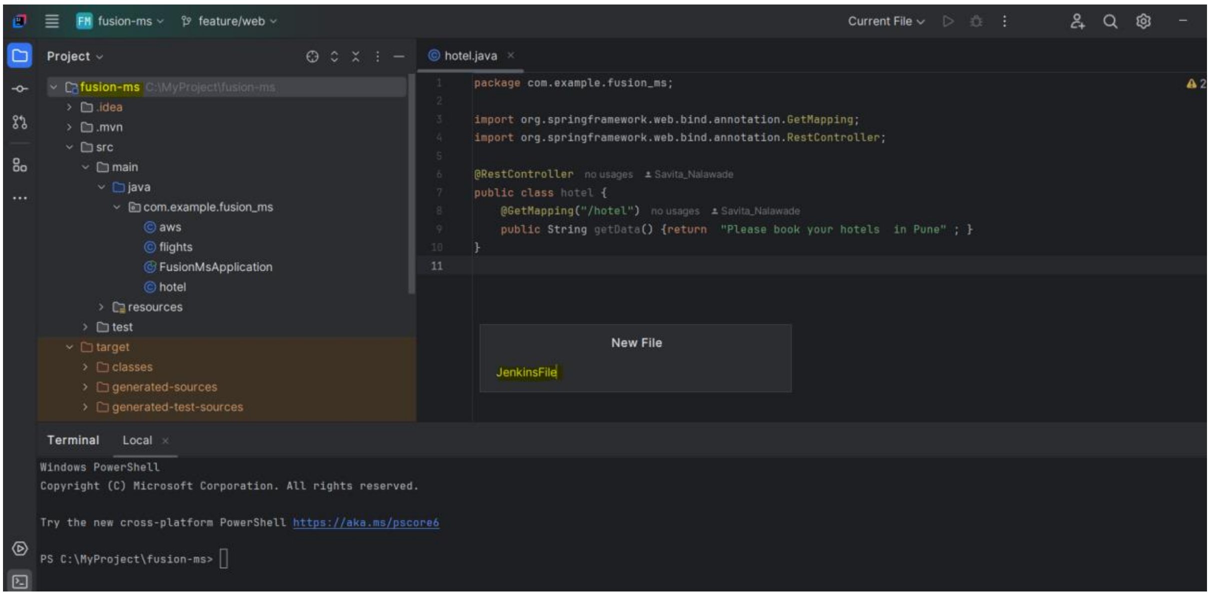
Pipeline_Jenkins_Job 11/10/24 SavitaNalawade

1)Create one normal file(Jenkinsfile) in existed (Fusion_ms) project



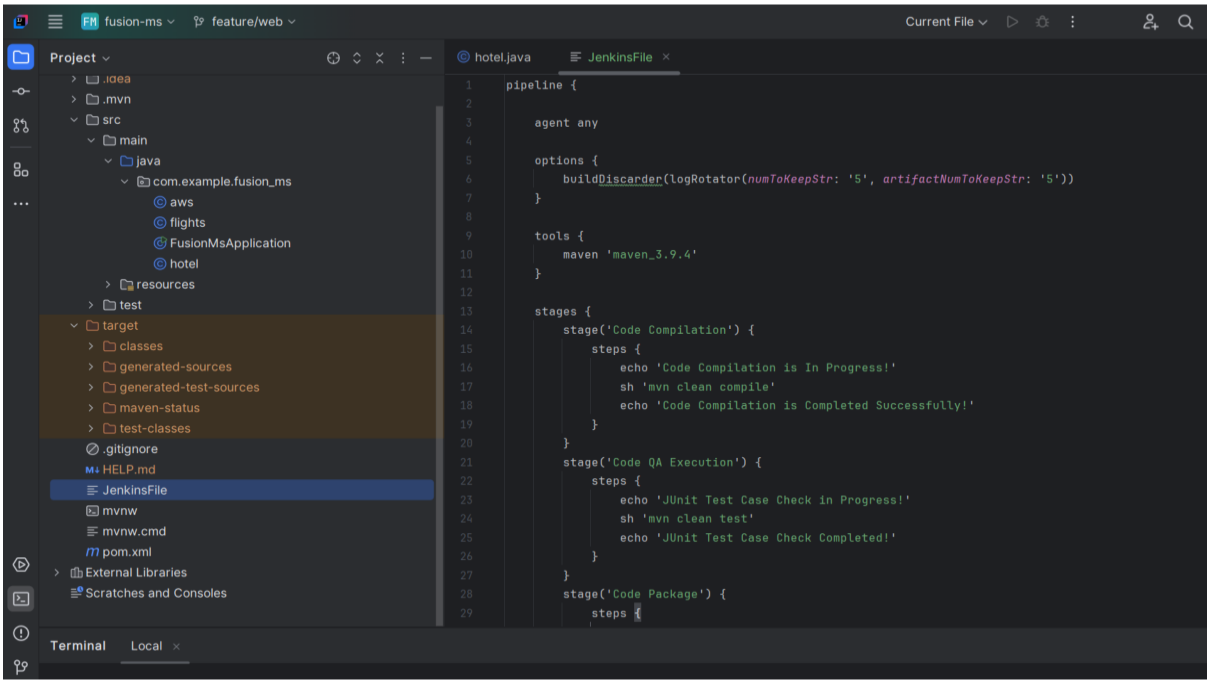
```
package com.example.fusion_ms;

import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.RestController;

@RestController  no usages  Savita_Nalawade
public class hotel {
    @GetMapping("/hotel")  no usages  Savita_Nalawade
    public String getData() {return  "Please book your hotels  in Pune" ; }
}
```

New File

JenkinsFile

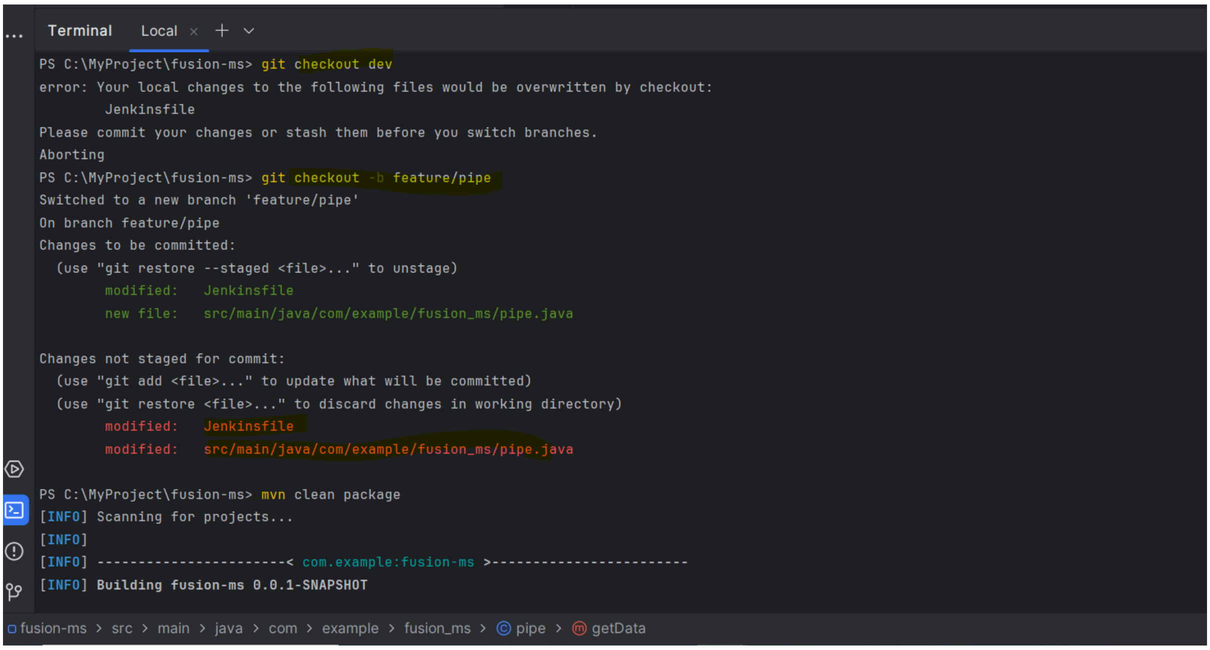
```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\MyProject\fusion-ms>
```

2)Enter code



```
pipeline {

    agent any

    options {
        buildDiscarder(logRotator(numToKeepStr: '5', artifactNumToKeepStr: '5'))
    }

    tools {
        maven 'maven_3.9.4'
    }

    stages {
        stage('Code Compilation') {
            steps {
                echo 'Code Compilation is In Progress!'
                sh 'mvn clean compile'
                echo 'Code Compilation is Completed Successfully!'
            }
        }
        stage('Code QA Execution') {
            steps {
                echo 'JUnit Test Case Check in Progress!'
                sh 'mvn clean test'
                echo 'JUnit Test Case Check Completed!'
            }
        }
        stage('Code Package') {
            steps {
```

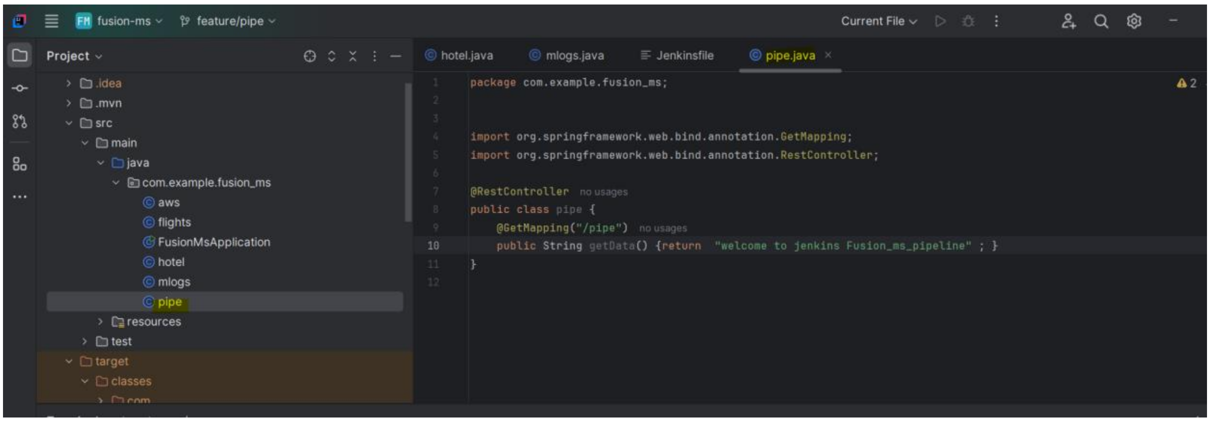
3)Created one new branch from dev (feature/pipe) and push this file to github



Terminal
Local
fusion-ms › src › main › java › com › example › fusion_ms › pipe › getData

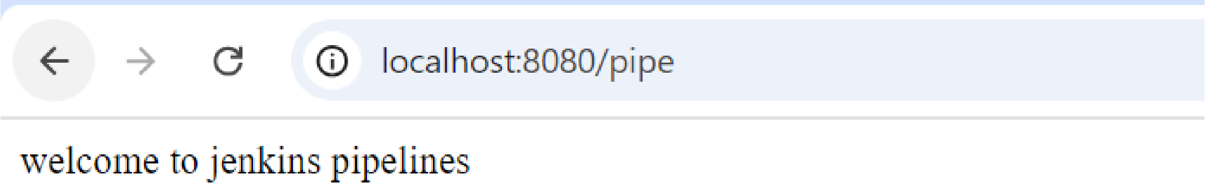
```
PS C:\MyProject\fusion-ms> git checkout dev
error: Your local changes to the following files would be overwritten by checkout:
        Jenkinsfile
Please commit your changes or stash them before you switch branches.
Aborting
PS C:\MyProject\fusion-ms> git checkout -b feature/pipe
Switched to a new branch 'feature/pipe'
On branch feature/pipe
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   Jenkinsfile
        new file:   src/main/java/com/example/fusion_ms/pipe.java

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   Jenkinsfile
        modified:   src/main/java/com/example/fusion_ms/pipe.java

PS C:\MyProject\fusion-ms> mvn clean package
[INFO] Scanning for projects...
[INFO]
[INFO] ----------------------< com.example:fusion-ms >-----------------------
[INFO] Building fusion-ms 0.0.1-SNAPSHOT
```

4)Create one class with same name and write some code



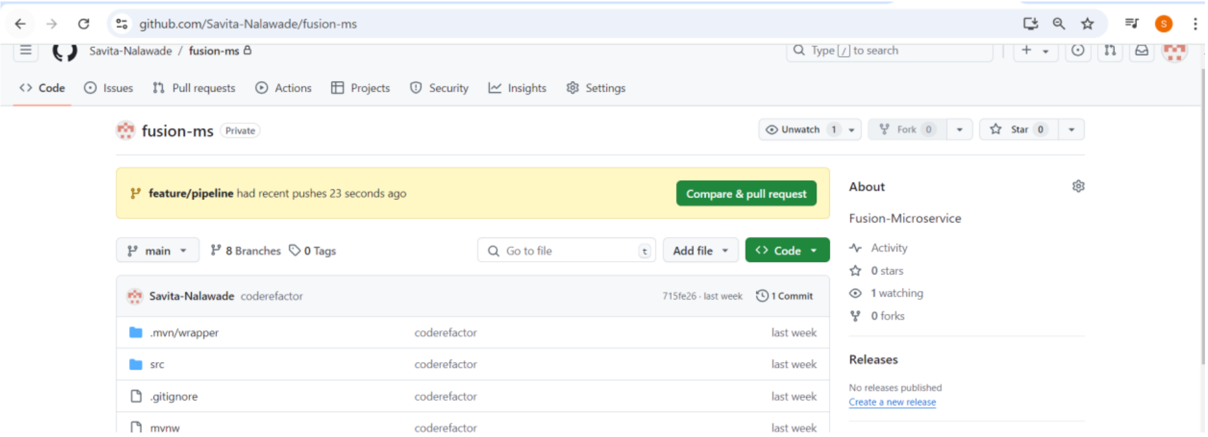
```java
package com.example.fusion_ms;


import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.RestController;

@RestController  no usages
public class pipe {
    @GetMapping("/pipe")  no usages
    public String getData() {return  "welcome to jenkins Fusion_ms_pipeline" ; }
}
```

5)check output of pipe file



welcome to jenkins pipelines

6)compare and pull request to dev branch



github.com/Savita-Nalawade/fusion-ms

feature/pipeline had recent pushes 23 seconds ago

About

Fusion-Microservice

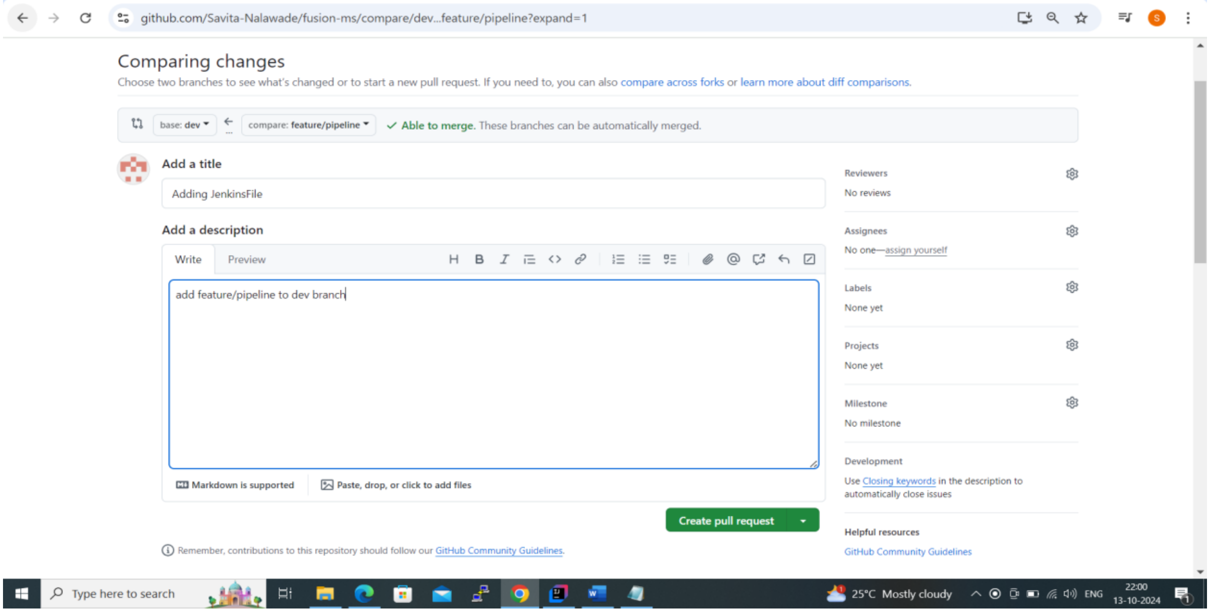
Releases

No releases published
Create a new release

Savita-Nalawade coderefactor 715fe26 · last week 1 Commit

.mvn/wrapper	coderefactor	last week
src	coderefactor	last week
.gitignore	coderefactor	last week
mvnw	coderefactor	last week

7)Merge branch



github.com/Savita-Nalawade/fusion-ms/compare/dev...feature/pipeline?expand=1

Comparing changes

Choose two branches to see what's changed or to start a new pull request. If you need to, you can also compare across forks or learn more about diff comparisons.

base: dev ← compare: feature/pipeline ✓ Able to merge. These branches can be automatically merged.

Add a title

Adding JenkinsFile

Add a description

add feature/pipeline to dev branch

Remember, contributions to this repository should follow our GitHub Community Guidelines.

Reviewers
No reviews

Assignees
No one—assign yourself

Labels
None yet

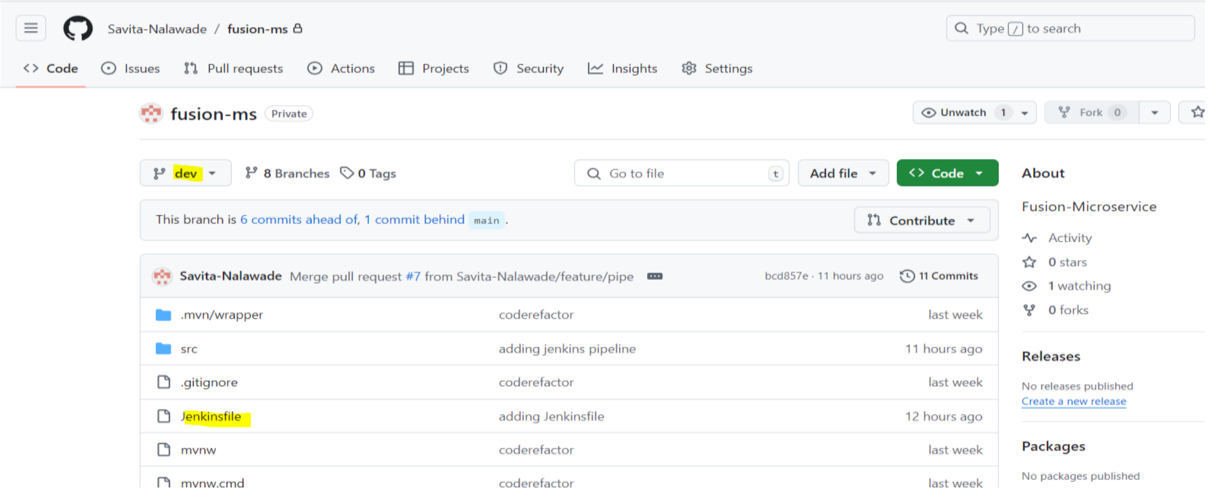
Projects
None yet

Milestone
No milestone

Development
Use Closing keywords in the description to automatically close issues

Helpful resources
GitHub Community Guidelines

8)Now we can see jenkinsfile in dev branch



This branch is 6 commits ahead of, 1 commit behind main .

Savita-Nalawade Merge pull request #7 from Savita-Nalawade/feature/pipe bcd857e · 11 hours ago 11 Commits

.mvn/wrapper	coderefactor	last week
src	adding jenkins pipeline	11 hours ago
.gitignore	coderefactor	last week
Jenkinsfile	adding Jenkinsfile	12 hours ago
mvnw	coderefactor	last week
mvnw.cmd	coderefactor	last week

About

Fusion-Microservice

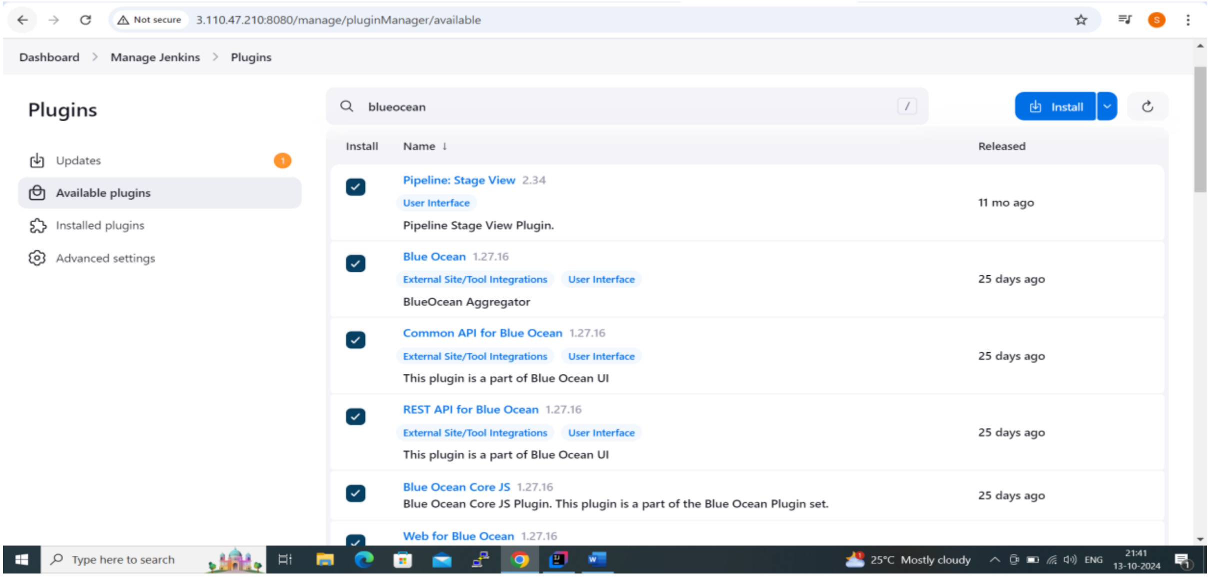
Releases

No releases published
Create a new release

Packages

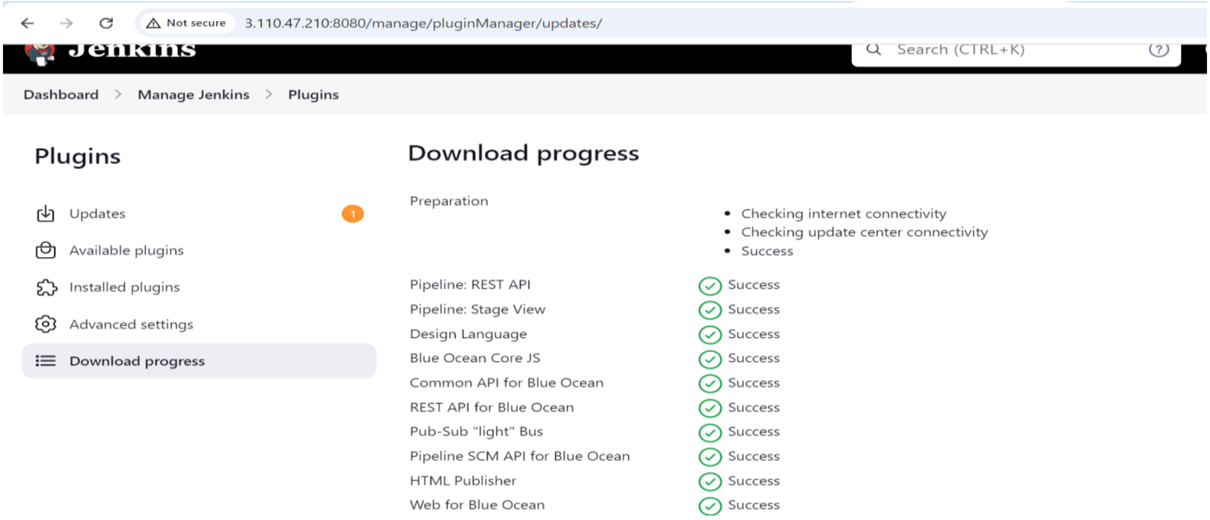
No packages published

9)Goto Jenkins and try to install some plugins which are related to pipelines



Install	Name ↓	Released
☑	Pipeline: Stage View 2.34 User Interface Pipeline Stage View Plugin.	11 mo ago
☑	Blue Ocean 1.27.16 External Site/Tool Integrations User Interface BlueOcean Aggregator	25 days ago
☑	Common API for Blue Ocean 1.27.16 External Site/Tool Integrations User Interface This plugin is a part of Blue Ocean UI	25 days ago
☑	REST API for Blue Ocean 1.27.16 External Site/Tool Integrations User Interface This plugin is a part of Blue Ocean UI	25 days ago
☑	Blue Ocean Core JS 1.27.16 Blue Ocean Core JS Plugin. This plugin is a part of the Blue Ocean Plugin set.	25 days ago
☑	Web for Blue Ocean 1.27.16	

10)Successfully installed Plugins

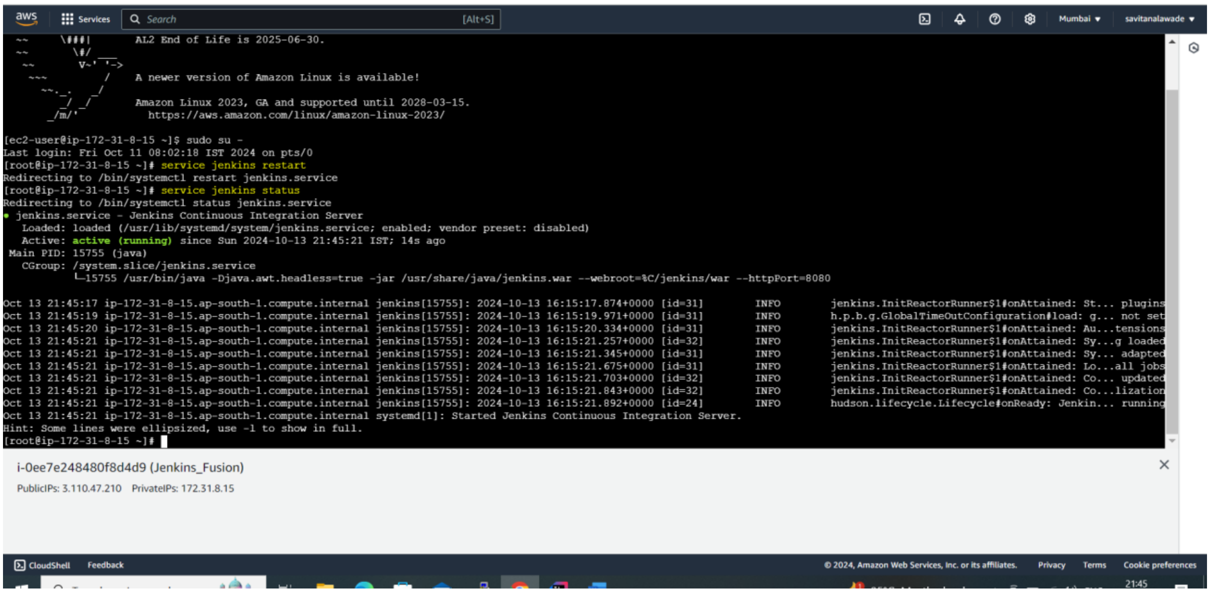


Download progress

Preparation
- Checking internet connectivity
- Checking update center connectivity
- Success

Pipeline: REST API	✓ Success
Pipeline: Stage View	✓ Success
Design Language	✓ Success
Blue Ocean Core JS	✓ Success
Common API for Blue Ocean	✓ Success
REST API for Blue Ocean	✓ Success
Pub-Sub "light" Bus	✓ Success
Pipeline SCM API for Blue Ocean	✓ Success
HTML Publisher	✓ Success
Web for Blue Ocean	✓ Success

11)Restart Jenkins

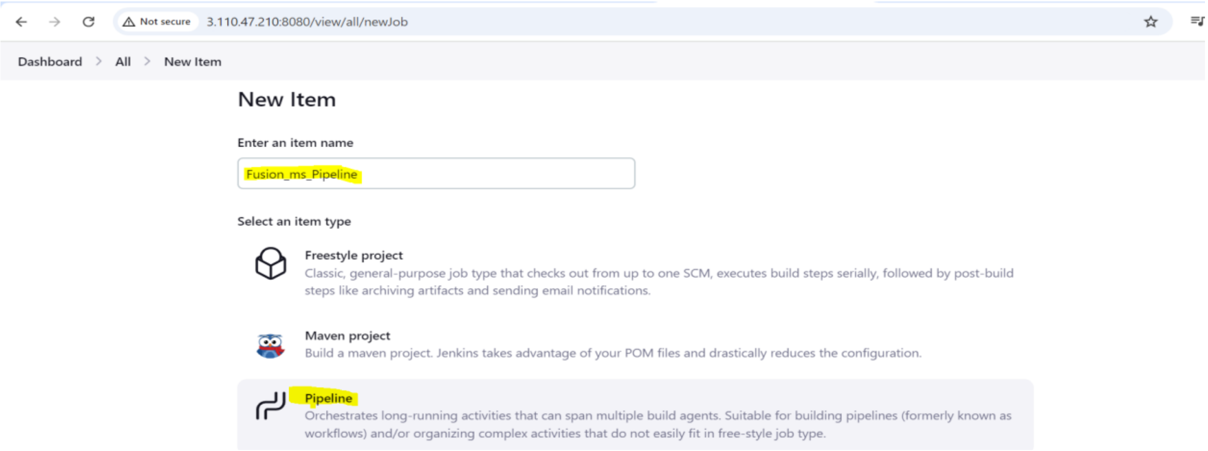


```
 ~~      \###|       AL2 End of Life is 2025-06-30.
 ~~       \#/ ___
  ~~       V~' '->
   ~~~        /     A newer version of Amazon Linux is available!
     ~~._.   _/
        _/ _/       Amazon Linux 2023, GA and supported until 2028-03-15.
      _/m/'           https://aws.amazon.com/linux/amazon-linux-2023/

[ec2-user@ip-172-31-8-15 ~]$ sudo su -
Last login: Fri Oct 11 08:02:18 IST 2024 on pts/0
[root@ip-172-31-8-15 ~]# service jenkins restart
Redirecting to /bin/systemctl restart jenkins.service
[root@ip-172-31-8-15 ~]# service jenkins status
Redirecting to /bin/systemctl status jenkins.service
● jenkins.service - Jenkins Continuous Integration Server
   Loaded: loaded (/usr/lib/systemd/system/jenkins.service; enabled; vendor preset: disabled)
   Active: active (running) since Sun 2024-10-13 21:45:21 IST; 14s ago
 Main PID: 15755 (java)
   CGroup: /system.slice/jenkins.service
           └─15755 /usr/bin/java -Djava.awt.headless=true -jar /usr/share/java/jenkins.war --webroot=%C/jenkins/war --httpPort=8080

Oct 13 21:45:17 ip-172-31-8-15.ap-south-1.compute.internal jenkins[15755]: 2024-10-13 16:15:17.874+0000 [id=31]        INFO       jenkins.InitReactorRunner$1#onAttained: St... plugins
Oct 13 21:45:19 ip-172-31-8-15.ap-south-1.compute.internal jenkins[15755]: 2024-10-13 16:15:19.971+0000 [id=31]        INFO       h.p.b.g.GlobalTimeOutConfiguration#load: g... not set
Oct 13 21:45:20 ip-172-31-8-15.ap-south-1.compute.internal jenkins[15755]: 2024-10-13 16:15:20.334+0000 [id=31]        INFO       jenkins.InitReactorRunner$1#onAttained: Au...tensions
Oct 13 21:45:21 ip-172-31-8-15.ap-south-1.compute.internal jenkins[15755]: 2024-10-13 16:15:21.257+0000 [id=32]        INFO       jenkins.InitReactorRunner$1#onAttained: Sy...g loaded
Oct 13 21:45:21 ip-172-31-8-15.ap-south-1.compute.internal jenkins[15755]: 2024-10-13 16:15:21.345+0000 [id=31]        INFO       jenkins.InitReactorRunner$1#onAttained: Sy... adapted
Oct 13 21:45:21 ip-172-31-8-15.ap-south-1.compute.internal jenkins[15755]: 2024-10-13 16:15:21.675+0000 [id=31]        INFO       jenkins.InitReactorRunner$1#onAttained: Lo...all jobs
Oct 13 21:45:21 ip-172-31-8-15.ap-south-1.compute.internal jenkins[15755]: 2024-10-13 16:15:21.703+0000 [id=32]        INFO       jenkins.InitReactorRunner$1#onAttained: Co... updated
Oct 13 21:45:21 ip-172-31-8-15.ap-south-1.compute.internal jenkins[15755]: 2024-10-13 16:15:21.843+0000 [id=32]        INFO       jenkins.InitReactorRunner$1#onAttained: Co...lization
Oct 13 21:45:21 ip-172-31-8-15.ap-south-1.compute.internal jenkins[15755]: 2024-10-13 16:15:21.892+0000 [id=24]        INFO       hudson.lifecycle.Lifecycle#onReady: Jenkin... running
Oct 13 21:45:21 ip-172-31-8-15.ap-south-1.compute.internal systemd[1]: Started Jenkins Continuous Integration Server.
Hint: Some lines were ellipsized, use -l to show in full.
[root@ip-172-31-8-15 ~]#
```

i-0ee7e248480f8d4d9 (Jenkins_Fusion)

PublicIPs: 3.110.47.210   PrivateIPs: 172.31.8.15

12)Create one Pipeline job



Not secure 3.110.47.210:8080/view/all/newJob

Dashboard > All > New Item

New Item

Enter an item name

Fusion_ms_Pipeline

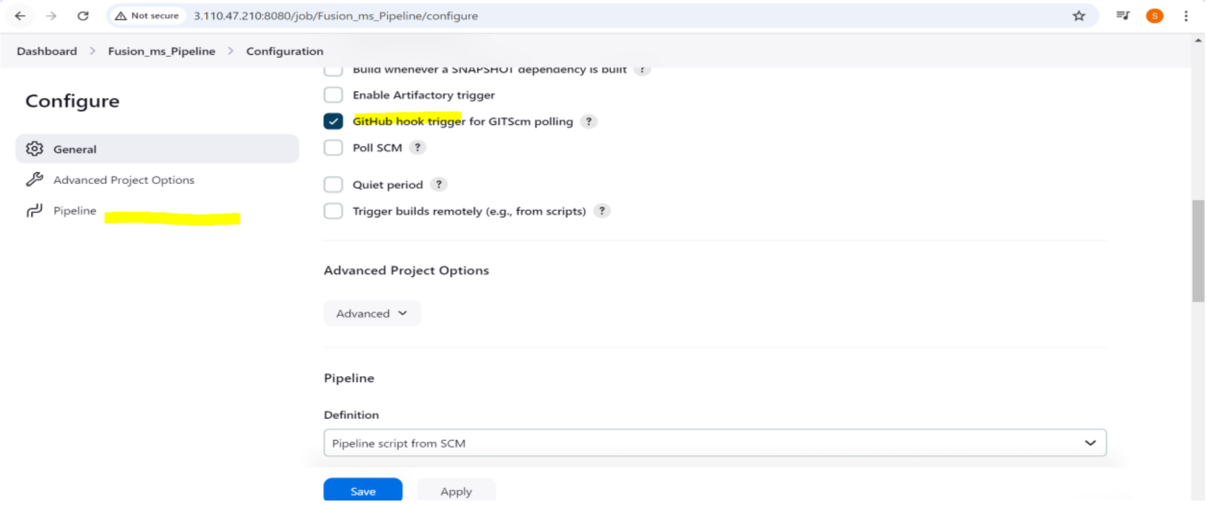
Select an item type

Freestyle project
Classic, general-purpose job type that checks out from up to one SCM, executes build steps serially, followed by post-build steps like archiving artifacts and sending email notifications.

Maven project
Build a maven project. Jenkins takes advantage of your POM files and drastically reduces the configuration.

Pipeline
Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.

13)Select below highlighted to push/download code from github to jenkins



Not secure 3.110.47.210:8080/job/Fusion_ms_Pipeline/configure

Dashboard > Fusion_ms_Pipeline > Configuration

Configure

- General
- Advanced Project Options
- Pipeline

□ Build whenever a SNAPSHOT dependency is built
□ Enable Artifactory trigger
☑ GitHub hook trigger for GITScm polling
□ Poll SCM
□ Quiet period
□ Trigger builds remotely (e.g., from scripts)

Advanced Project Options

Advanced

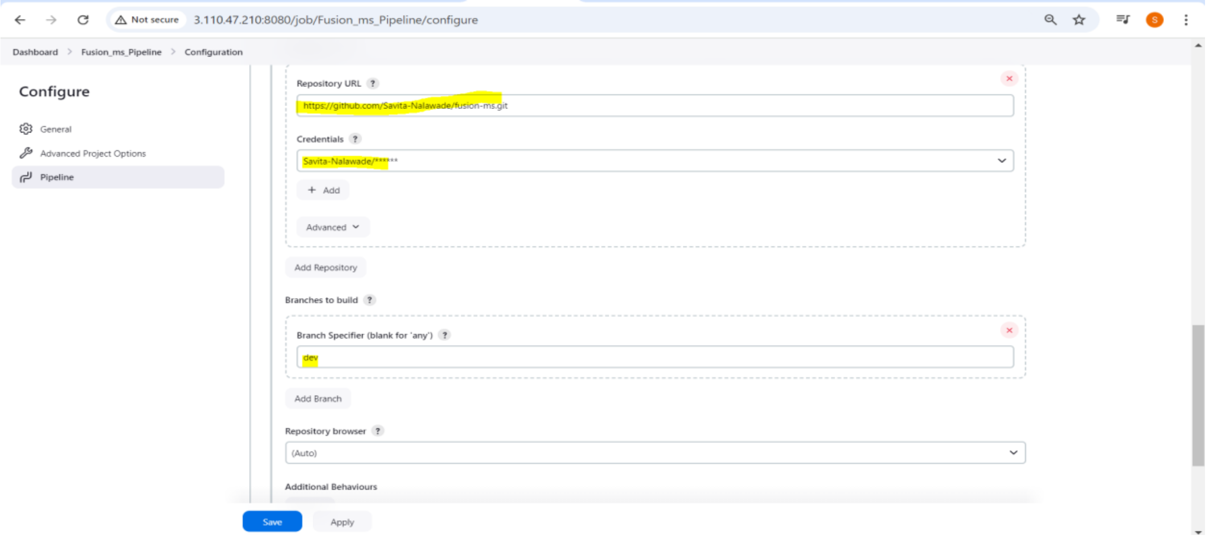
Pipeline

Definition

Pipeline script from SCM

Save Apply

14)Enter github url and add creds if repository is private



Not secure 3.110.47.210:8080/job/Fusion_ms_Pipeline/configure

Dashboard > Fusion_ms_Pipeline > Configuration

Configure

- General
- Advanced Project Options
- Pipeline

Repository URL

https://github.com/Savita-Nalawade/fusion-ms.git

Credentials

Savita-Nalawade/******

+ Add

Advanced

Add Repository

Branches to build

Branch Specifier (blank for 'any')

dev

Add Branch

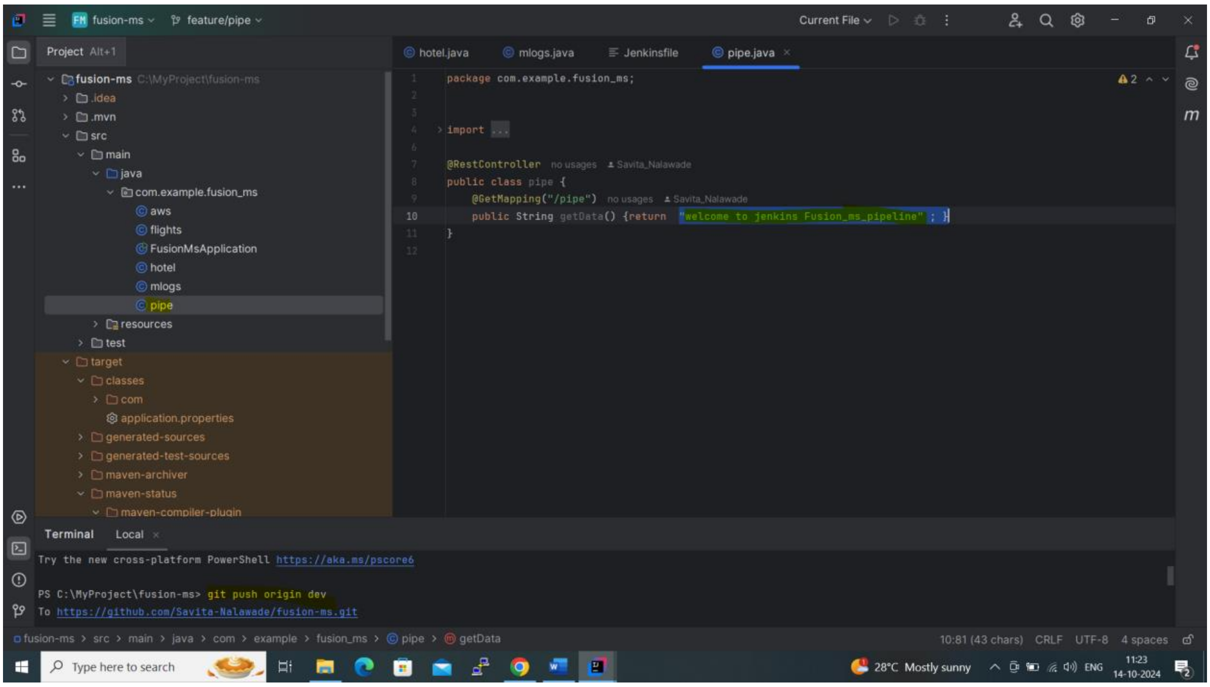
Repository browser

(Auto)

Additional Behaviours

Save Apply

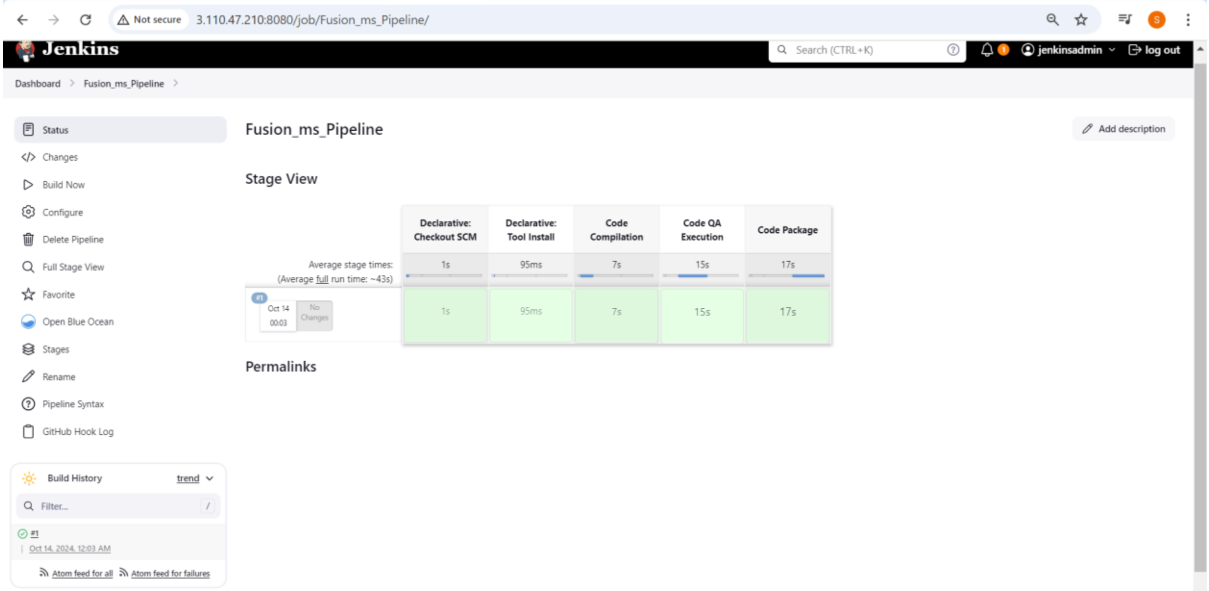
15)do some changes in code and push code in dev branch



```java
package com.example.fusion_ms;


import ...

@RestController
public class pipe {
    @GetMapping("/pipe")
    public String getData() {return "welcome to jenkins Fusion_ms_pipeline" ; }
}
```

```
Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\MyProject\fusion-ms> git push origin dev
To https://github.com/Savita-Nalawade/fusion-ms.git
```

16)If everything is fine output will looks like as per below

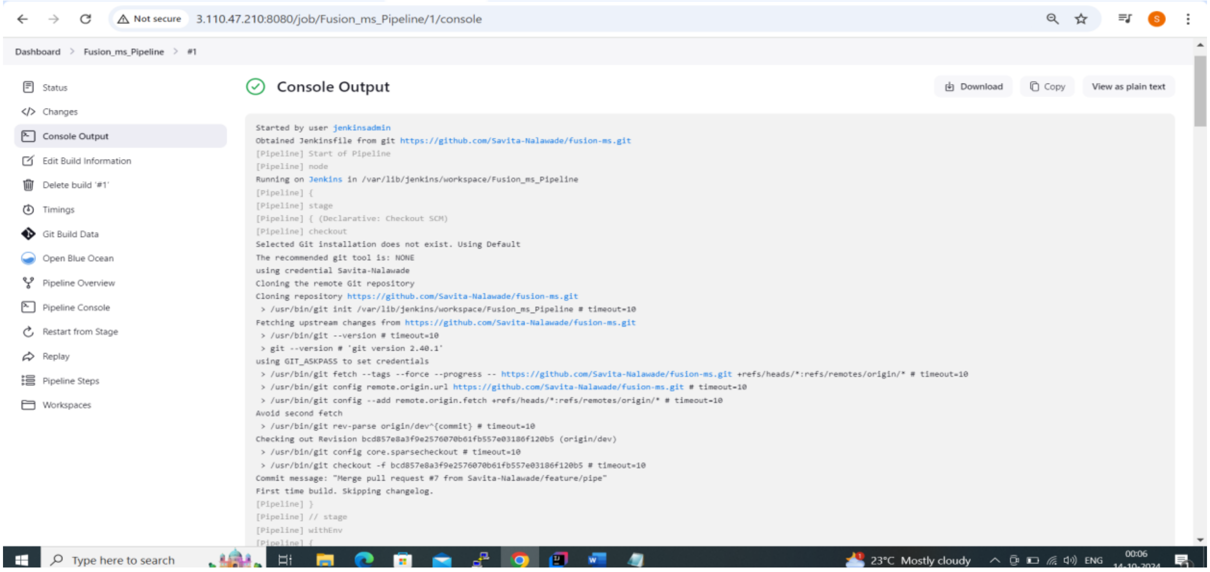


Fusion_ms_Pipeline

Stage View

	Declarative: Checkout SCM	Declarative: Tool Install	Code Compilation	Code QA Execution	Code Package
Average stage times: (Average full run time: ~43s)	1s	95ms	7s	15s	17s
#1 Oct 14 00:03 No Changes	1s	95ms	7s	15s	17s

Permalinks



Console Output

```
Started by user jenkinsadmin
Obtained Jenkinsfile from git https://github.com/Savita-Nalawade/fusion-ms.git
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in /var/lib/jenkins/workspace/Fusion_ms_Pipeline
[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 Savita-Nalawade
Cloning the remote Git repository
Cloning repository https://github.com/Savita-Nalawade/fusion-ms.git
 > /usr/bin/git init /var/lib/jenkins/workspace/Fusion_ms_Pipeline # timeout=10
Fetching upstream changes from https://github.com/Savita-Nalawade/fusion-ms.git
 > /usr/bin/git --version # timeout=10
 > git --version # 'git version 2.40.1'
using GIT_ASKPASS to set credentials
 > /usr/bin/git fetch --tags --force --progress -- https://github.com/Savita-Nalawade/fusion-ms.git +refs/heads/*:refs/remotes/origin/* # timeout=10
 > /usr/bin/git config remote.origin.url https://github.com/Savita-Nalawade/fusion-ms.git # timeout=10
 > /usr/bin/git config --add remote.origin.fetch +refs/heads/*:refs/remotes/origin/* # timeout=10
Avoid second fetch
 > /usr/bin/git rev-parse origin/dev^{commit} # timeout=10
Checking out Revision bcd857e8a3f9e2576070b61fb557e03186f120b5 (origin/dev)
 > /usr/bin/git config core.sparsecheckout # timeout=10
 > /usr/bin/git checkout -f bcd857e8a3f9e2576070b61fb557e03186f120b5 # timeout=10
Commit message: "Merge pull request #7 from Savita-Nalawade/feature/pipe"
First time build. Skipping changelog.
[Pipeline] }
[Pipeline] // stage
[Pipeline] withEnv
[Pipeline] {
```

Thank You!!!!