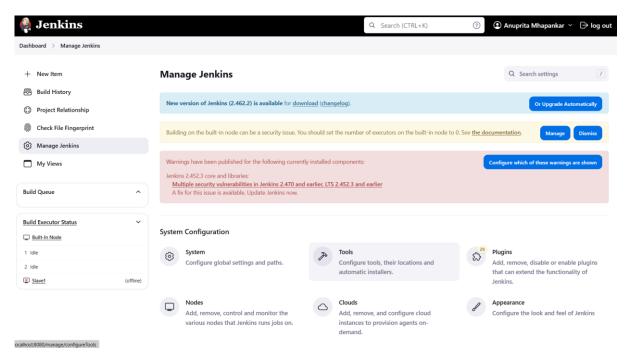


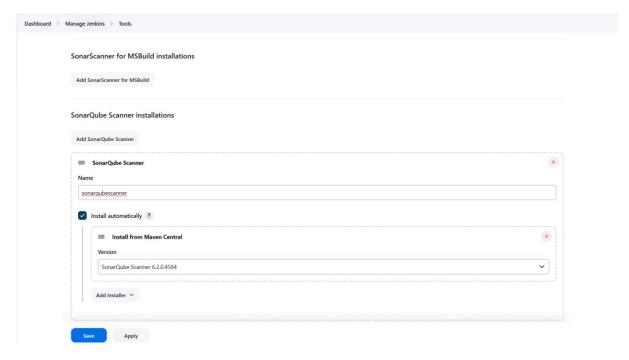
Step 5: Select Manage Jenkins, then select the System and then scroll down to SonarQube Server. Name the server as sonarqube and set the server url as http://localhost:9000/ then click on save.



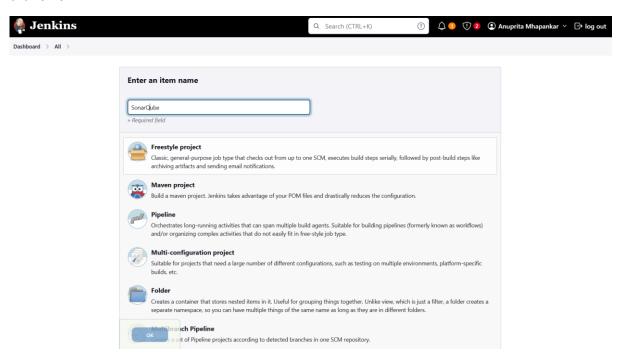


Step 6: Go to Jenkins Dashboard and select Manage Jenkins, then select the Tools and then scroll down to SonarQube Scanner installations. Name the sonarqube scanner as sonarqubescanner and select install automatically then click on save.



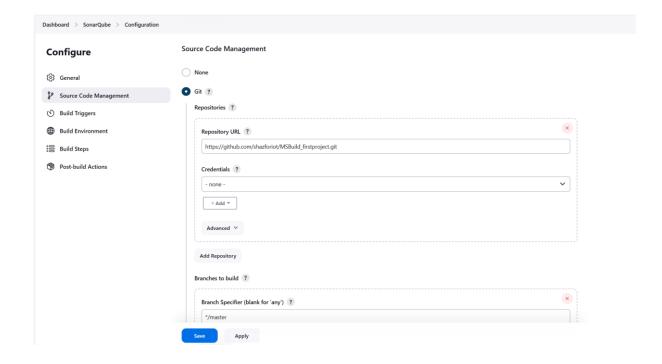


Step 7: Go to Jenkins dashboard and click on New Item and select Freestyle project and name it as SonarQube and then click on ok.



Step 8: For configuration, Select git and paste the following git repository in the repository url. https://github.com/shazforiot/MSBuild_firstproject

This is a simple Hello world project



Step 9: Under the Build steps select "Execute SonarQube Scanner" option and under Analysis Properties write the following -

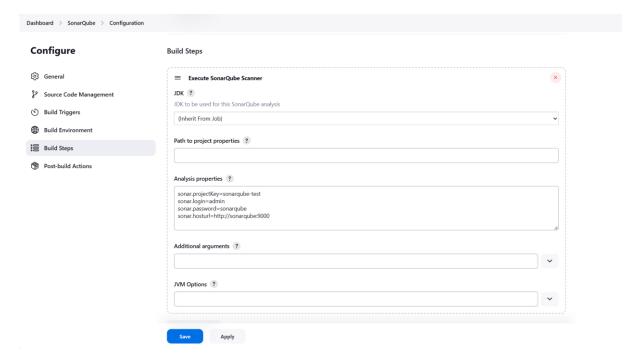
sonar.project Key = sonar qube-test

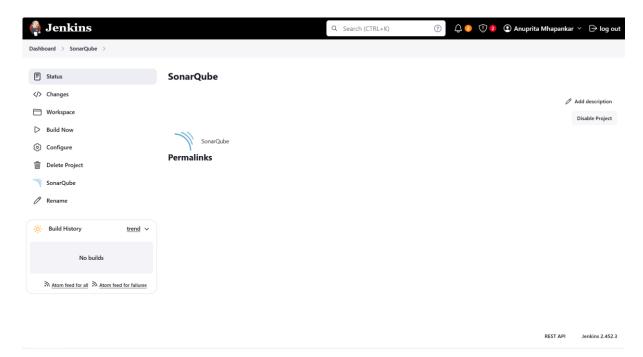
sonar.login=admin

sonar.password=sonarqube

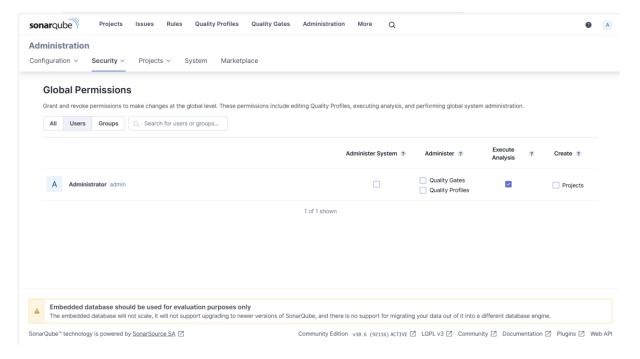
sonar.hosturl=http://sonarqube:9000

Then click on the save button.

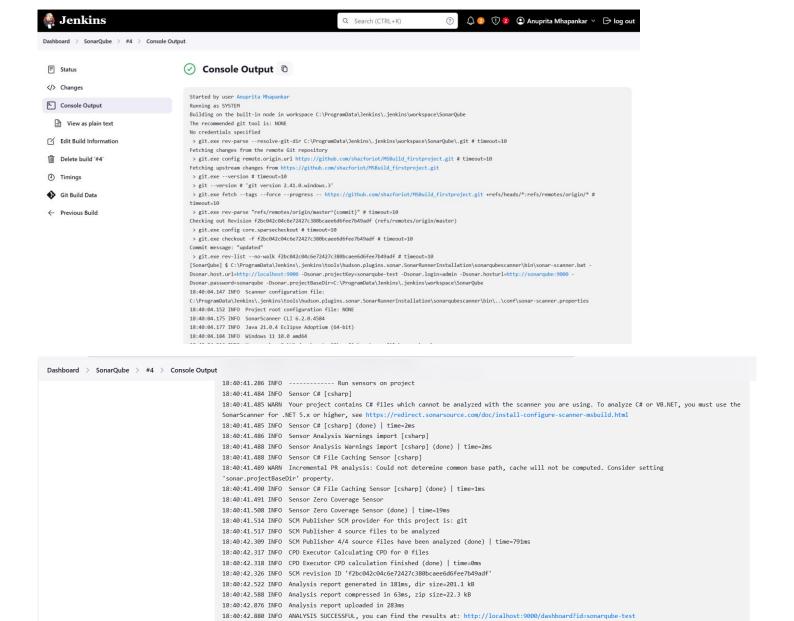




Step 10: Visit http://localhost:9000/admin/permissions and select the Users tab and for Administrator select the checkbox Execute Analysis.



Step 11: Now, come back to Jenkins and click on Build Now. The build is success.



18:40:42.881 INFO Note that you will be able to access the updated dashboard once the server has processed the submitted analysis report 18:40:42.882 INFO More about the report processing at http://localhost:9000/api/ce/task?id=d10eb30d-ebdd-4bb2-b564-0aa4ea71b0f2

REST API Jenkins 2.452.

Step 12: Visit the following URL to see the result - http://localhost:9000/dashboard?id=sonarqube-test&codeScope=overall

18:40:42.916 INFO Analysis total time: 25.189 s 18:40:42.926 INFO SonarScanner Engine completed successfully

18:40:43.027 INFO EXECUTION SUCCESS 18:40:43.029 INFO Total time: 38.885s

Finished: SUCCESS

