

Devops Jenkins Assignment

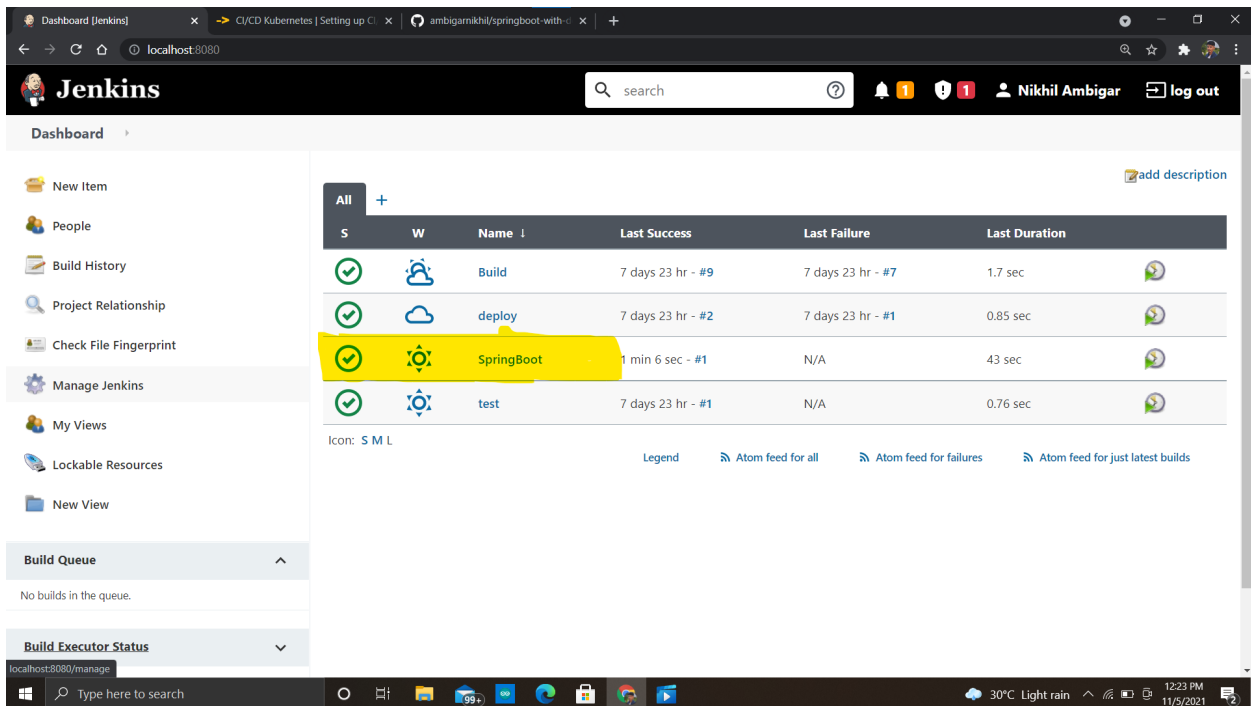
Team - 03

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Assignment-01: Set up complete CI/CD Jenkins pipeline for Kubernetes.

Step-1: Install Jenkins and create a pipeline job, in our case we named our job Springboot.



The screenshot shows the Jenkins Dashboard interface. The left sidebar contains navigation links: New Item, People, Build History, Project Relationship, Check File Fingerprint, Manage Jenkins, My Views, Lockable Resources, and New View. The main content area displays a table of jobs. The 'SpringBoot' job is highlighted in yellow. Below the table, there is a legend and options for Atom feed feeds.

S	W	Name	Last Success	Last Failure	Last Duration
✓	☁	Build	7 days 23 hr - #9	7 days 23 hr - #7	1.7 sec
✓	☁	deploy	7 days 23 hr - #2	7 days 23 hr - #1	0.85 sec
✓	⚙	SpringBoot	1 min 6 sec - #1	N/A	43 sec
✓	⚙	test	7 days 23 hr - #1	N/A	0.76 sec

Icon: S M L

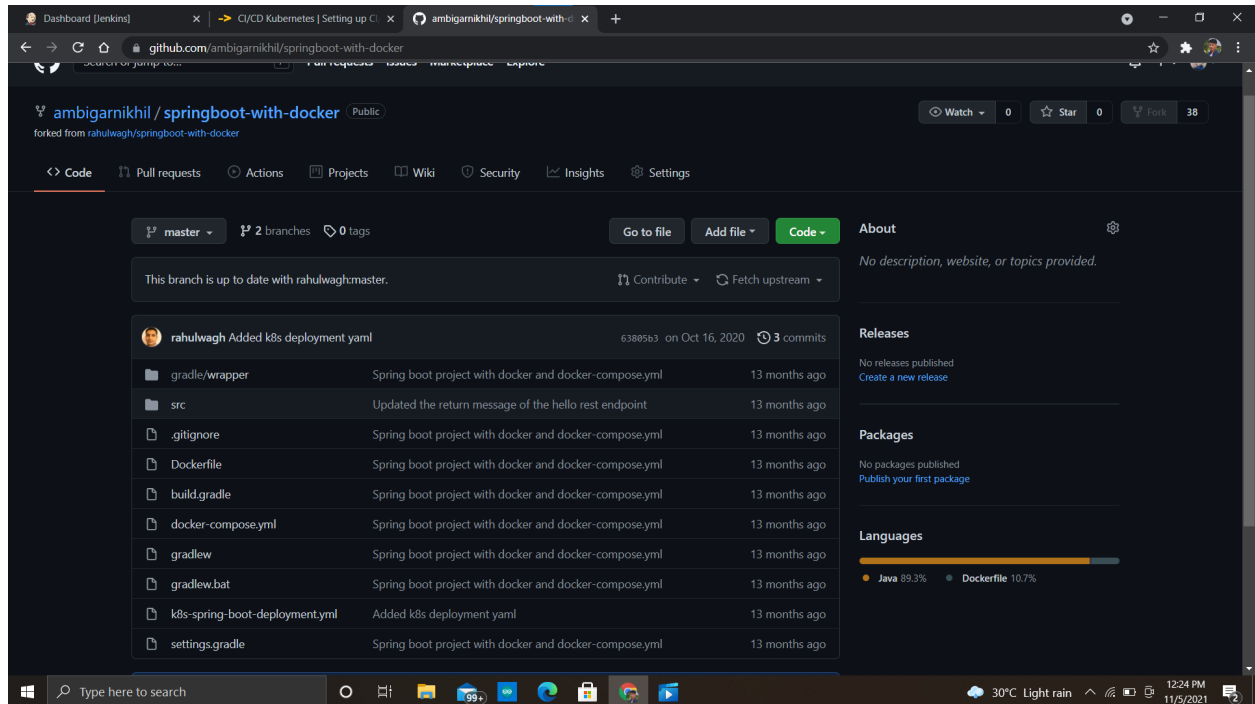
Legend

Atom feed for all

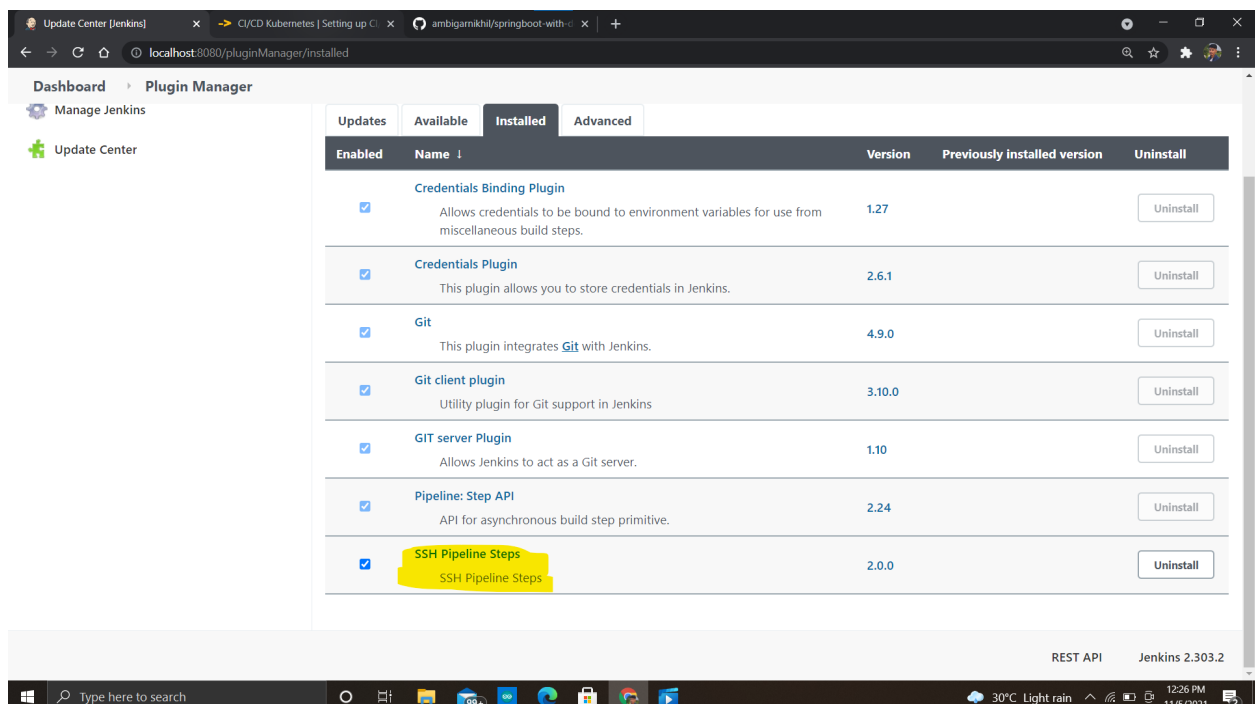
Atom feed for failures

Atom feed for just latest builds

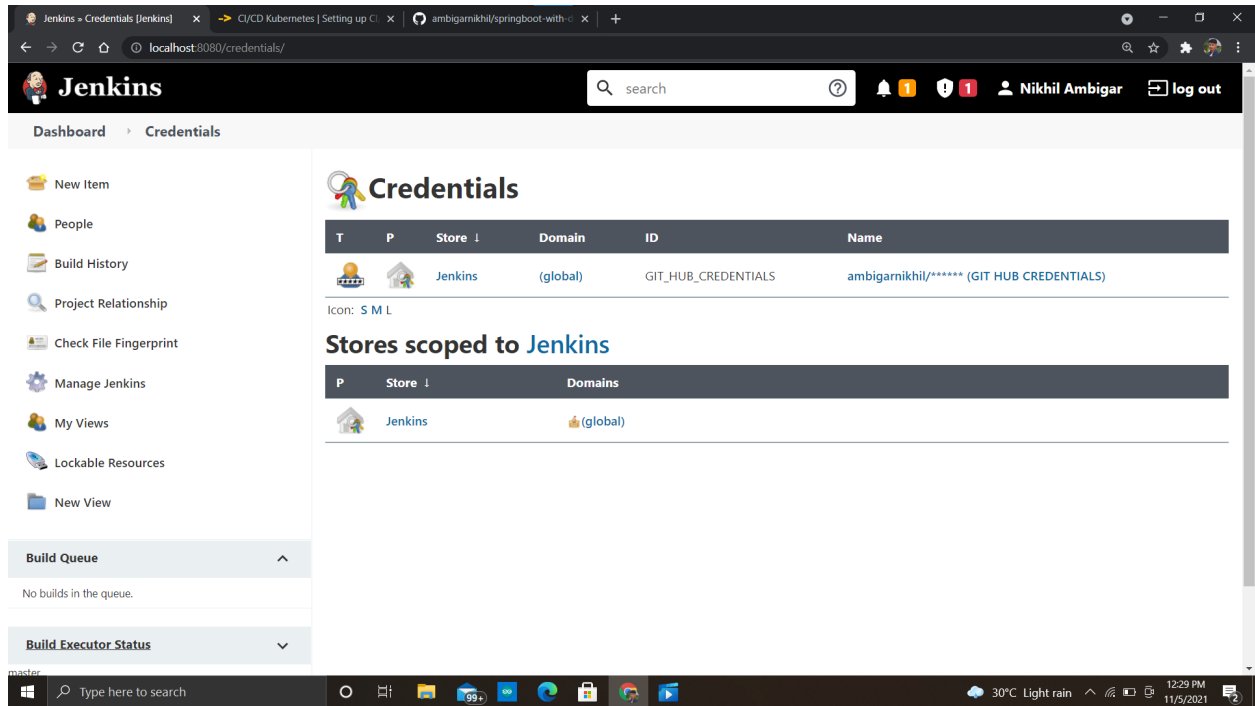
View of our git repo:



Step-2: Install SSH pipeline steps plugin.

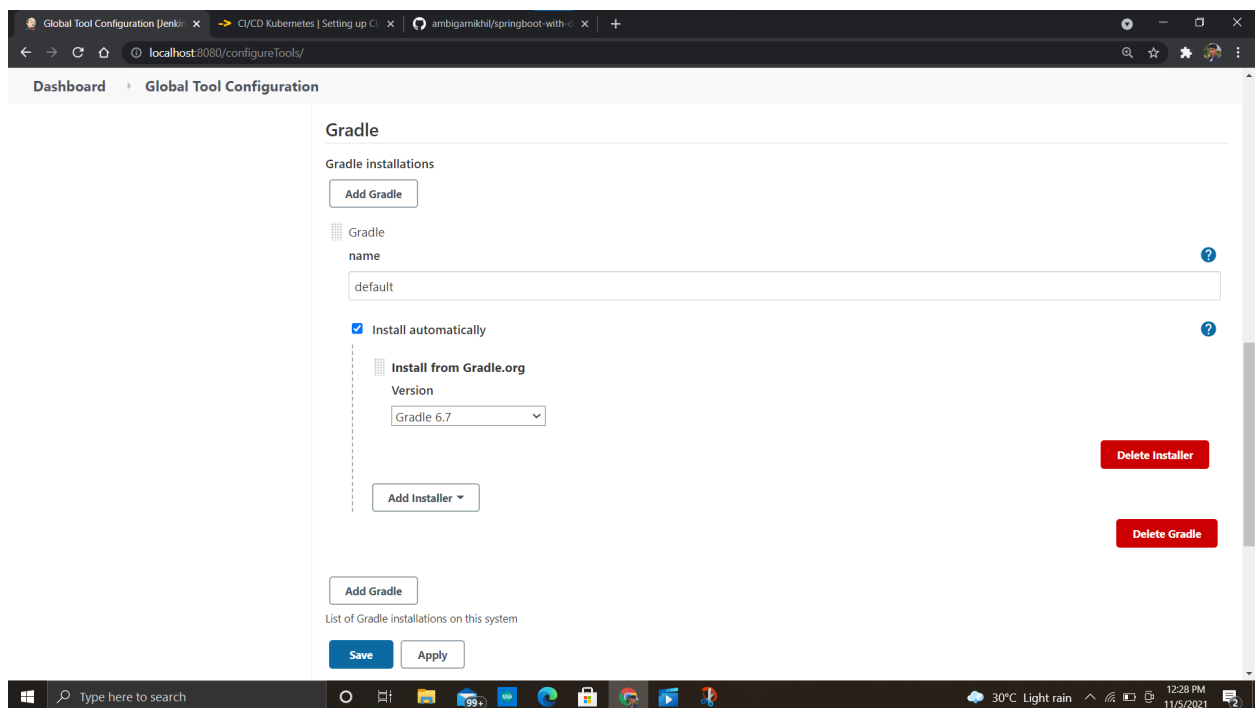


Step-3: Add our Github credentials.
(Manage Jenkins -> Manage Credentials -> Add credentials.)



The screenshot shows the Jenkins web interface at localhost:8080/credentials/. The left sidebar contains navigation links: New Item, People, Build History, Project Relationship, Check File Fingerprint, Manage Jenkins, My Views, Lockable Resources, and New View. The main content area is titled 'Credentials' and features a table with columns: T, P, Store, Domain, ID, and Name. A single entry is listed with Store 'Jenkins', Domain '(global)', ID 'GIT_HUB_CREDENTIALS', and Name 'ambigarnikhil/***** (GIT HUB CREDENTIALS)'. Below the table, there is a section 'Stores scoped to Jenkins' with a table showing Store 'Jenkins' and Domain '(global)'. The bottom of the interface shows a Windows taskbar with the time 12:29 PM on 11/5/2021.

Step-4: Install Gradle.



The screenshot shows the Jenkins web interface at localhost:8080/configureTools/. The page is titled 'Global Tool Configuration' and specifically for 'Gradle'. It includes a section 'Gradle installations' with an 'Add Gradle' button. Below this, there is a form for a new installation with fields for 'name' (set to 'default') and a checked 'Install automatically' option. Under 'Install from Gradle.org', the 'Version' is set to 'Gradle 6.7'. There are buttons for 'Delete Installer' and 'Delete Gradle' on the right. At the bottom, there are 'Add Gradle', 'Save', and 'Apply' buttons. The Windows taskbar at the bottom shows the time 12:28 PM on 11/5/2021.

Step 5: Configure our SpringBoot job.

In the pipeline script firstly we are creating a git clone stage by using the following script.

```
stage("Git Clone"){  
  
    git credentialsId: 'GIT_HUB_CREDENTIALS', url:  
    'https://github.com/ambigarnikhil/springboot-with-docker.git'  
  
}
```

The screenshot displays the Jenkins web interface for a pipeline named 'SpringBoot'. The left sidebar contains navigation links: Dashboard, SpringBoot, Back to Dashboard, Status, Changes, Build Now, Configure, Delete Pipeline, Full Stage View, Rename, Pipeline Syntax, Build History, and a search bar. The main content area is titled 'Pipeline SpringBoot' and includes a 'Recent Changes' section, a 'Stage View' section, and a 'Permalinks' section. The 'Stage View' section shows a bar chart for the 'Git Clone' stage, indicating an average stage time of 24s and an average full run time of ~43s. The 'Permalinks' section lists links for the last build, last stable build, last successful build, and last completed build, all of which are 2 minutes and 47 seconds ago. The bottom of the screenshot shows a Windows taskbar with various application icons and system information.

SpringBoot [Jenkins] x CI/CD Kubernetes [Setting up CI x ambigarnikhil/springboot-with-docker x +

localhost:8080/job/SpringBoot/

Dashboard > SpringBoot >

Back to Dashboard

Status

Changes

Build Now

Configure

Delete Pipeline

Full Stage View

Rename

Pipeline Syntax

Build History trend ^

find x

#1 Nov 5, 2021 12:21 PM

Atom feed for all Atom feed for failures

Pipeline SpringBoot

add description

Disable Project

Recent Changes

Stage View

Average stage times:
(Average full run time: ~43s)

Git Clone

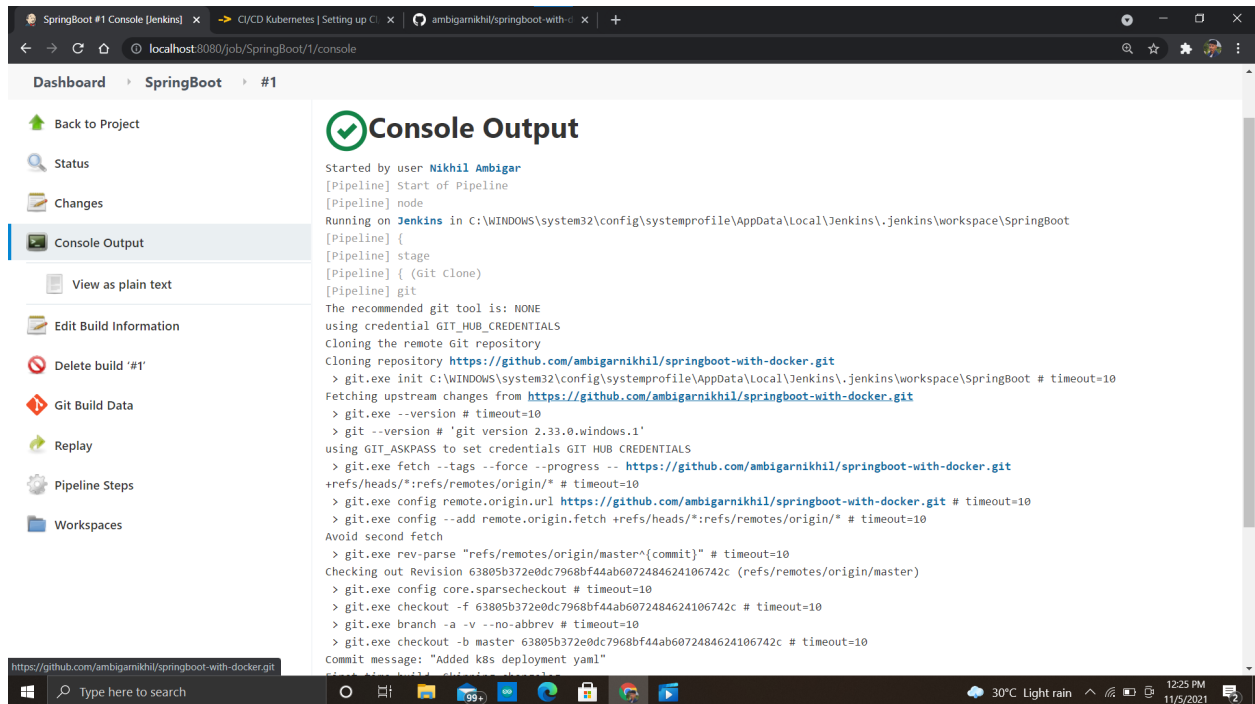
24s

24s

Permalinks

- Last build (#1), 2 min 47 sec ago
- Last stable build (#1), 2 min 47 sec ago
- Last successful build (#1), 2 min 47 sec ago
- Last completed build (#1), 2 min 47 sec ago

30°C Light rain 12:24 PM 11/5/2021



In the pipeline script then we are creating a Gradle build stage by using the following script.

```
stage('Gradle Build') {  
  
    bat './gradlew build'  
  
}
```

The screenshot shows the Jenkins web interface for a pipeline named 'SpringBoot'. The left sidebar contains navigation options: Dashboard, Status, Changes, Build Now (highlighted), Configure, Delete Pipeline, Full Stage View, Rename, and Pipeline Syntax. Below these is the 'Build History' section, which lists two builds: #9 (Nov 5, 2021 6:37 PM) and #1 (Nov 5, 2021 12:21 PM). The main area displays the 'Stage View' for build #9, showing a table of stages: 'Git Clone' (13s) and 'Gradle Build' (3s). Below the table, the 'Permalinks' section lists links for the last build, last stable build, last successful build, and last completed build. The bottom of the screen shows a Windows taskbar with the search bar and system tray.

Stage	Duration
Git Clone	13s
Gradle Build	3s

Average stage times: (Average full run time: ~43s)

Build History:

- #9 Nov 5, 2021 6:37 PM
- #1 Nov 5, 2021 12:21 PM

Permalinks:

- Last build (#1), 6 hr 15 min ago
- Last stable build (#1), 6 hr 15 min ago
- Last successful build (#1), 6 hr 15 min ago
- Last completed build (#1), 6 hr 15 min ago

The screenshot shows the Jenkins web interface for the 'SpringBoot' pipeline, specifically the console output for build #9. The left sidebar contains navigation options: Dashboard, SpringBoot, #9, Back to Project, Status, Changes, Console Output (highlighted), View as plain text, Edit Build Information, Delete build '#9', Git Build Data, Replay, Pipeline Steps, Workspaces, and Previous Build. The main area displays the 'Console Output' for build #9, showing the start of the pipeline and the 'Git Clone' stage. The output includes the recommended git tool is NONE, using credential GIT_HUB_CREDENTIALS, and the git command to fetch changes from the remote repository. The bottom of the screen shows a Windows taskbar with the search bar and system tray.

```
Started by user Nikhil Ambigar
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in C:\WINDOWS\system32\config\systemprofile\AppData\Local\Jenkins\.jenkins\workspace\SpringBoot
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Git Clone)
[Pipeline] git
The recommended git tool is: NONE
using credential GIT_HUB_CREDENTIALS
> git.exe rev-parse --resolve-git-dir C:\WINDOWS\system32\config\systemprofile\AppData\Local\Jenkins\.jenkins\workspace\SpringBoot\.git #
timeout=10
Fetching changes from the remote Git repository
> git.exe config remote.origin.url https://github.com/ambigarnikhil/springboot-with-docker.git # timeout=10
Fetching upstream changes from https://github.com/ambigarnikhil/springboot-with-docker.git
> git.exe --version # timeout=10
> git --version # 'git version 2.33.0.windows.1'
using GIT_ASKPASS to set credentials GIT_HUB_CREDENTIALS
> git.exe fetch --tags --force --progress -- https://github.com/ambigarnikhil/springboot-with-docker.git
+refs/heads/*:refs/remotes/origin/* # timeout=10
> git.exe rev-parse "refs/remotes/origin/master^{commit}" # timeout=10
Checking out Revision 63805b372e0dc7968bf44ab6072484624106742c (refs/remotes/origin/master)
> git.exe config core.sparsecheckout # timeout=10
> git.exe checkout -f 63805b372e0dc7968bf44ab6072484624106742c # timeout=10
> git.exe branch -a -v --no-abbrev # timeout=10
> git.exe branch -D master # timeout=10
```

Unfortunately, we are facing this issue. And we tried running it 3 thrices, all the times we are getting the same error.