Cloud Computing: UE20CS252

Assignment 2 – Jenkins (Creating a DevOps Pipeline, CI/CD tool)

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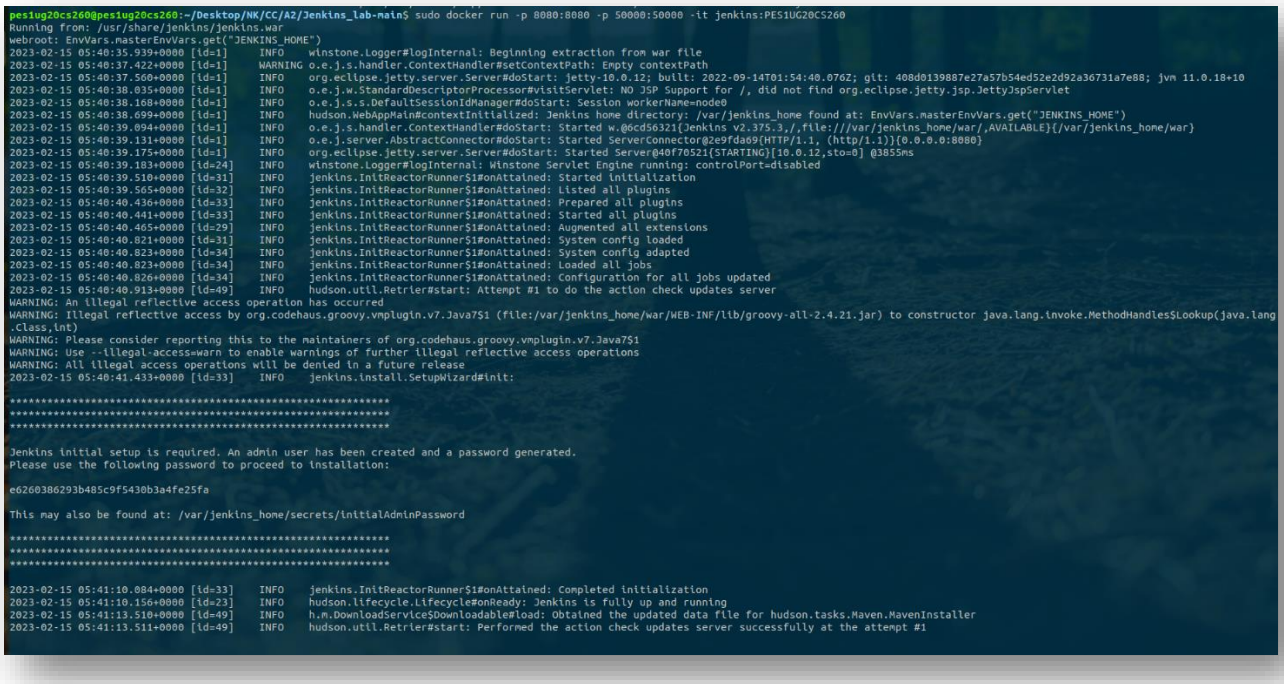
PES1UG20CS260

Screenshots:

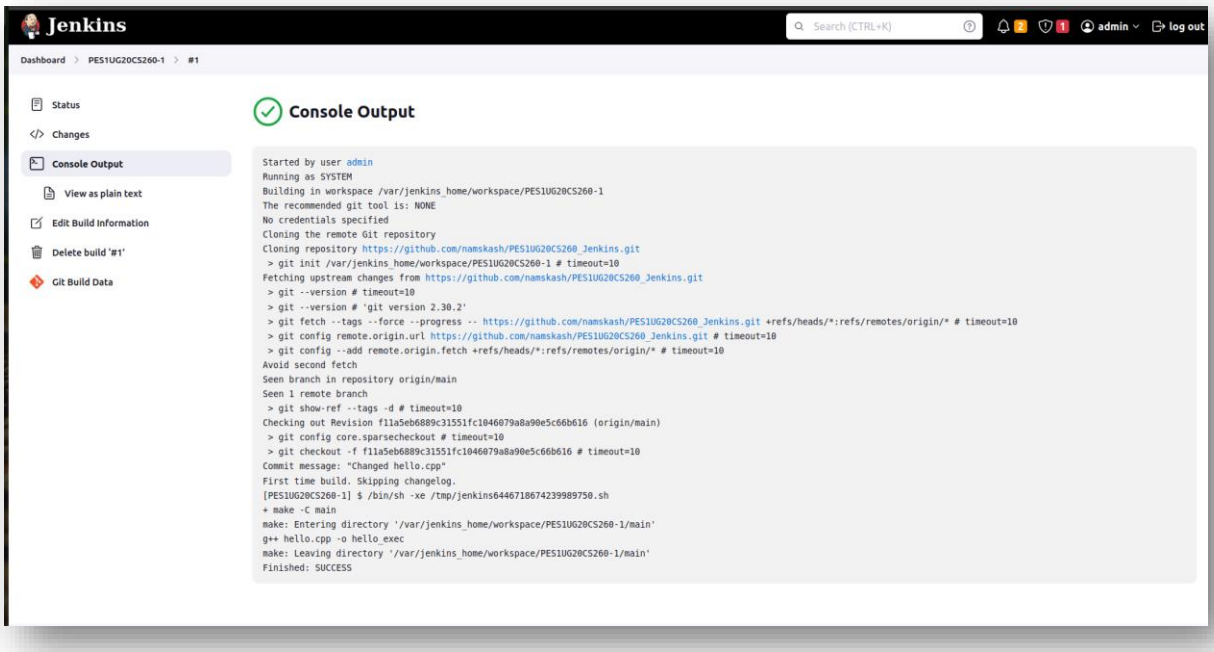
Task 1:

1. Screenshot of the running Docker Container after installing Jenkins

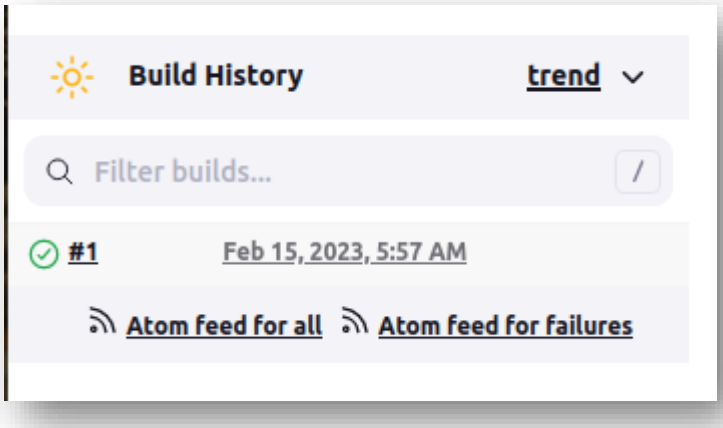


Task 2:

1. Picture showing the console output after the build is successful

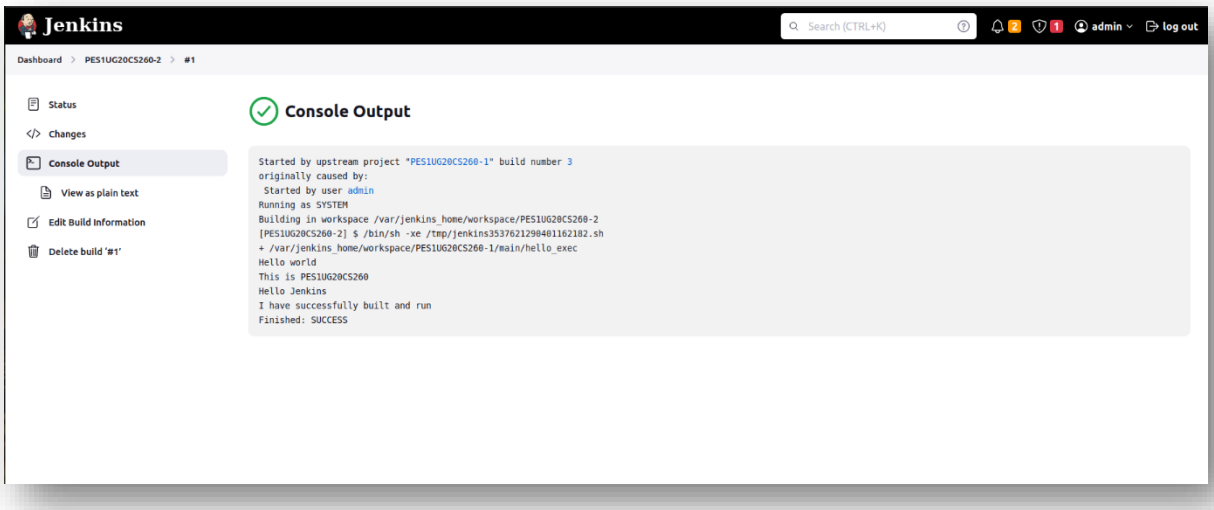


2. Picture showing the Stable state of the task in Build History of Jenkins

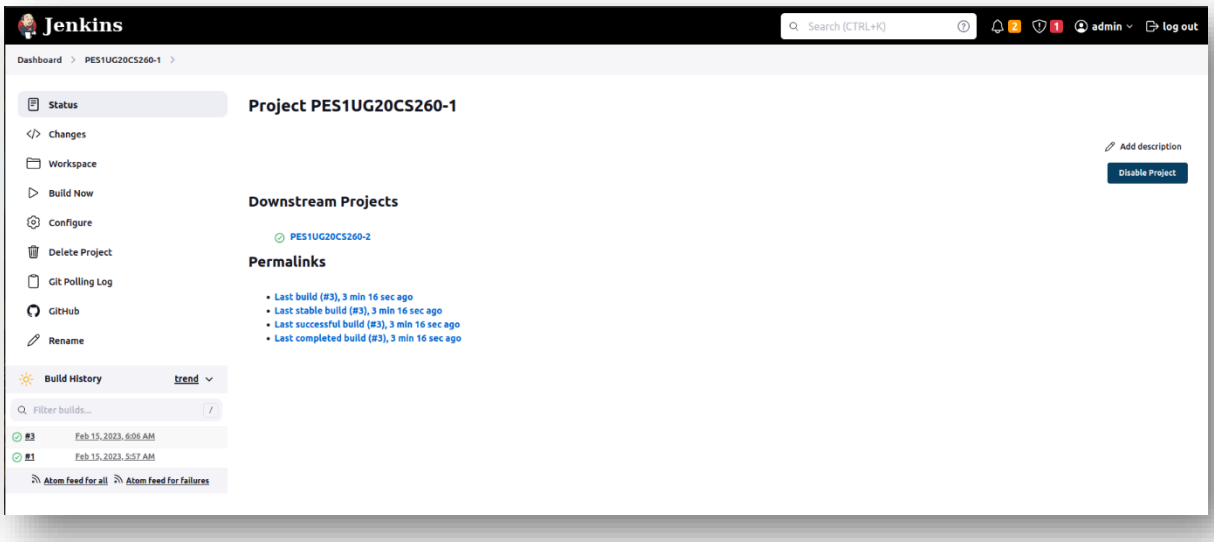


Task 3:

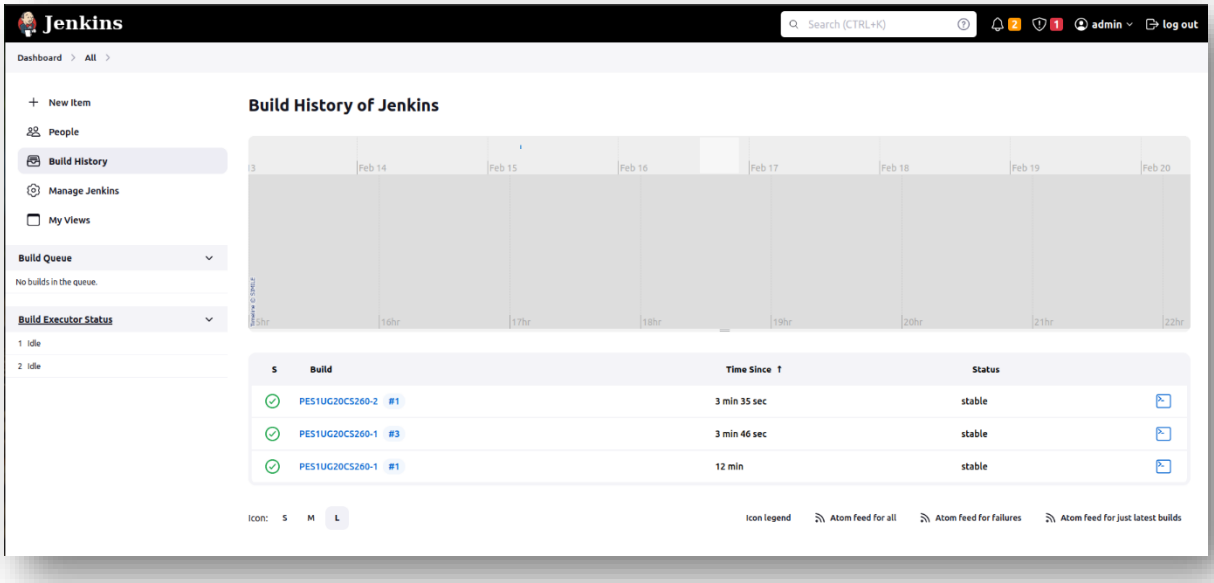
1. Console output of second job



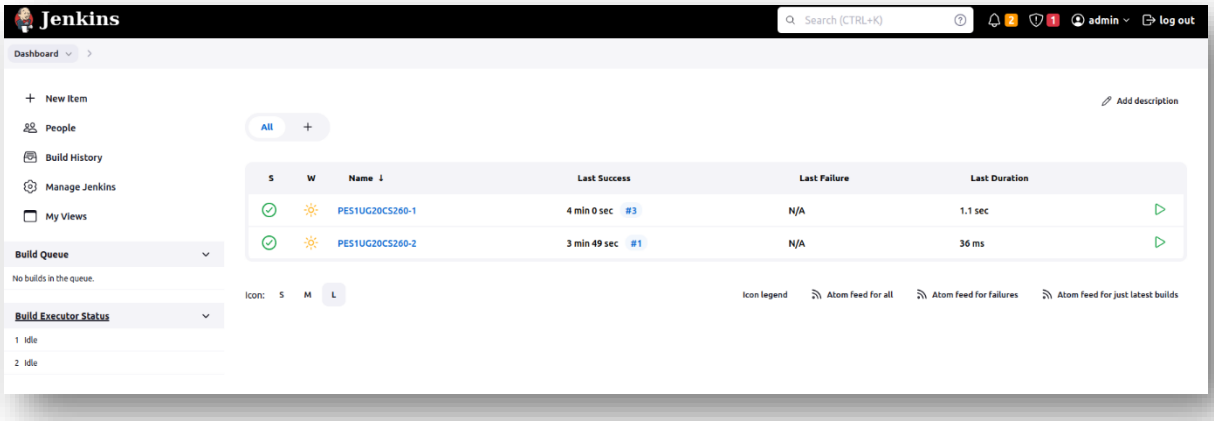
2. Status page of first job



3. Build History of Jenkins

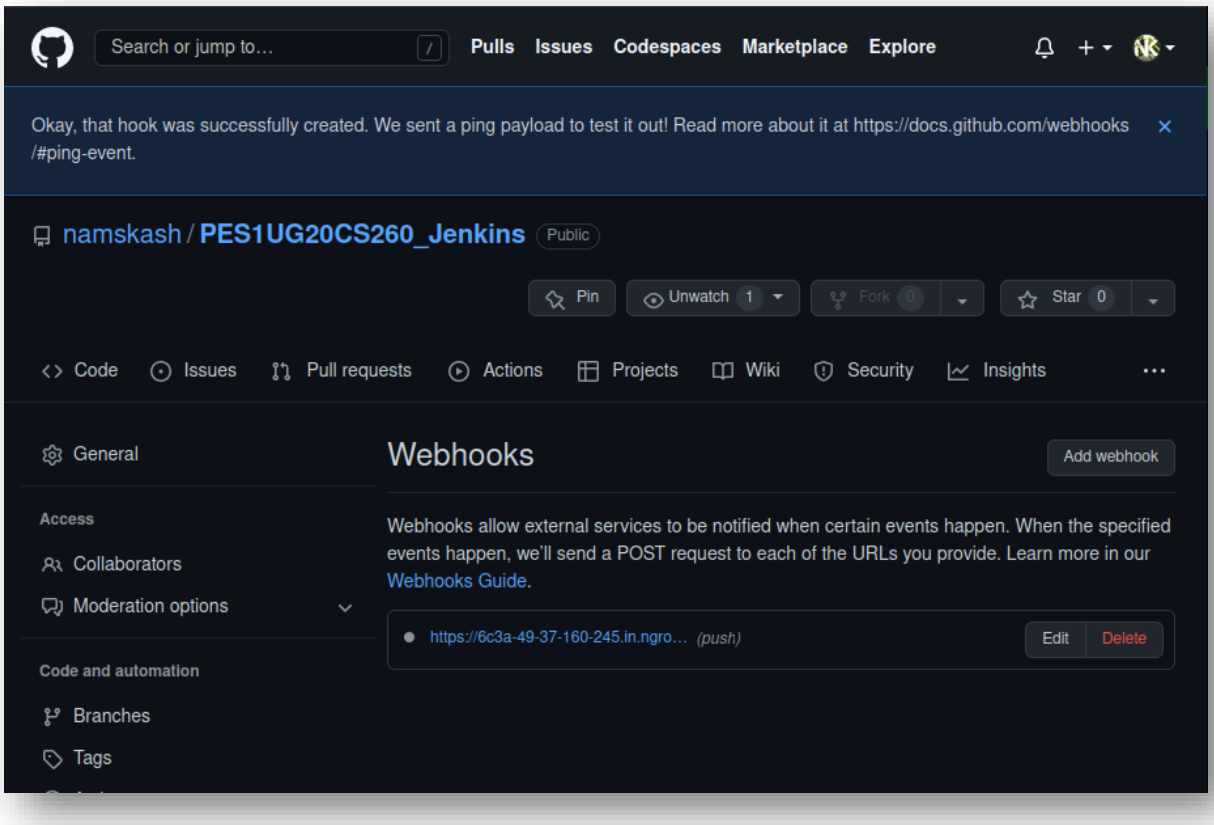


4. Jenkins Dashboard

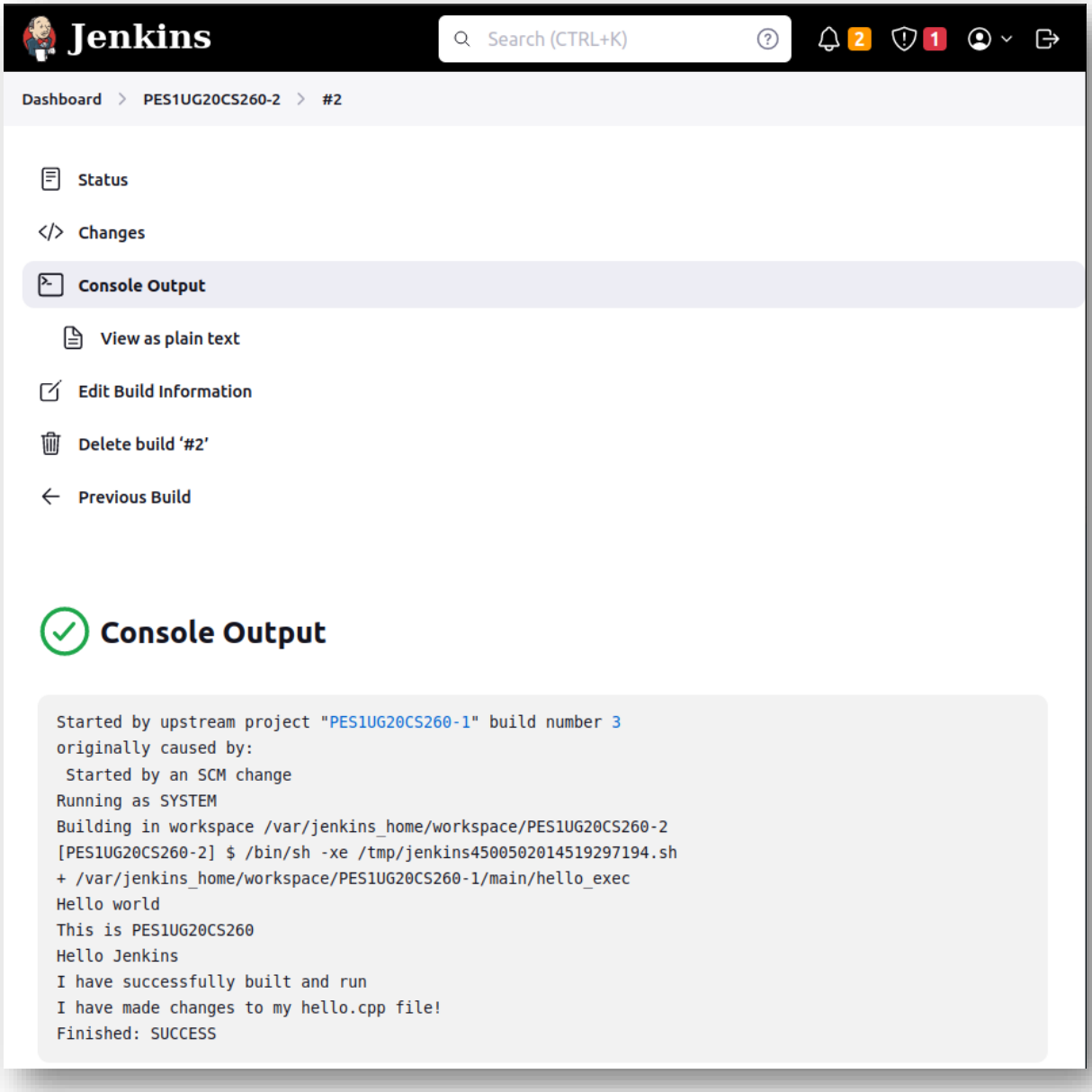


Task 4:

1. Webhook added to your GitHub repository

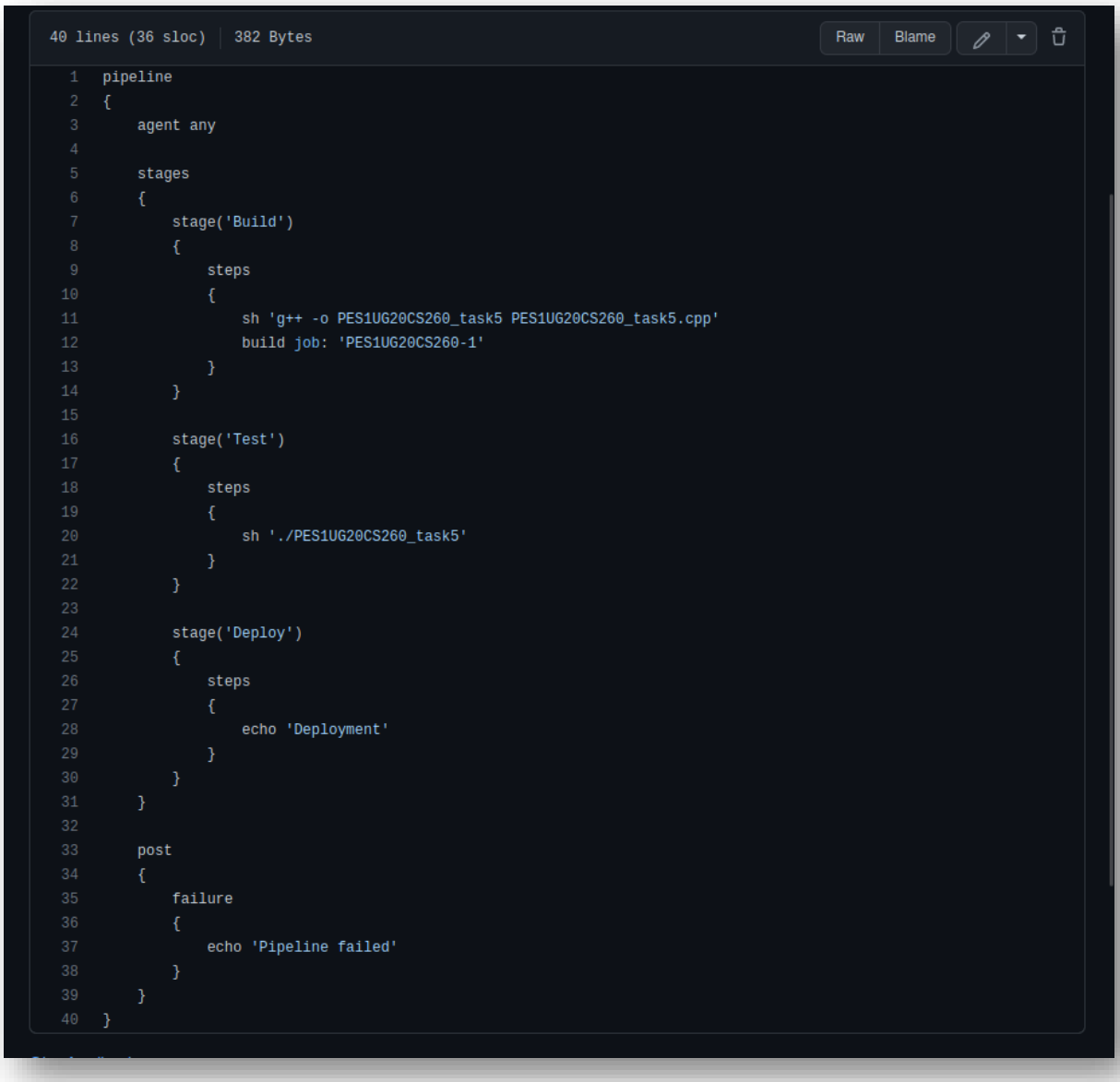


2. Console Output of second job displaying the change made in hello.cpp file.


Jenkins
Search (CTRL+K)
2
1
Dashboard
PES1UG20CS260-2
#2
Status
Changes
Console Output
View as plain text
Edit Build Information
Delete build '#2'
Previous Build
Console Output
Started by upstream project "PES1UG20CS260-1" build number 3
originally caused by:
Started by an SCM change
Running as SYSTEM
Building in workspace /var/jenkins_home/workspace/PES1UG20CS260-2
[PES1UG20CS260-2] $ /bin/sh -xe /tmp/jenkins4500502014519297194.sh
+ /var/jenkins_home/workspace/PES1UG20CS260-1/main/hello_exec
Hello world
This is PES1UG20CS260
Hello Jenkins
I have successfully built and run
I have made changes to my hello.cpp file!
Finished: SUCCESS

Task 5:

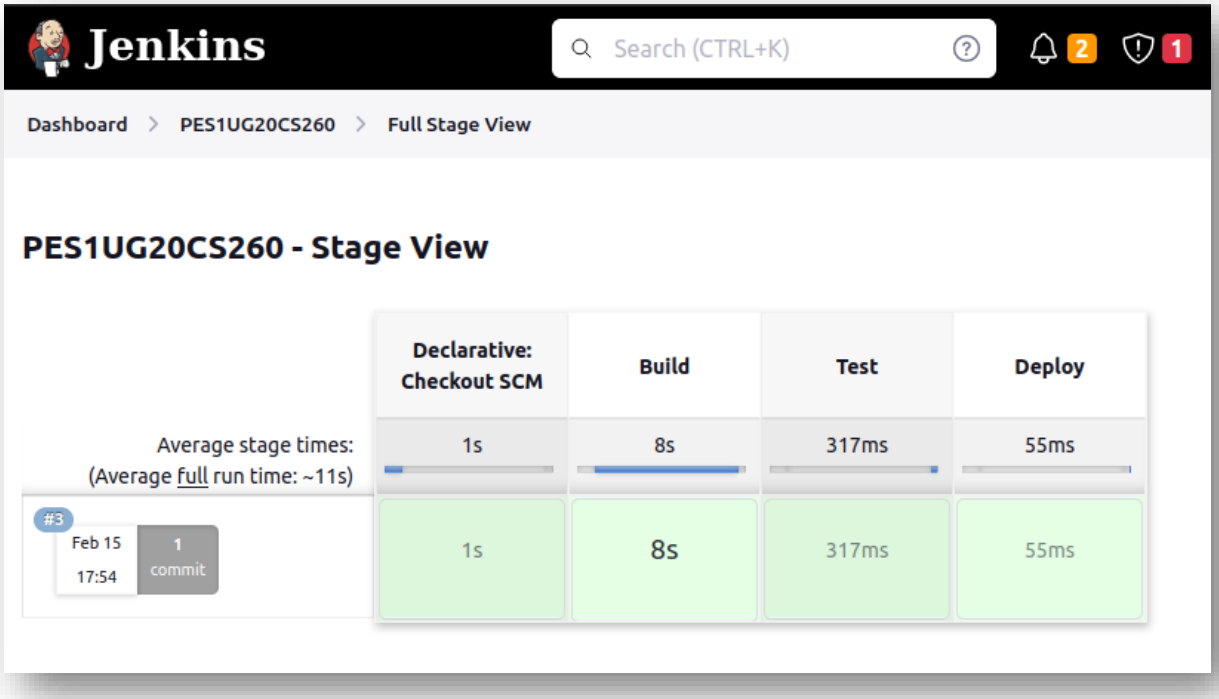
1. Code/script written to create basic pipeline using GitHub repository



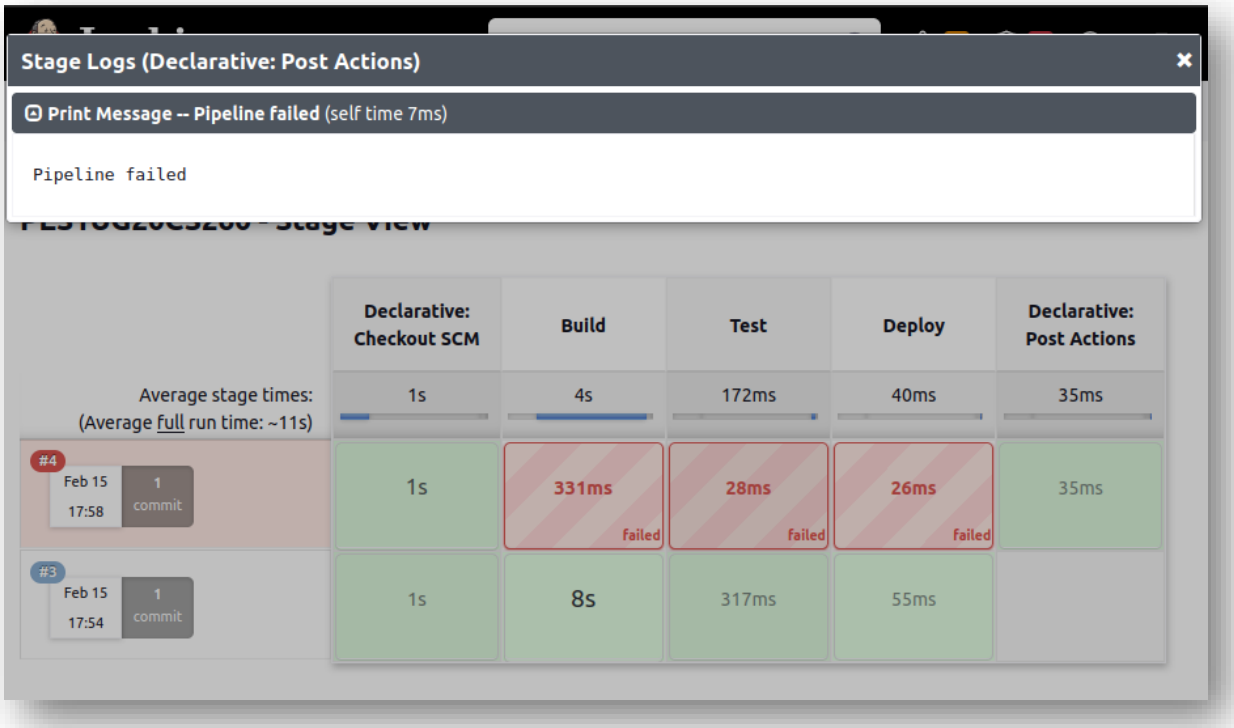

```
pipeline
{
    agent any

    stages
    {
        stage('Build')
        {
            steps
            {
                sh 'g++ -o PES1UG20CS260_task5 PES1UG20CS260_task5.cpp'
                build job: 'PES1UG20CS260-1'
            }
        }

        stage('Test')
        {
            steps
            {
                sh './PES1UG20CS260_task5'
            }
        }

        stage('Deploy')
        {
            steps
            {
                echo 'Deployment'
            }
        }
    }

    post
    {
        failure
        {
            echo 'Pipeline failed'
        }
    }
}
```

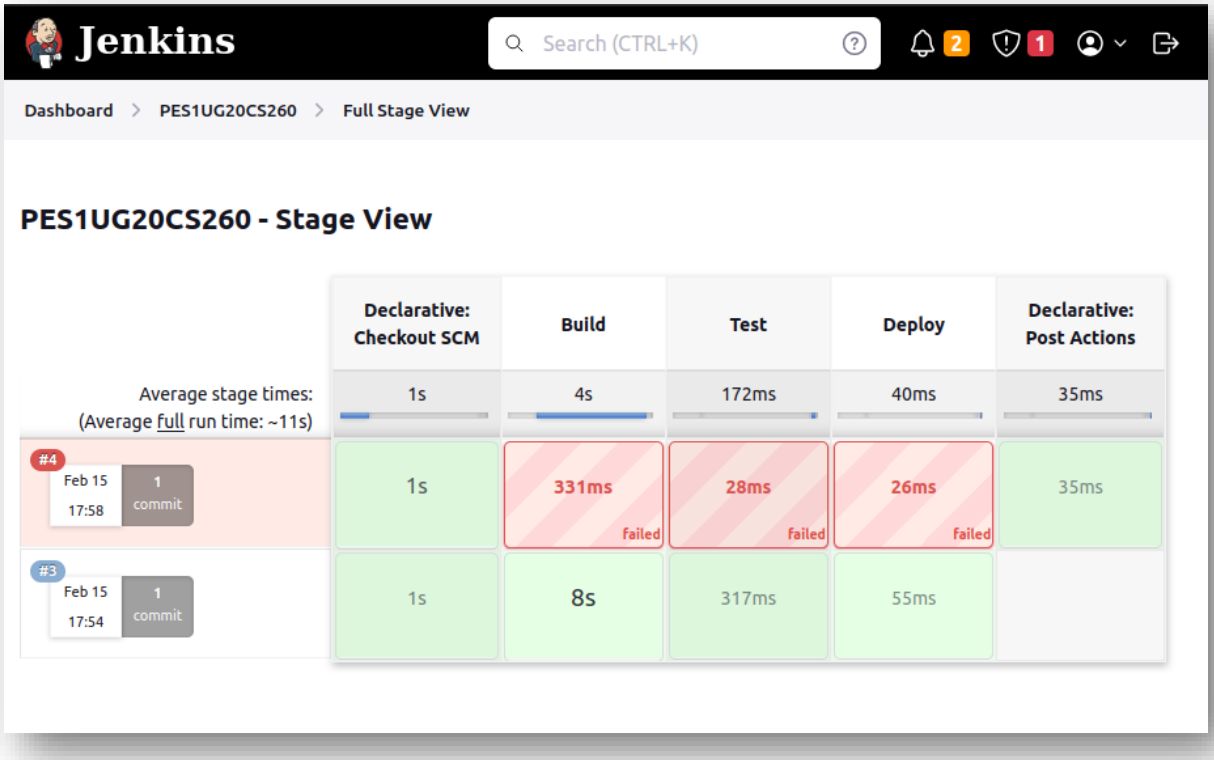
2. Output of working created pipeline:

- *Stage view / Execution status of pipeline with all stages succeeded*



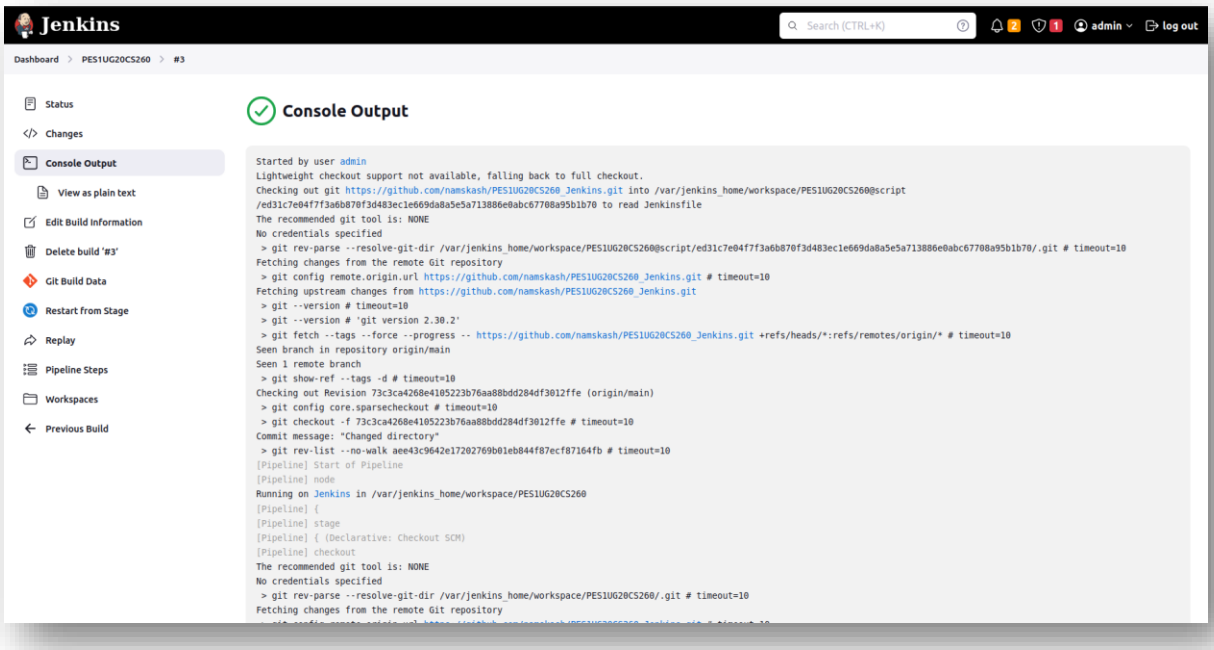
- *Verify Declarative: Post Actions stage succeed for handling failures.*



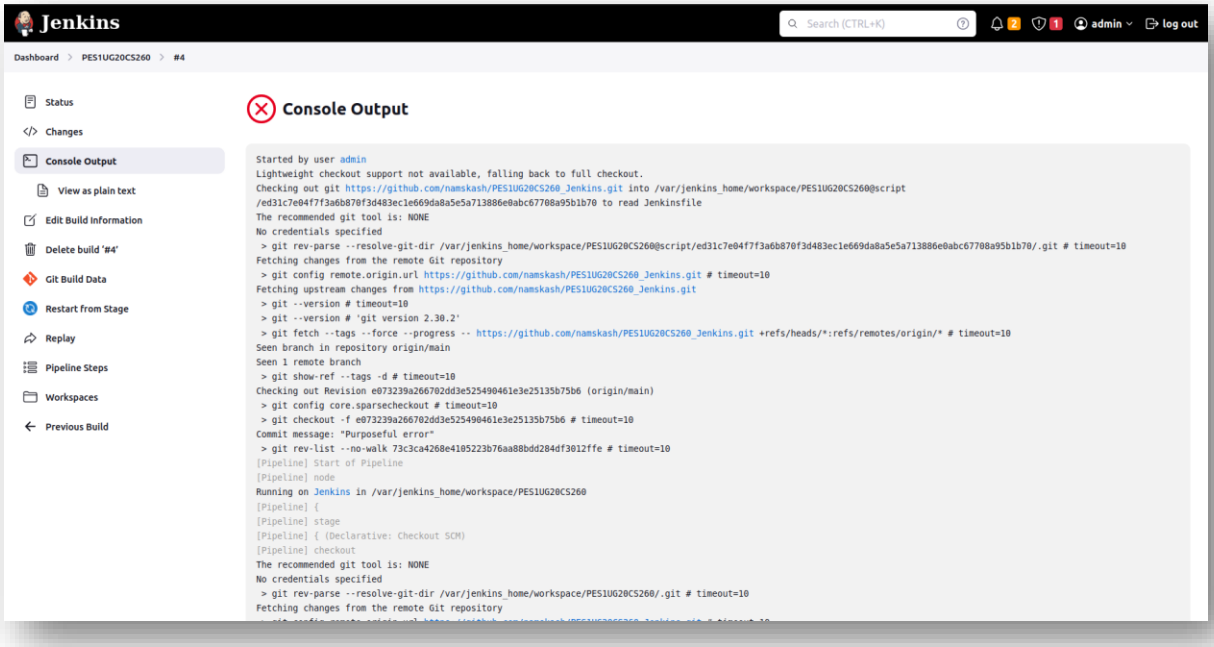


3. Console Output of the Pipeline

SUCCESS



FAILURE



4. Link to the created GitHub repository

Link: https://github.com/namskash/PES1UG20CS260_Jenkins.git