Experiment No 7
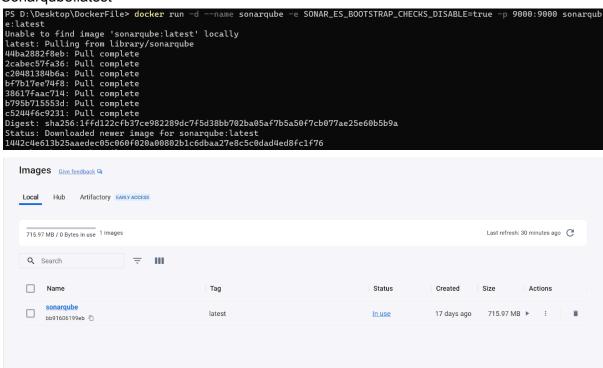
Name:Jyoti Fabiyani
Class:D15B/14

Sonarqube:latest

```
PS D:\Desktop\DockerFile> docker run -d --name sonarqube -e SONAR_ES_BOOTSTRAP_CHECKS_DISABLE=true -p 9000:9000 sonarqub
e:latest
Unable to find image 'sonarqube:latest' locally
latest: Pulling from library/sonarqube
44ba2882f8eb: Pull complete
2cabec57fa36: Pull complete
c20481384b6a: Pull complete
bf7b17ee74f8: Pull complete
38617faac714: Pull complete
b795b715553d: Pull complete
c5244f6c9231: Pull complete
Digest: sha256:1ffd122cfb37ce982289dc7f5d38bb702ba05af7b5a50f7cb077ae25e60b5b9a
Status: Downloaded newer image for sonarqube:latest
1442c4e613b25aaedec05c060f020a00802b1c6dbaa27e8c5c0dad4ed8fc1f76
```

Images Give feedback 🖘

Local   Hub   Artifactory EARLY ACCESS

715.97 MB / 0 Bytes in use   1 images   Last refresh: 30 minutes ago ↻

🔍 Search   ≡   �III

	Name	Tag	Status	Created	Size	Actions
☐	sonarqube bb91606199eb 📋	latest	In use	17 days ago	715.97 MB ▶	⋮ 🗑

M Gmail ▶ YouTube 🔤 Translate ⊙ What's New in Dev...

Log in to SonarQube

admin

•••••

Log in Cancel

sonarqube   Projects   Issues   Rules   Quality Profiles   Quality Gates   Administration   More   Q

How do you want to create your project?

Do you want to benefit from all of SonarQube's features (like repository import and Pull Request decoration)?
Create your project from your favorite DevOps platform.

First, you need to set up a DevOps platform configuration.

Import from Azure DevOps	Setup
Import from Bitbucket Cloud	Setup
Import from Bitbucket Server	Setup
Import from GitHub	Setup
Import from GitLab	Setup

Are you just testing or have an advanced use-case? Create a project manually.

Create project manually

Create project manually:
Here project name is "AdDevops"

sonarqube   Projects   Issues   Rules   Quality Profiles   Quality Gates   Administration   More   Q

Create a project

Project display name *

AdDevops ✓

Up to 255 characters. Some scanners might override the value you provide.

Project key *

AdDevops ✓

The project key is a unique identifier for your project. It may contain up to 400 characters.
Allowed characters are alphanumeric, '-' (dash), '_' (underscore), '.' (period) and ':' (colon), with at least one non-digit.

Main branch name *

main

The name of your project's default branch. Learn More 🗗

Next

---

sonarqube   Projects   Issues   Rules   Quality Profiles   Quality Gates   Administration   More   Q

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

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

Download progress

Preparation
- Checking internet connectivity
- Checking update center connectivity
- Success

SSH server	✅ Success
Deploy to container	✅ Success
Loading plugin extensions	✅ Success
SonarQube Scanner	✅ Success
Loading plugin extensions	✅ Success

→ **Go back to the top page**
(you can start using the installed plugins right away)

→ ☐ Restart Jenkins when installation is complete and no jobs are running

---

SonarQube servers

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

☑ **Environment variables** Enable injection of SonarQube server configuration as build environment variables

SonarQube installations

List of SonarQube installations

Name

AdDevops

Server URL

Default is http://localhost:9000

Server authentication token

SonarQube authentication token. Mandatory when anonymous access is disabled.

- none -

Add ▾

Advanced ⌄

Save   Apply

Choose the latest configuration and choose Install Automatically.

SonarQube Scanner

SonarQube Scanner installations

List of SonarQube Scanner installations on this system

[Add SonarQube Scanner]

≡ **SonarQube Scanner**

Name

AdDevops

☑ Install automatically ?

≡ **Install from Maven Central**

Version

SonarQube Scanner 5.0.1.3006

[Add Installer ▾]

[Add SonarQube Scanner]

Ant

[Save] [Apply]

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

Enter an item name

AdDevopsLab7

» *Required field*

Freestyle project
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used

Maven project
Build a maven project. Jenkins takes advantage of your POM files and drastically reduces the configuration.

Pipeline
Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as workflows) an

Multi-configuration project
Suitable for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific bui

Folder
Creates a container that stores nested items in it. Useful for grouping things together. Unlike view, which is just a filter, a folder creates a s
as they are in different folders.

Multibranch Pipeline
Creates a set of Pipeline projects according to detected branches in one SCM repository.

Organization Folder
a set of multibranch project subfolders by scanning for repositories.

[OK]

Go to http://localhost:9000/ and enter your previously created username.
Go to Permissions and grant the Admin user Execute Permissions.

AdDevops /   ↕ main ⌄   ?

Overview   Issues   Security Hotspots   Measures   Code   Activity   Project Settings ⌄   Project Information

Permissions   Apply Permission Template

Grant and revoke project-level permissions. Permissions can be granted to groups or individual users.
This project is public. Anyone can browse and see the source code.

◉ Public   ○ Private

All Users Groups	Q Search for users or groups...	Administer Issues ⓘ	Administer Security Hotspots ⓘ	Administer ⓘ	Execute Analysis ⓘ
sonar-administrators System administrators		☐	☐	☑	☐
sonar-users Every authenticated user automatically belongs to this group		☑	☑	☐	☐
Anyone DEPRECATED Anybody who browses the application belongs to this group. If authentication is not enforced, assigned permissions also apply to non-authenticated users.		☐	☐	☐	☐
A Administrator admin		☐	☐	☐	☑

4 of 4 shown

Build and Run:

Dashboard > AdDevopsLab7

📄 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

Jenkins

Dashboard > AdDevopsLab7 > #1

📄 Status
</> Changes
⌗ Console Output
☑ Edit Build Information
🗑 Delete build '#1'
◈ Git Build Data

⊘ **Build #1 (Sep 28, 2024, 10:31:52 PM)**

</> No changes.

🕑 Started by user Vaibhav Boudh

◈ git **Revision:** f2bc042c04c6e72427c380bcaee6d6fee7b49adf
Repository: https://github.com/ vaibhavboudh@671 /MSBuild_firstproject.git

• refs/remotes/origin/master

Console Output:

✓ 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)
```

```
INFO: Sensor IaC Docker Sensor [iac] (done) | time=74ms
INFO: ------------- Run sensors on project
INFO: Sensor C# [csharp]
WARN: Your project contains C# files which cannot be analyzed with the scanner you are using. To analyze C# or VB.NET, you must use the SonarScanner for .NET 5.x or higher, see
https://redirect.sonarsource.com/doc/install-configure-scanner-msbuild.html
INFO: Sensor C# [csharp] (done) | time=0ms
INFO: Sensor Analysis Warnings import [csharp]
INFO: Sensor Analysis Warnings import [csharp] (done) | time=15ms
INFO: Sensor C# File Caching Sensor [csharp]
WARN: Incremental PR analysis: Could not determine common base path, cache will not be computed. Consider setting 'sonar.projectBaseDir' property.
INFO: Sensor C# File Caching Sensor [csharp] (done) | time=0ms
INFO: Sensor Zero Coverage Sensor
INFO: Sensor Zero Coverage Sensor (done) | time=2ms
INFO: SCM Publisher SCM provider for this project is: git
INFO: SCM Publisher 4 source files to be analyzed
INFO: SCM Publisher 4/4 source files have been analyzed (done) | time=792ms
INFO: CPD Executor Calculating CPD for 0 files
INFO: CPD Executor CPD calculation finished (done) | time=0ms
INFO: Analysis report generated in 83ms, dir size=139.0 kB
INFO: Analysis report compressed in 13ms, zip size=19.2 kB
INFO: Analysis report uploaded in 241ms
INFO: ANALYSIS SUCCESSFUL, you can find the results at: http://localhost:9000/dashboard?id=AdDevops
INFO: Note that you will be able to access the updated dashboard once the server has processed the submitted analysis report
INFO: More about the report processing at http://localhost:9000/api/ce/task?id=AYqpPltkG6XzcbrlT4cp
INFO: Analysis total time: 16.844 s
INFO: ------------------------------------------------------------------------
INFO: EXECUTION SUCCESS
INFO: ------------------------------------------------------------------------
INFO: Total time: 31.521s
INFO: Final Memory: 20M/74M
INFO: ------------------------------------------------------------------------
Finished: SUCCESS
```

Project on sonarqube: