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D15B 12
Batch A

AIM: Integrating Jenkins with SonarQube.
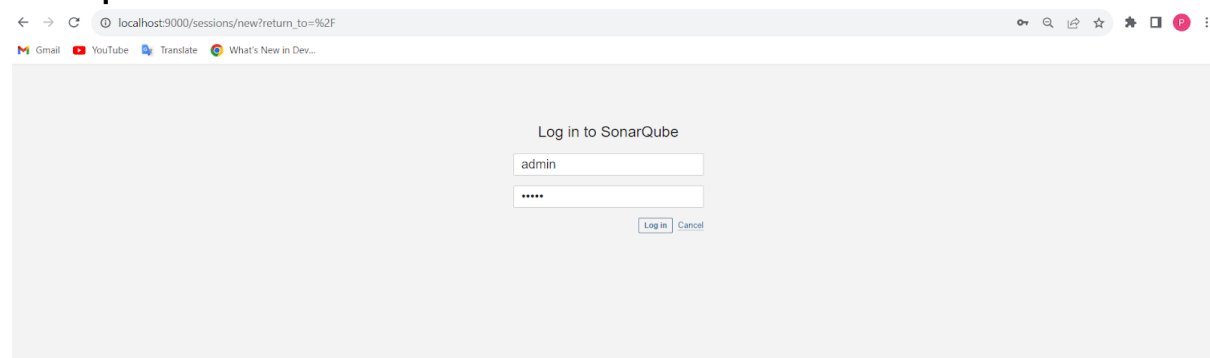
Open up Jenkins Dashboard on localhost, port 8080
Run SonarQube in a Docker container using this command -
$ docker run -d --name sonarqube -e SONAR_ES_BOOTSTRAP_CHECKS_DISABLE=true -p 9000:9000
sonarqube:latest

```
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
```

sonarqube

Log in to SonarQube

admin
•••••

Log in   Cancel

Create project manually

Create a project

Project display name *

AdDevopsLab8 ✔

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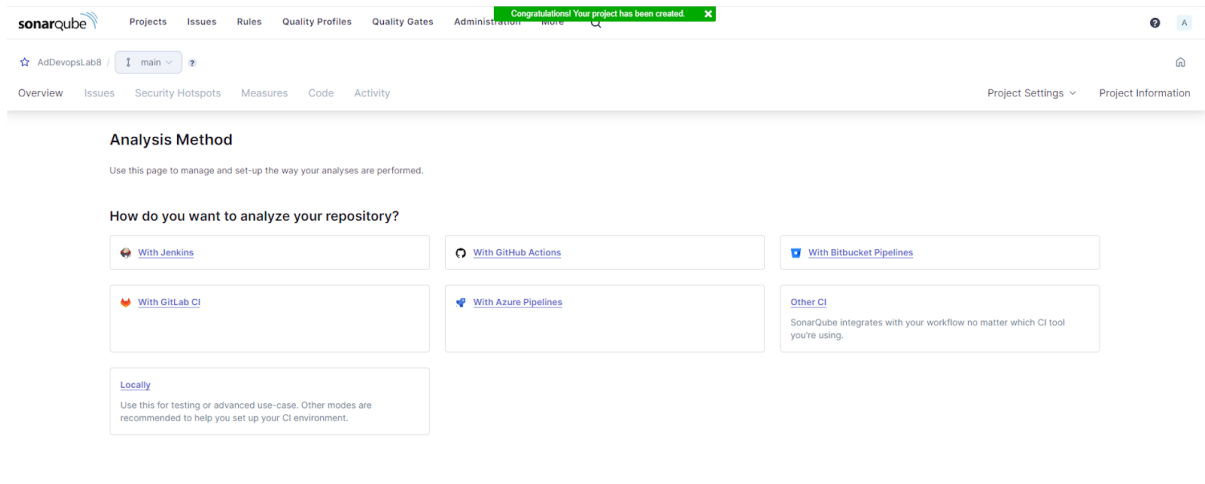
Project key *

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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
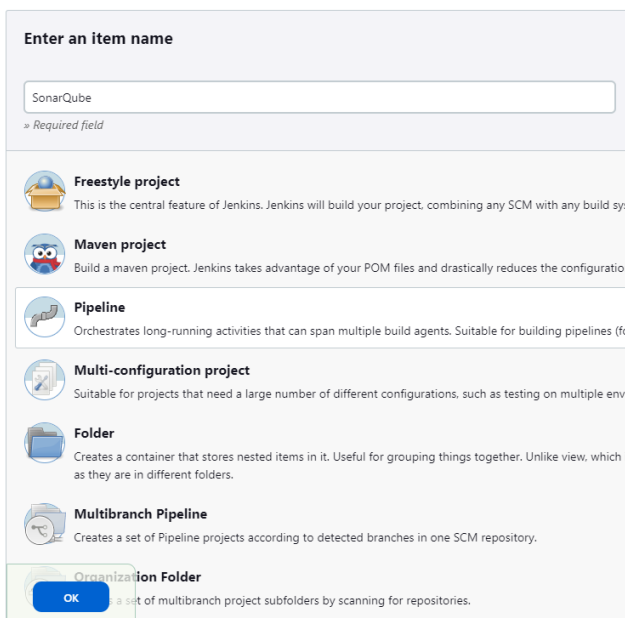least one non-digit.

Main branch name *

main

The name of your project's default branch Learn More ⎘

Next

In Jenkins create a pipeline here named "SonarQube"

Enter the following in pipeline script:

```
node {
    stage('Cloning the GitHub Repo') {
        git 'https://github.com/PrajaktaUpadhye6/MSBuild_firstproject.git'
    }
    stage('SonarQube analysis') {
        withSonarQubeEnv('sonarqube') {
            bat "D:/sonar-scanner-cli-5.0.1.3006-windows/sonar-scanner-5.0.1.3006-windows/bin/sonar-scanner.bat \
                -D sonar.login=admin \
                -D sonar.password=abc \
                -D sonar.projectKey=AdDevops \
                -D sonar.exclusions=vendor/**,resources/**,**/*.java \
                -D sonar.host.url=http://127.0.0.1:9000/"
        }
    }
```

```
        }
}
```

Pipeline

Definition

Pipeline script

Script ?

```
 1 ▾ node {
 2 ▾     stage('Cloning the GitHub Repo') {
 3           git 'https://github.com/PrajaktaUpadhye6/HTML_TRIAL.git'
 4       }
 5 ▾     stage('SonarQube analysis') {
 6 ▾         withSonarQubeEnv('sonarqube') {
 7               bat "D:/sonar-scanner-cli-5.0.1.3006-windows/sonar-scanner-5.0.1.3006-windows/bin/sonar-scanner.bat \
 8                   -D sonar.login=admin \
 9                   -D sonar.password=abc \
10                   -D sonar.projectKey=AdDevops \
11                   -D sonar.exclusions=vendor/**,resources/**,**/*.java \
12                   -D sonar.host.url=http://127.0.0.1:9000/"
13           }
14       }
15  }
```

☑ Use Groovy Sandbox ?

Pipeline Syntax

Save   Apply

It is a java sample project which has a lot of repetitions and issues that will be detected by SonarQube.
Build and run:

🗐 Status	**Pipeline SonarQube**
</> Changes	Lab 8
▷ Build Now	
⚙ Configure	
🗑 Delete Pipeline	**Stage View**
🔍 Full Stage View	
⊙ GitHub	
⌇ SonarQube	
✎ Rename	
⑦ Pipeline Syntax	

	Cloning the GitHub Repo	SonarQube analysis
Average stage times: (Average full run time: ~36s)	2s	33s
#8 Sep 20 12:36	No Changes	2s	33s

Build History   trend ⌄

🔍 Filter builds...   /

✓ #8
Sep 20, 2023, 12:36 PM

🔊 Atom feed for all 🔊 Atom feed for failures

Permalinks

- Last build (#8), 1 min 44 sec ago
- Last stable build (#8), 1 min 44 sec ago
- Last successful build (#8), 1 min 44 sec ago
- Last completed build (#8), 1 min 44 sec ago

Console output:

sonarqube:

Reliability:

Bugs:

Maintanaibility:

Security:

Duplications:

Cyclomatic complexity:

Activity:
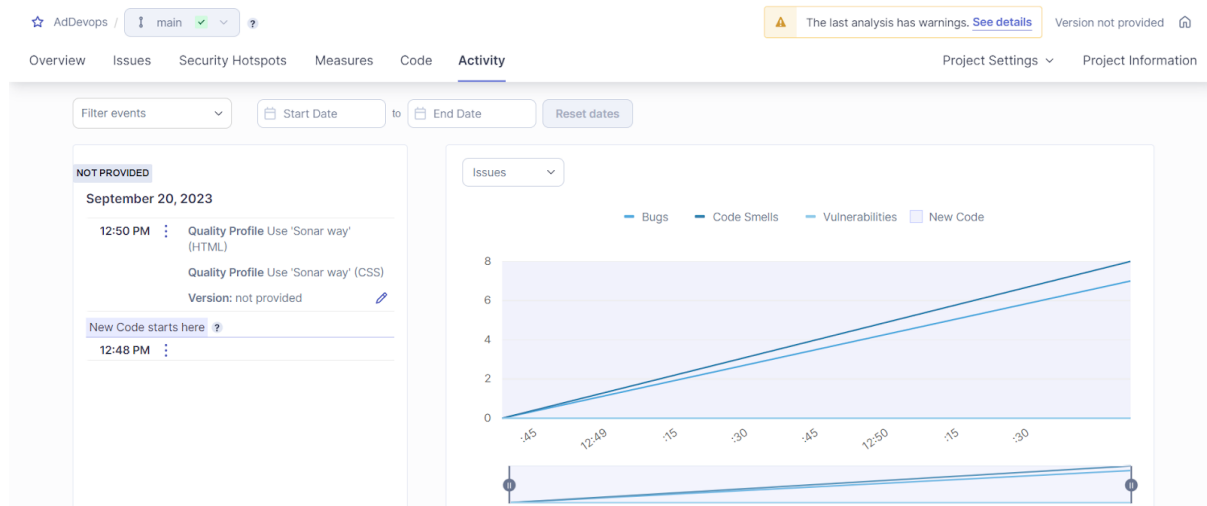
Conclusion: Thus, we have successfully integrated Jenkins with SonarQube.