

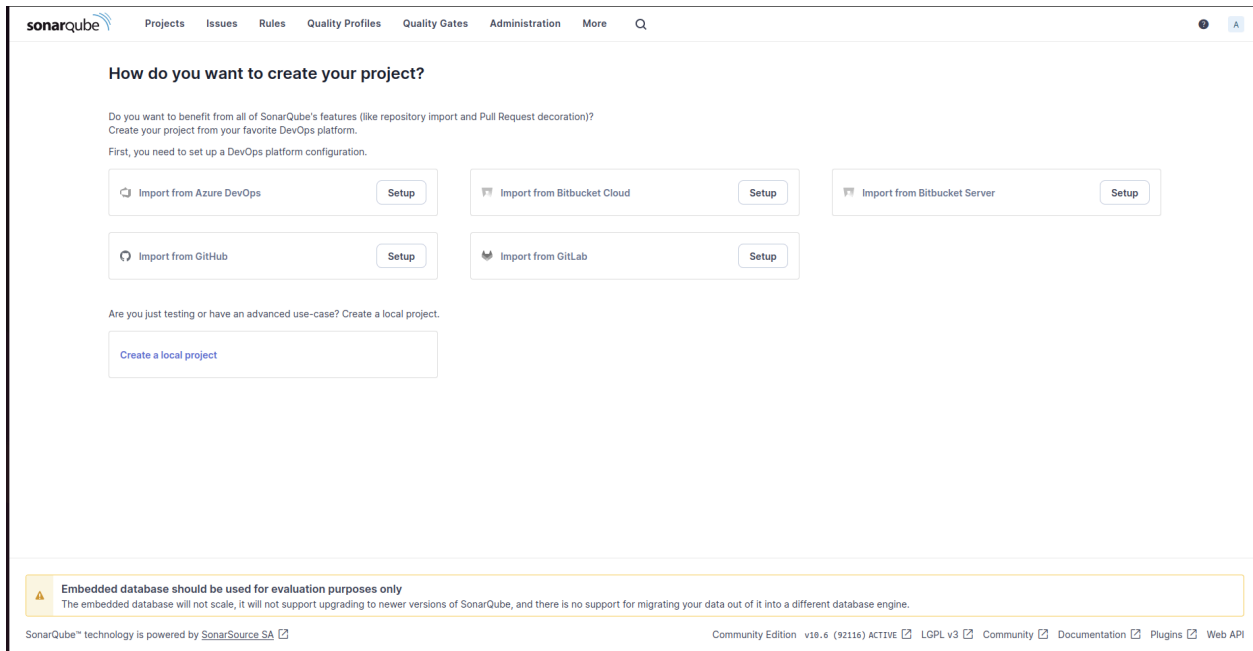
# ADVANCE DEVOPS - 7

NAME - PRANAV TITAMBE

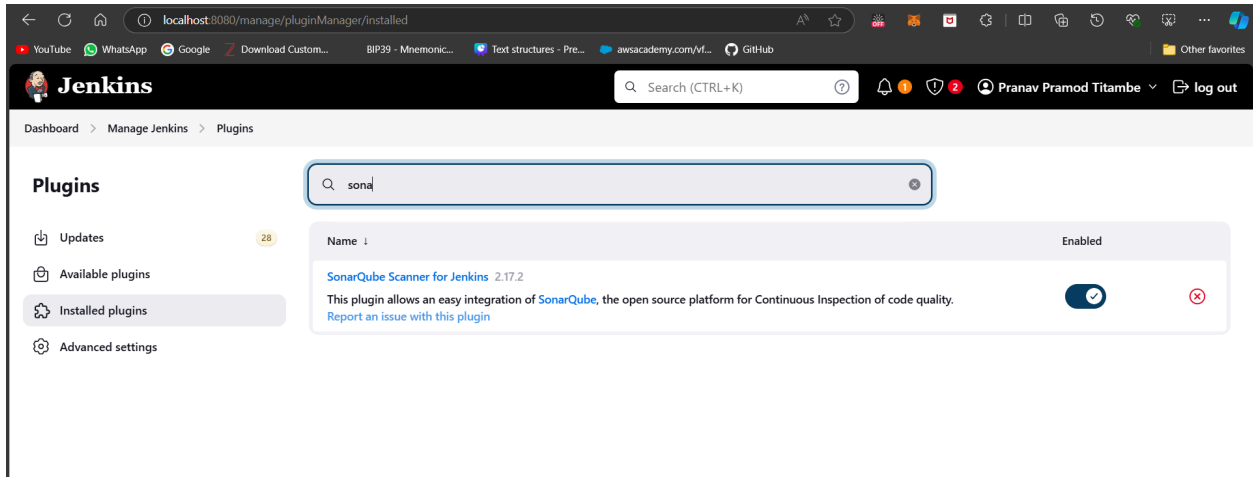
D15A/62

Install SonarQube docker image from the docker registry.  
SonarQube will run on <http://localhost:9000>

```
pranavtitambe@pranavtitambe:~$ sudo docker run -d --name sonarqube -e SONAR_ES_BOOTSTRAP_CHECKS_DISABLE=true -p 9000:9000 sonarqube:latest
Unable to find image 'sonarqube:latest' locally
latest: Pulling from library/sonarqube
7478e0ac0f23: Pull complete
90a925ab929a: Pull complete
7d9a34308537: Pull complete
80338217a4ab: Pull complete
1a5fd5c7e184: Pull complete
7b87d6fa783d: Downloading [=====>] 91.37MB/738.4MB
bd819c9b5ead: Download complete
4f4fb700ef54: Download complete
```



Step 1 - Login to Jenkins dashboard.



Step 2 - Add the SonarQube Server to the Jenkins configuration in Configure System option.

**SonarQube servers**

If checked, job administrators will be able to inject a SonarQube server configuration as environment variables in the build.

☒ Environment variables

**SonarQube installations**

List of SonarQube installations

**Name**

SonarQube-server

**Server URL**

Default is <http://localhost:9000>

<http://localhost:9000>

**Server authentication token**

SonarQube authentication token. Mandatory when anonymous access is disabled.

- none -

+ Add

Advanced

Step 3 - Login to SonarQube dashboard which is by default installed on <http://localhost:9000>

<div>sonarqube</div> <div> <a href="#">Projects</a> <a href="#">Issues</a> <a href="#">Rules</a> <a href="#">Quality Profiles</a> <a href="#">Quality Gates</a> <a href="#">Administration</a> <a href="#">More</a> </div>					
Administration					
<div> <a href="#">Configuration</a> <a href="#">Security</a> <a href="#">Projects</a> <a href="#">System</a> <a href="#">Marketplace</a> </div>					
<div> <div>AllUsersGroups</div> <div>Search for users or groups...</div> </div>					
			Administer System ?	Administer ?	Execute Analysis ? Create ?
	sonar-administrators	System administrators	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Quality Gates <input checked="" type="checkbox"/> Quality Profiles	<input checked="" type="checkbox"/> Projects
	sonar-users	Every authenticated user automatically belongs to this group	<input type="checkbox"/>	<input type="checkbox"/> Quality Gates <input type="checkbox"/> Quality Profiles	<input checked="" type="checkbox"/> Projects
	Anyone <b>DEPRECATED</b>	Anybody who browses the application belongs to this group. If authentication is not enforced, assigned permissions also apply to non-authenticated users.	<input type="checkbox"/>	<input type="checkbox"/> Quality Gates <input type="checkbox"/> Quality Profiles	<input type="checkbox"/> Projects
	Administrator	admin	<input type="checkbox"/>	<input type="checkbox"/> Quality Gates <input type="checkbox"/> Quality Profiles	<input type="checkbox"/> Projects
4 of 4 shown					

Step 4 - Create a new free style project and add the github link in the github section of this following new item and add these properties in the build steps.

Dashboard > sonar-qube-test > Configuration

Configure

General

Source Code Management

Build Triggers

Build Environment

Build Steps

Post-build Actions

Build Steps

Execute SonarQube Scanner

JDK ?  
JDK to be used for this SonarQube analysis  
(Inherit From Job)

Path to project properties ?

Analysis properties ?  
sonar.projectKey=sonarqube-test-project  
sonar.login=sqp\_11b8aeada68800192bcb980cba1cad34c6c3c486  
sonar.sources=HelloWorldCore  
sonar.host.url=http://localhost:9000

Additional arguments ?

SaveApply

Step 5 - Click on Build now option to build your free style project



## Console Output



```
Started by user Pranav Pramod Titambe
Running as SYSTEM
Building on the built-in node in workspace C:\ProgramData\Jenkins\.jenkins\workspace\sonar-qube-test
The recommended git tool is: NONE
No credentials specified
> git.exe rev-parse --resolve-git-dir C:\ProgramData\Jenkins\.jenkins\workspace\sonar-qube-test\.git # timeout=10
Fetching changes from the remote Git repository
> git.exe config remote.origin.url https://github.com/shazforiot/MSBuild_firstproject.git # timeout=10
Fetching upstream changes from https://github.com/shazforiot/MSBuild_firstproject.git
> git.exe --version # timeout=10
> git --version # 'git version 2.45.1.windows.1'
> git.exe fetch --tags --force --progress -- https://github.com/shazforiot/MSBuild_firstproject.git +refs/heads/*:refs/remotes/origin/* #
timeout=10
> git.exe rev-parse "refs/remotes/origin/master^(commit)" # timeout=10
Checking out Revision f2bc042c04c6e72427c380bcae6d6fee7b49adf (refs/remotes/origin/master)
> git.exe config core.sparsecheckout # timeout=10
> git.exe checkout -f f2bc042c04c6e72427c380bcae6d6fee7b49adf # timeout=10
Commit message: "updated"
> git.exe rev-list --no-walk f2bc042c04c6e72427c380bcae6d6fee7b49adf # timeout=10
Unpacking https://repo1.maven.org/maven2/org/sonarsource/scanner/cli/sonar-scanner-cli/6.2.0.4584/sonar-scanner-cli-6.2.0.4584.zip to
C:\ProgramData\Jenkins\.jenkins\tools\udson.plugins.sonar.SonarRunnerInstallation\SonarQube on Jenkins
[sonar-qube-test] $ C:\ProgramData\Jenkins\.jenkins\tools\udson.plugins.sonar.SonarRunnerInstallation\SonarQube\bin\sonar-scanner.bat -
Dsonar.host.url=http://localhost:9000 -Dsonar.projectKey=sonarqube-test-project -Dsonar.login=sqp_11b8aeada68800192bcb980cba1cad34c6c3c486 -
Dsonar.host.url=http://localhost:9000 -Dsonar.sources=HelloWorldCore -Dsonar.projectBaseDir=C:\ProgramData\Jenkins\.jenkins\workspace\sonar-qube-
test
10:50:31 017 WARN: Property 'sonar.host.url' with value 'http://localhost:9000' is overridden with value 'http://localhost:9000'
```

Step 6 - Check your SonarQube dashboard and you will get the following analysis.

The screenshot shows the SonarQube dashboard for a project named 'sonarqube-test-project'. The main branch is 'main' and the status is 'Passed'. The dashboard includes a 'Quality Gate' section with a green checkmark and a warning icon indicating 'The last analysis has warnings. See details'. Below this, there are three tabs: 'New Code', 'Overall Code', and 'Code'. The 'Overall Code' tab is selected, showing a summary of metrics: Security (0 Open issues, A grade), Reliability (0 Open issues, A grade), and Maintainability (0 Open issues, A grade). Each metric has a bar chart showing 'O H', 'O M', and 'O L' values. At the bottom, there are sections for 'Accepted issues', 'Coverage', and 'Duplications'.