

DEVOPS

ASSIGNMENT 2

STEPS:

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).

OUTPUT:

The screenshot shows the Jenkins web interface. The top navigation bar includes the Jenkins logo, a search icon, notification icons, and the user 'Pragalya K K' with a 'log out' link. The breadcrumb trail is 'Dashboard > Assignment_2 > #5'. On the left sidebar, the 'Console Output' tab is selected. The main area displays the console output for a pipeline run. The output shows the pipeline starting, checking out the code from a GitHub repository, and setting up the environment. The console output is as follows:

```
Started by user Pragalya K K
Obtained Jenkinsfile from git https://github.com/Pragalyakarthish/Sample_assignment2
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in /var/jenkins_home/workspace/Assignment_2
[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_Credentials
> git rev-parse --resolve-git-dir /var/jenkins_home/workspace/Assignment_2/.git # timeout=10
Fetching changes from the remote Git repository
> git config remote.origin.url https://github.com/Pragalyakarthish/Sample_assignment2 # timeout=10
Fetching upstream changes from https://github.com/Pragalyakarthish/Sample_assignment2
> git --version # timeout=10
> git --version # 'git version 2.39.5'
using GIT_ASKPASS to set credentials
> git fetch --tags --force --progress -- https://github.com/Pragalyakarthish/Sample_assignment2 +refs/heads/*:refs/remotes/origin/* #
timeout=10
> git rev-parse refs/remotes/origin/master^{commit} # timeout=10
Checking out Revision c541720ec15231d42da5ea99c7cb929f17a765e3 (refs/remotes/origin/master)
```

This screenshot shows the continuation of the Jenkins pipeline run. The console output continues from the previous stage, showing the checkout of a specific revision, configuration of sparse checkout, and the start of a new stage. The console output is as follows:

```
Fetching changes from the remote Git repository
> git config remote.origin.url https://github.com/Pragalyakarthish/Sample_assignment2.git # timeout=10
Fetching upstream changes from https://github.com/Pragalyakarthish/Sample_assignment2.git
> git --version # timeout=10
> git --version # 'git version 2.39.5'
using GIT_ASKPASS to set credentials
> git fetch --tags --force --progress -- https://github.com/Pragalyakarthish/Sample_assignment2.git +refs/heads/*:refs/remotes/origin/* #
timeout=10
> git rev-parse refs/remotes/origin/master^{commit} # timeout=10
Checking out Revision c541720ec15231d42da5ea99c7cb929f17a765e3 (refs/remotes/origin/master)
> git config core.sparsecheckout # timeout=10
> git checkout -f c541720ec15231d42da5ea99c7cb929f17a765e3 # timeout=10
> git branch -a -v --no-abbrev # timeout=10
> git checkout -b master c541720ec15231d42da5ea99c7cb929f17a765e3 # timeout=10
Commit message: "modify commit"
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Build)
[Pipeline] echo
Building...
[Pipeline] }
[Pipeline] // stage
[Pipeline] }
[Pipeline] // withEnv
[Pipeline] }
[Pipeline] // node
[Pipeline] End of Pipeline
Finished: SUCCESS
```