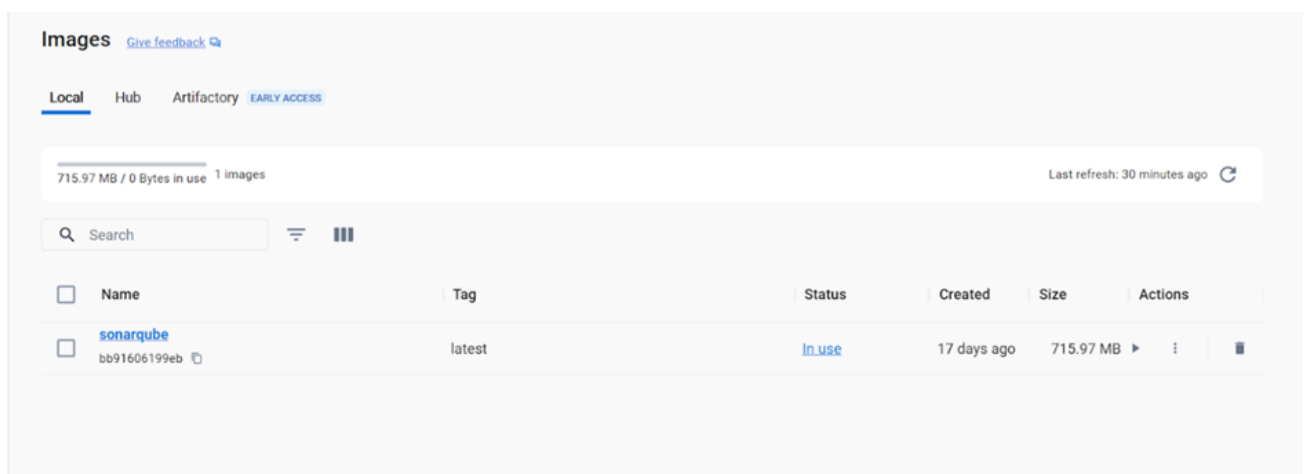# Experiment No 7

AIM: Installing SonarQube from the Docker Image

$ docker run -d --name sonarqube -e SONAR_ES_BOOTSTRAP_CHECKS_DISABLE=true -p 9000:9000

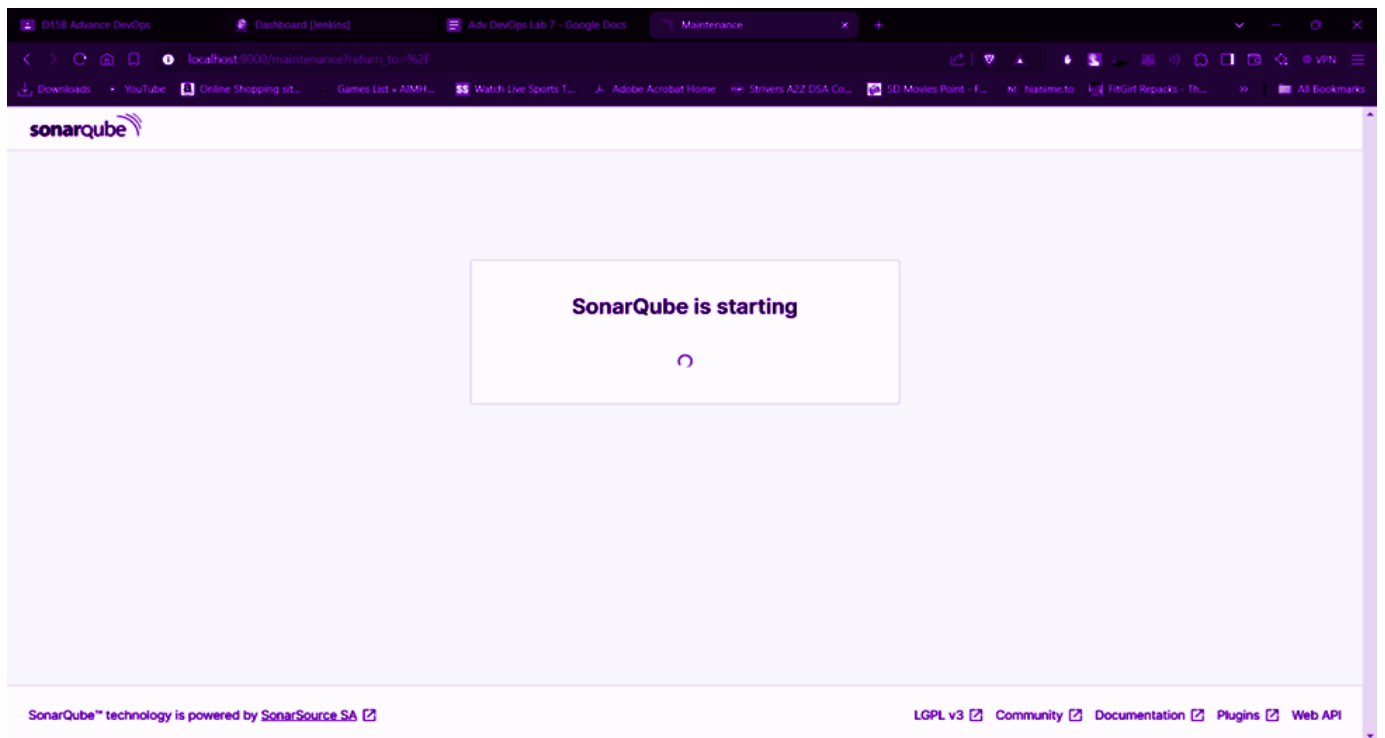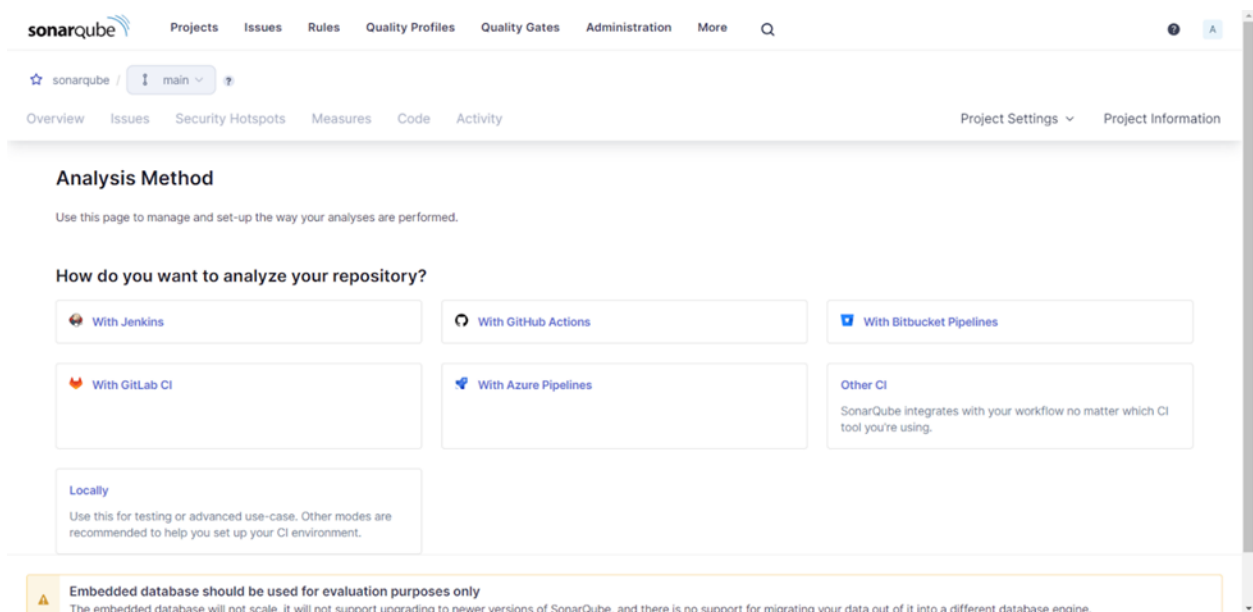Sonarqube:latest

go to the SonarQube page by typing:
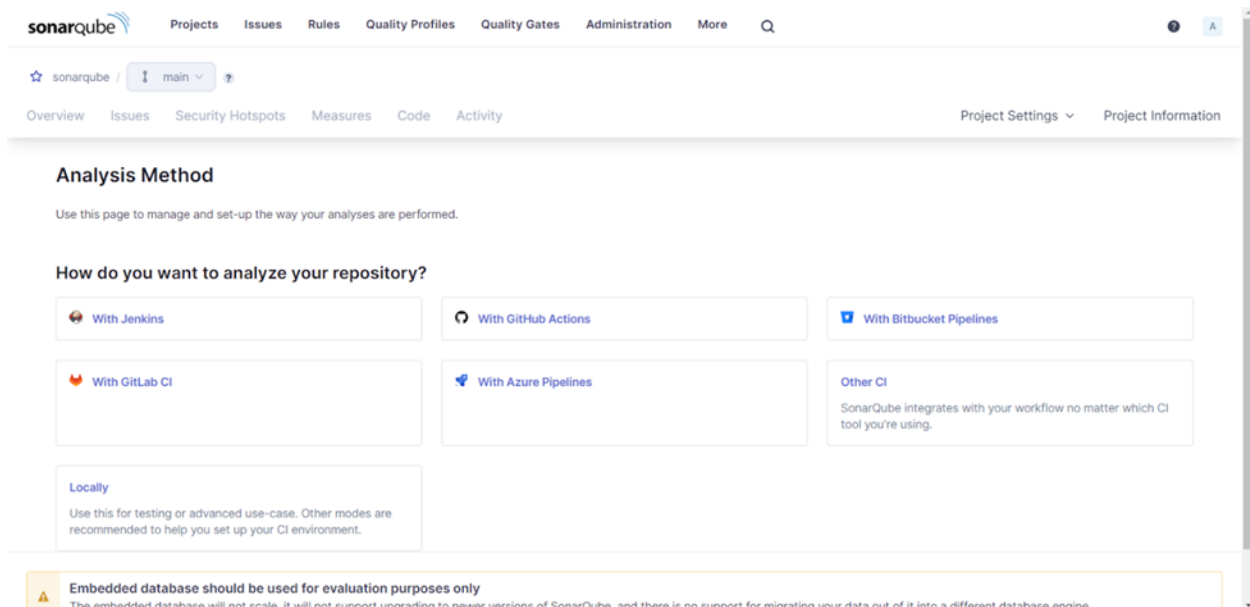
http://localhost:9000/ on your browser.
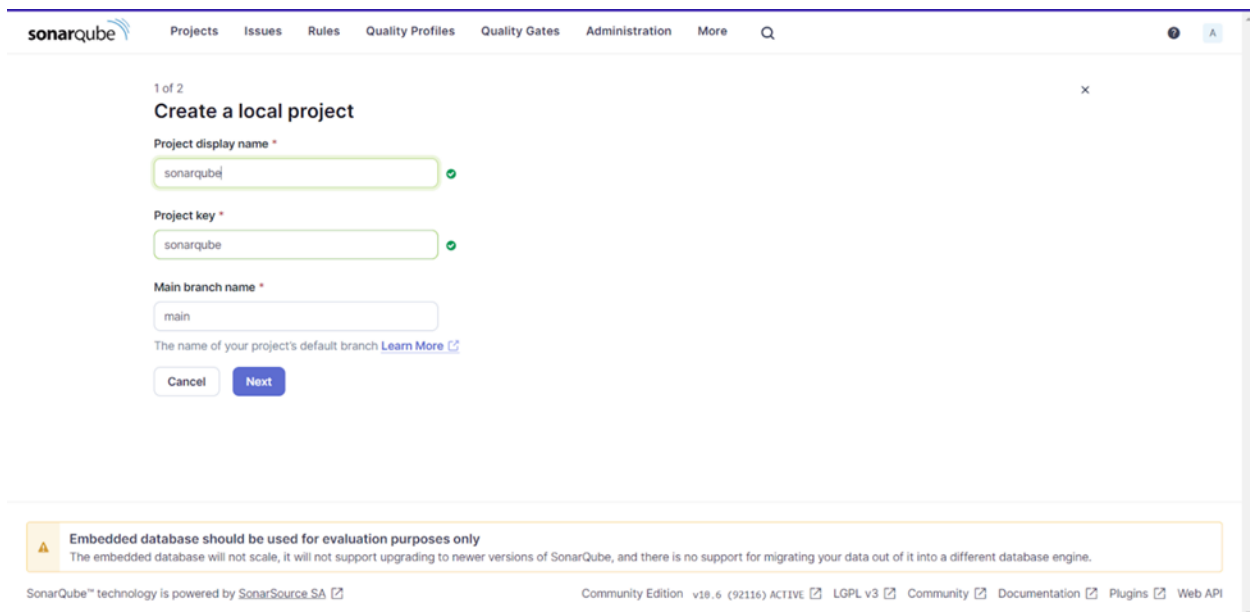
Installation is successful if you see this page

Update to new password

Create project manually:

Here project name is "AdDevops"

Set up project for Clean as You Code

The new code definition sets which part of your code will be considered new code. This helps you focus attention on the most recent changes to your project, enabling you to follow the Clean as You Code methodology. Learn more: Defining New Code

Choose the baseline for new code for this project

◉ Use the global setting

Previous version

Any code that has changed since the previous version is considered new code.

Recommended for projects following regular versions or releases.

○ Define a specific setting for this project

○ Previous version

Any code that has changed since the previous version is considered new code.

Recommended for projects following regular versions or releases.

○ Number of days

Any code that has changed in the last x days is considered new code. If no action is taken on a new issue after x days, this issue will become part of the overall code.

Recommended for projects following continuous delivery.

○ Reference branch

Choose a branch as the baseline for the new code.

Recommended for projects using feature branches.

Create project

open Jenkins

Go to Dashboard ->Manage Jenkins -> Plugin Manager and search fo

Plugins

🔍 sonarqube   /

Install	Name ↓	Released
☑	**SonarQube Scanner** 2.15 External Site/Tool Integrations Build Reports This plugin allows an easy integration of SonarQube, the open source platform for Continuous Inspection of code quality.	10 mo ago
☐	**Sonar Gerrit** 384.vdb_755265c28d External Site/Tool Integrations This plugin allows to submit issues from SonarQube to Gerrit as comments directly.	20 days ago
☐	**SonarQube Generic Coverage** 1.0 TODO	4 yr 1 mo ago

Install without restart   **Download now and install after restart**   Update information obtained: 1 day 11 hr ago   Check now

SonarQube Scanner under Available plugins for Jenkins and install without restart
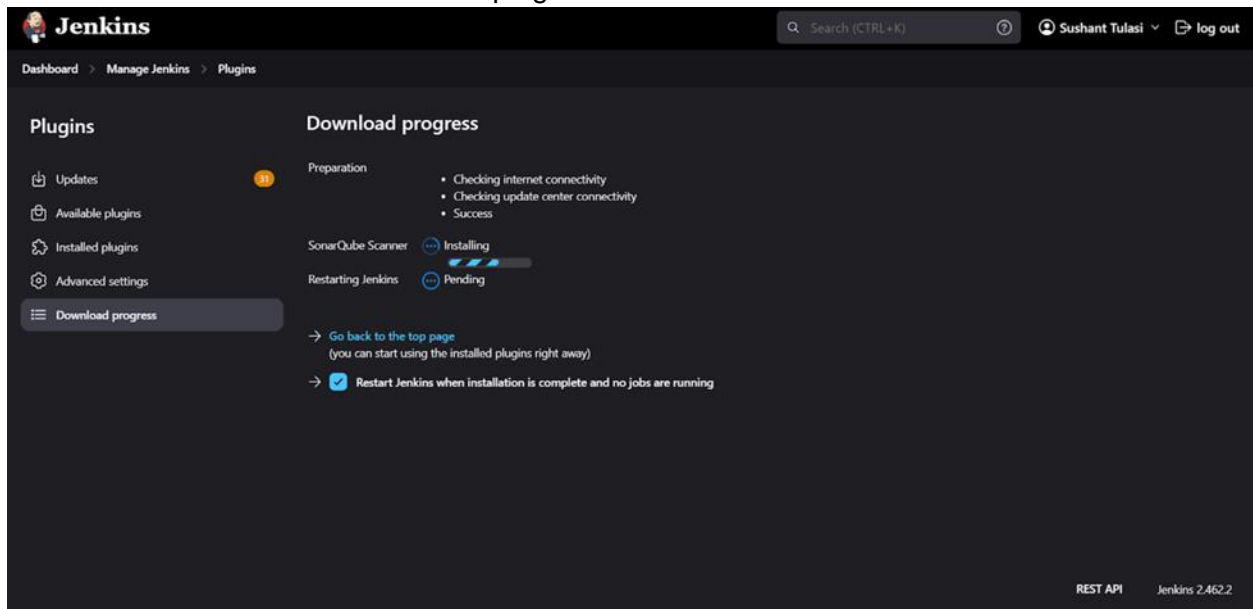
Under Jenkins ,

Dashboard -> Manage Jenkins -> Configure System ,

Look for SonarQube Servers and enter the details. Enter the Server Authentication Token

if needed.
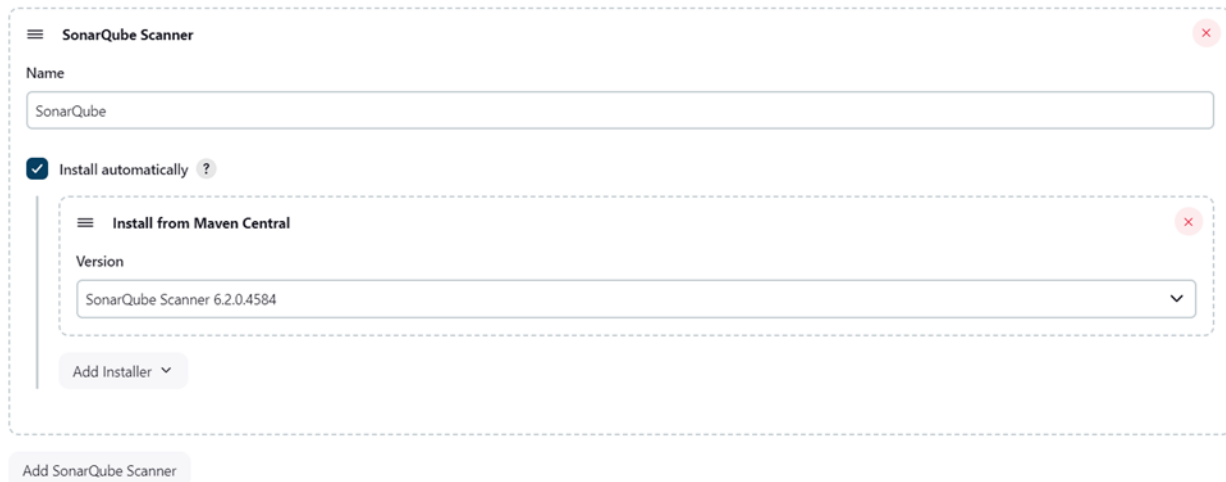

Search SonarQube Scanner under Dashboard -> Manage Jenkins -> Global

Tool Configuration.

Choose the latest configuration and choose Install Automatically.

create a New Item in Jenkins, choose a freestyle project.

Choose this GitHub repository in Source Code Management.

https://github.com/shazforiot/MSBuild_firstproject.git

Under Build ->Execute SonarQube Scanner, enter these Analysis

properties. Mention the SonarQube Project Key, Login, Password, and Host

URL.

sonar.projectKey=AdDevops

sonar.login=admin

sonar.password=abc

sonar.hosturl=http://localhost:9000/

Source Code Management

○ None

● Git ?

Repositories ?

Repository URL ?   ✕

https://github.com/shazforiot/MSBuild_firstproject.git

Credentials ?

- none -   ⌄

+ Add ▾

Advanced ⌄

Add Repository

Go to http://localhost:9000/ and enter your previously created username.

Go to Permissions and grant the Admin user Execute Permissions.

Build and Run:

Status
Changes
Workspace
Build Now
Configure
Delete Project
SonarQube
Rename

Project AdDevopsLab7

This is Lab 7.

✏ Edit description

Disable Project

SonarQube

Permalinks

Build History   trend ⌄

🔍 Filter builds...

⊘ #1
Sep 18, 2023, 10:31 PM

📶 Atom feed for all 📶 Atom feed for failures

Console Output:

Status
Changes
Console Output
  View as plain text
**Edit Build Information**
Delete build '#1'
Git Build Data

✅ **Console Output**

```
Started by user Prajakta Upadhye
Running as SYSTEM
Building on the built-in node in workspace C:\ProgramData\Jenkins\.jenkins\workspace\AdDevopsLab7
The recommended git tool is: NONE
No credentials specified
Cloning the remote Git repository
Cloning repository https://github.com/PrajaktaUpadhye6/MSBuild_firstproject.git
 > git.exe init C:\ProgramData\Jenkins\.jenkins\workspace\AdDevopsLab7 # timeout=10
Fetching upstream changes from https://github.com/PrajaktaUpadhye6/MSBuild_firstproject.git
 > git.exe --version # timeout=10
 > git --version # "git version 2.39.2.windows.1"
 > git.exe fetch --tags --force --progress -- https://github.com/PrajaktaUpadhye6/MSBuild_firstproject.git +refs/heads/*:refs/remotes/origin/* # timeout=10
 > git.exe config remote.origin.url https://github.com/PrajaktaUpadhye6/MSBuild_firstproject.git # timeout=10
 > git.exe config --add remote.origin.fetch +refs/heads/*:refs/remotes/origin/* # timeout=10
Avoid second fetch
 > git.exe rev-parse "refs/remotes/origin/master^{commit}" # timeout=10
Checking out Revision f2bc042c04c6e72427c380bcaee6d6fee7b49adf (refs/remotes/origin/master)
 > git.exe config core.sparsecheckout # timeout=10
 > git.exe checkout -f f2bc042c04c6e72427c380bcaee6d6fee7b49adf # timeout=10
Commit message: "updated"
First time build. Skipping changelog.
Unpacking https://repo1.maven.org/maven2/org/sonarsource/scanner/cli/sonar-scanner-cli/5.0.1.3006/sonar-scanner-cli-5.0.1.3006.zip to
C:\ProgramData\Jenkins\.jenkins\tools\hudson.plugins.sonar.SonarRunnerInstallation\AdDevops on Jenkins
[AdDevopsLab7] $ C:\ProgramData\Jenkins\.jenkins\tools\hudson.plugins.sonar.SonarRunnerInstallation\AdDevops\bin\sonar-scanner.bat -Dsonar.projectKey=AdDevops -Dsonar.login=admin -
Dsonar.hosturl=http://localhost:9000/ -Dsonar.password=abc -Dsonar.projectBaseDir=C:\ProgramData\Jenkins\.jenkins\workspace\AdDevopsLab7
INFO: Scanner configuration file: C:\ProgramData\Jenkins\.jenkins\tools\hudson.plugins.sonar.SonarRunnerInstallation\AdDevops\bin\..\conf\sonar-scanner.properties
INFO: Project root configuration file: NONE
INFO: SonarScanner 5.0.1.3006
INFO: Java 18.0.2.1 Oracle Corporation (64-bit)
```

```
14:42:33.145 INFO  CPD Executor CPD calculation finished (done) | time=0ms
14:42:33.151 INFO  SCM revision ID 'f2bc042c04c6e72427c380bcaee6d6fee7b49adf'
14:42:33.466 INFO  Analysis report generated in 95ms, dir size=201.0 kB
14:42:33.546 INFO  Analysis report compressed in 54ms, zip size=22.4 kB
14:42:33.834 INFO  Analysis report uploaded in 285ms
14:42:33.847 INFO  ANALYSIS SUCCESSFUL, you can find the results at: http://localhost:9000/dashboard?id=sonarqube
14:42:33.847 INFO  Note that you will be able to access the updated dashboard once the server has processed the submitted analysis report
14:42:33.847 INFO  More about the report processing at http://localhost:9000/api/ce/task?id=7db13258-220d-47ae-9e4e-dcbe6e3771ea
14:42:33.862 INFO  Analysis total time: 27.320 s
14:42:33.863 INFO  SonarScanner Engine completed successfully
14:42:33.947 INFO  EXECUTION SUCCESS
14:42:33.949 INFO  Total time: 42.241s
Finished: SUCCESS
```

Project on sonarqube:
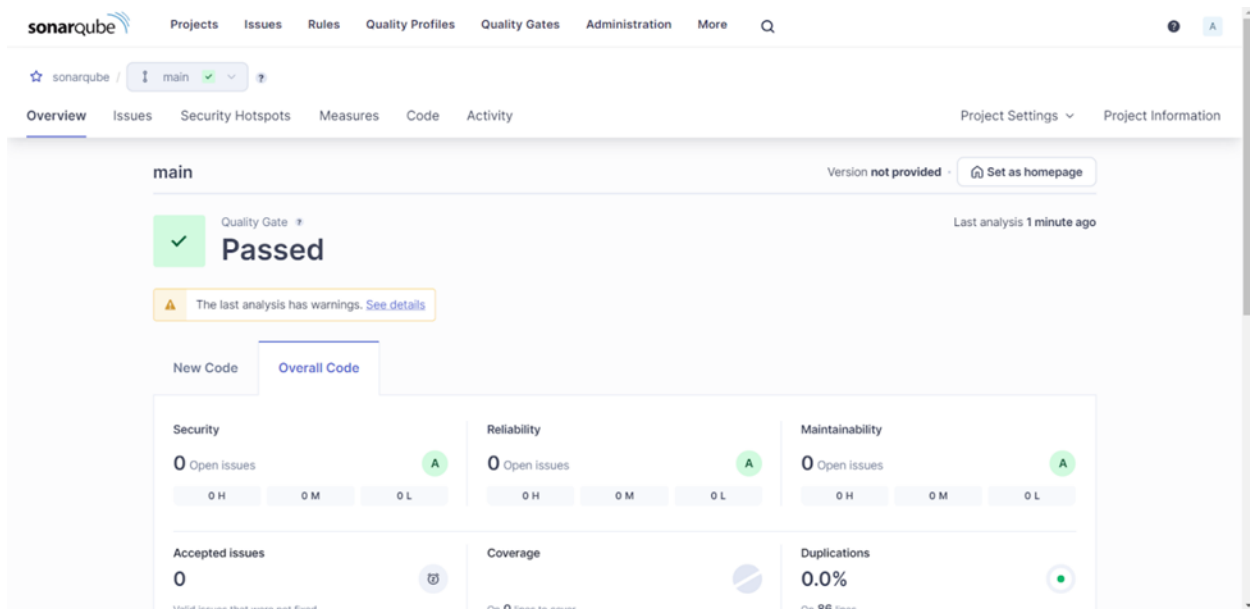
Conclusion:

Thus, we have successfully installed SonarQube using a Docker image, providing a seamless setup for continuous code quality analysis. This approach simplifies the deployment process, ensures easy scalability, and enhances development workflows with robust code review and testing capabilities in a containerized environment.