

TASK 2

Step 1: Open Jenkins and click "**New Item.**"

Step 2: Enter a project name, select "**Pipeline,**" then click **OK.**

Step 3: In the **General** tab, scroll down to the "**Pipeline**" section.

Step 4: Under "**Definition,**" select "**Pipeline script from SCM.**"

Step 5: In the **SCM** field, choose "**Git,**" then enter your GitHub repository URL.

Step 6: Ensure your GitHub repository contains the following files:

- app.py (Application code)
- Dockerfile (Instructions to build the Docker image)
- docker-compose.yml (For container orchestration)
- Jenkinsfile (Defines the pipeline stages)
- requirements.txt (Dependencies for the application)

Step 7: Click "**Save**" to apply the configuration.

Step 8: On the project page, click "**Build Now**" to start the job.

Step 9: The build status will appear in the **Build History** panel (left-side panel).

Step 10: Click on the latest build (#1, #2, etc.) and select "**Console Output**" to view logs and results.

task2 #13 Console [Jenki...]

ChatGPT

Docker Home

Devops/Jenkinsfile at ma...

Inbox (3,173) - krishnas...

+

http://localhost:8080/job/task2/13/console

Jenkins

Dashboard > task2 > #13

Status

</> Changes

Console Output

✓ Edit Build Information

🗑 Delete build '#13'

🕒 Timings

🔗 Git Build Data

🔍 Pipeline Overview

📄 Pipeline Console

🔄 Restart from Stage

🔍 Replay

📋 Pipeline Steps

📁 Workspaces

⬅ Previous Build

Download

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Started by user Krishnasamy

Obtained Jenkinsfile from git <https://github.com/KRISHNA-1505/Devops>

[Pipeline] Start of Pipeline

[Pipeline] node

Running on Jenkins in /var/lib/jenkins/workspace/task2

[Pipeline] {

[Pipeline] stage

[Pipeline] { (Declarative: Checkout SCM)

[Pipeline] checkout

Selected Git installation does not exist. Using Default

The recommended git tool is: NONE

using credential github

> git rev-parse --resolve-git-dir /var/lib/jenkins/workspace/task2/.git # timeout=10

Fetching changes from the remote Git repository

> git config remote.origin.url <https://github.com/KRISHNA-1505/Devops> # timeout=10

Fetching upstream changes from <https://github.com/KRISHNA-1505/Devops>

> git --version # timeout=10

> git --version # 'git version 2.43.0'

using GIT_ASKPASS to set credentials

> git fetch --tags --force --progress -- <https://github.com/KRISHNA-1505/Devops> +refs/heads/*:refs/remotes/origin/* # timeout=10

> git rev-parse refs/remotes/origin/main^{commit} # timeout=10

Checking out Revision 53aa9e3f02739b0caed5dd26510b38af861301ab (refs/remotes/origin/main)

> git config core.sparsecheckout # timeout=10

> git checkout -f 53aa9e3f02739b0caed5dd26510b38af861301ab # timeout=10

Commit message: "Update Jenkinsfile"

> git rev-list --no-walk 53aa9e3f02739b0caed5dd26510b38af861301ab # timeout=10

[Pipeline] }

[Pipeline] // stage

[Pipeline] withEnv

[Pipeline] {

[Pipeline] withEnv

[Pipeline] {

[Pipeline] stage

task2 #13 Console [Jenki...]

ChatGPT

Docker Home

Devops/Jenkinsfile at ma...

Inbox (3,173) - krishnas...

+

http://localhost:8080/job/task2/13/console

Jenkins

Dashboard > task2 > #13

[Pipeline] {

[Pipeline] withEnv

[Pipeline] {

[Pipeline] stage

[Pipeline] { (Checkout Code)

[Pipeline] git

Selected Git installation does not exist. Using Default

The recommended git tool is: NONE

Warning: CredentialId "githubs" could not be found.

> git rev-parse --resolve-git-dir /var/lib/jenkins/workspace/task2/.git # timeout=10

Fetching changes from the remote Git repository

> git config remote.origin.url <https://github.com/KRISHNA-1505/Devops.git> # timeout=10

Fetching upstream changes from <https://github.com/KRISHNA-1505/Devops.git>

> git --version # timeout=10

> git --version # 'git version 2.43.0'

> git fetch --tags --force --progress -- <https://github.com/KRISHNA-1505/Devops.git> +refs/heads/*:refs/remotes/origin/* # timeout=10

> git rev-parse refs/remotes/origin/main^{commit} # timeout=10

Checking out Revision 53aa9e3f02739b0caed5dd26510b38af861301ab (refs/remotes/origin/main)

> git config core.sparsecheckout # timeout=10

> git checkout -f 53aa9e3f02739b0caed5dd26510b38af861301ab # timeout=10

> git branch -a -v --no-abbrev # timeout=10

> git branch -D main # timeout=10

> git checkout -b main 53aa9e3f02739b0caed5dd26510b38af861301ab # timeout=10

Commit message: "Update Jenkinsfile"

[Pipeline] }

[Pipeline] // stage

[Pipeline] stage

[Pipeline] { (Build Docker Image)

[Pipeline] script

[Pipeline] {

[Pipeline] sh

+ docker build -t krishna728/my-app:latest .

#0 building with "default" instance using docker driver

#1 [internal] load build definition from Dockerfile

#1 transferring dockerfile: 471B done

#1 DONE 0.1s

#2 [internal] load metadata for docker.io/library/python:3.11-slim

```
Mar 20, 2002
task2 #13 Console [Jenki] x ChatGPT x Docker Home x Devops/Jenkinsfile at ma x Inbox (3,173) - krishnasar: x +
http://localhost:8080/job/task2/13/console
Dashboard > task2 > #13

#1 [internal] load metadata for docker.io/library/python:3.11-slim
#1 DONE 0.1s

#2 [internal] load metadata for docker.io/library/python:3.11-slim
#2 DONE 0.0s

#3 [internal] load .dockerignore
#3 transferring context: 2B done
#3 DONE 0.2s

#4 [1/5] FROM docker.io/library/python:3.11-slim
#4 DONE 0.0s

#5 [internal] load build context
#5 transferring context: 10.14kB 0.1s done
#5 DONE 0.4s

#6 [2/5] WORKDIR /app
#6 CACHED

#7 [3/5] COPY requirements.txt /app/
#7 CACHED

#8 [4/5] RUN pip install --no-cache-dir -r requirements.txt
#8 CACHED

#9 [5/5] COPY . /app
#9 DONE 1.9s

#10 exporting to image
#10 exporting layers
#10 exporting layers 0.3s done
#10 writing image sha256:0dac086a65762061db20ba3d8f29679cd085764225faee0c6f5298a6de4a6724 0.0s done
#10 naming to docker.io/krishna728/my-app:latest 0.1s done
#10 DONE 0.6s

[Pipeline] }
[Pipeline] // script
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
```

```
Mar 20, 2002
task2 #13 Console [Jenki] x ChatGPT x Docker Home x Devops/Jenkinsfile at ma x Inbox (3,173) - krishnasar: x +
http://localhost:8080/job/task2/13/console
Dashboard > task2 > #13

[Pipeline] {
[Pipeline] withCredentials
Masking supported pattern matches of $DOCKER_PASS
[Pipeline] {
[Pipeline] sh
+ echo ****
+ docker login -u krishna728 --password-stdin
Login Succeeded
[Pipeline] }
[Pipeline] // withCredentials
[Pipeline] }
[Pipeline] // script
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Push Image to Docker Registry)
[Pipeline] script
[Pipeline] {
[Pipeline] sh
+ docker push krishna728/my-app:latest
The push refers to repository [docker.io/krishna728/my-app]
c0dc697173d9: Preparing
f7b6b67b4c81: Preparing
e2ede4134a73: Preparing
7033cdf6f5c5: Preparing
e394b4c0757a: Preparing
97d879c3dfa3: Preparing
e2f88fe30c9c: Preparing
1287fbcdfcc: Preparing
97d879c3dfa3: Waiting
e2f88fe30c9c: Waiting
1287fbcdfcc: Waiting
e2ede4134a73: Layer already exists
e394b4c0757a: Layer already exists
f7b6b67b4c81: Layer already exists
7033cdf6f5c5: Layer already exists
97d879c3dfa3: Layer already exists
1287fbcdfcc: Layer already exists
e2f88fe30c9c: Layer already exists
c0dc697173d9: Pushed
}
```

task2 #13 Console [Jenki] x ChatGPT x Docker Home x Devops/Jenkinsfile at ma x Inbox (3,173) - krishnasar: x +

Mar 20, 2003

http://localhost:8080/job/task2/13/console

Dashboard > task2 > #13

```
[Pipeline] // script
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Deploy using Docker Compose)
[Pipeline] script
[Pipeline] {
[Pipeline] sh
+ docker-compose up -d
Building app
#0 building with "default" instance using docker driver

#1 [internal] load build definition from Dockerfile
#1 transferring dockerfile: 471B done
#1 DONE 0.1s

#2 [internal] load metadata for docker.io/library/python:3.11-slim
#2 DONE 0.0s

#3 [internal] load .dockerignore
#3 transferring context:
#3 transferring context: 2B done
#3 DONE 0.2s

#4 [1/5] FROM docker.io/library/python:3.11-slim
#4 DONE 0.0s

#5 [internal] load build context
#5 transferring context: 3.99kB 0.0s done
#5 DONE 1.3s

#6 [2/5] WORKDIR /app
#6 CACHED

#7 [3/5] COPY requirements.txt /app/
#7 CACHED

#8 [4/5] RUN pip install --no-cache-dir -r requirements.txt
#8 CACHED
```

task2 #13 Console [Jenki] x ChatGPT x Docker Home x Devops/Jenkinsfile at ma x Inbox (3,173) - krishnasar: x +

Mar 20, 2004

http://localhost:8080/job/task2/13/console

Dashboard > task2 > #13

```
#9 CACHED

#10 exporting to image
#10 exporting layers done
#10 writing image sha256:0dac086a65762061db20ba3d8f29679c6d05764225faee0c6f5298a6de4a6724
#10 writing image sha256:0dac086a65762061db20ba3d8f29679c6d05764225faee0c6f5298a6de4a6724 0.2s done
#10 naming to docker.io/library/task2_app
#10 naming to docker.io/library/task2_app 0.6s done
#10 DONE 0.9s

Image for service app was built because it did not already exist. To rebuild this image you must use `docker-compose build` or `docker-compose up --build`.
Creating task2_db_1 ...
Creating task2_redis_1 ... done
Creating task2_db_1 ... done
Creating task2_app_1 ...
Creating task2_app_1 ... done
[Pipeline] }
[Pipeline] // script
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Declarative: Post Actions)
[Pipeline] echo
Pipeline executed successfully!
[Pipeline] }
[Pipeline] // stage
[Pipeline] }
[Pipeline] // withEnv
[Pipeline] }
[Pipeline] // withEnv
[Pipeline] }
[Pipeline] // node
[Pipeline] End of Pipeline
Finished: SUCCESS
```

REST API Jenkins 2.492.2