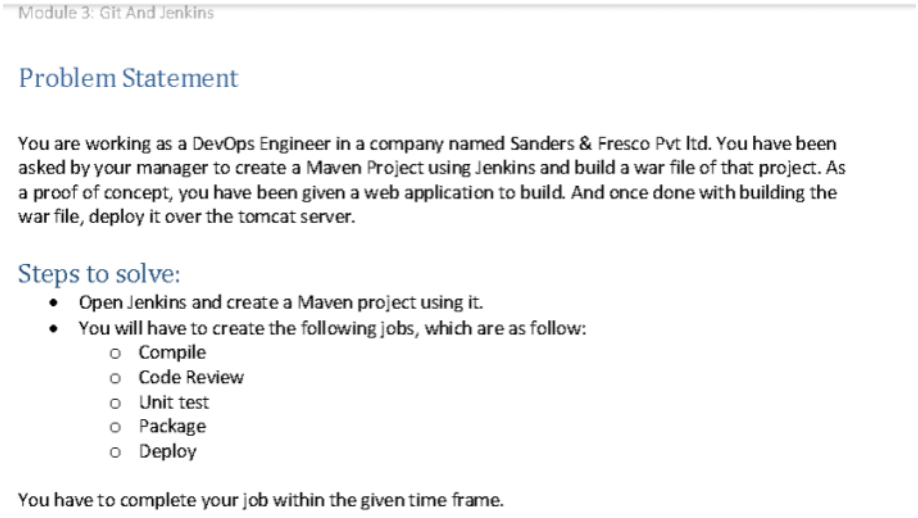
GIT Repo Used:

https://github.com/Vagish619/Edureka-DevOps-Assignments.git

Branch Name:

Assignment3-Git_And_Jenkins

Problem Statement:



Module 3: Git And Jenkins

Problem Statement

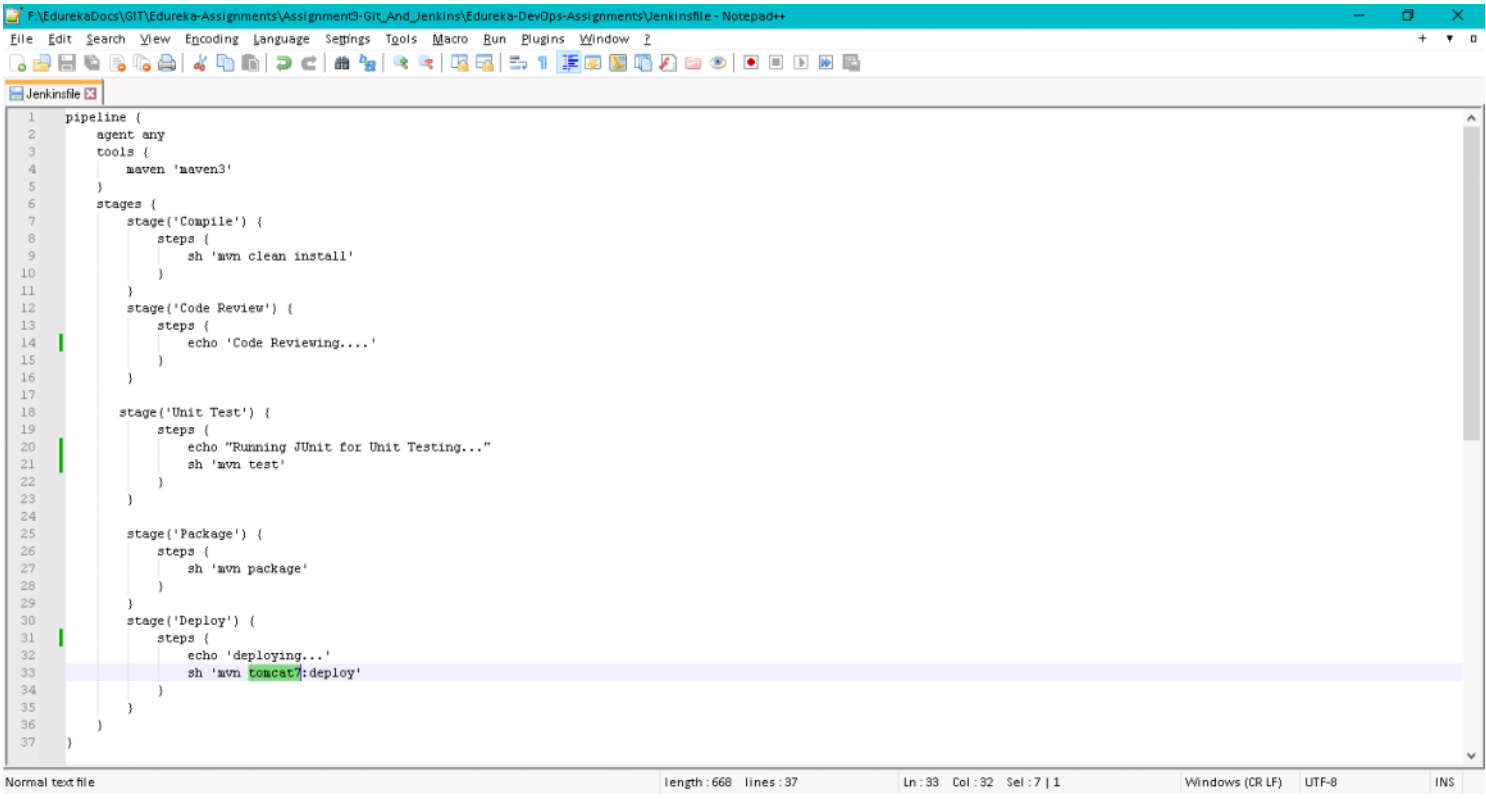
You are working as a DevOps Engineer in a company named Sanders & Fresco Pvt ltd. You have been asked by your manager to create a Maven Project using Jenkins and build a war file of that project. As a proof of concept, you have been given a web application to build. And once done with building the war file, deploy it over the tomcat server.

Steps to solve:

- Open Jenkins and create a Maven project using it.
- You will have to create the following jobs, which are as follow:
  - Compile
  - Code Review
  - Unit test
  - Package
  - Deploy

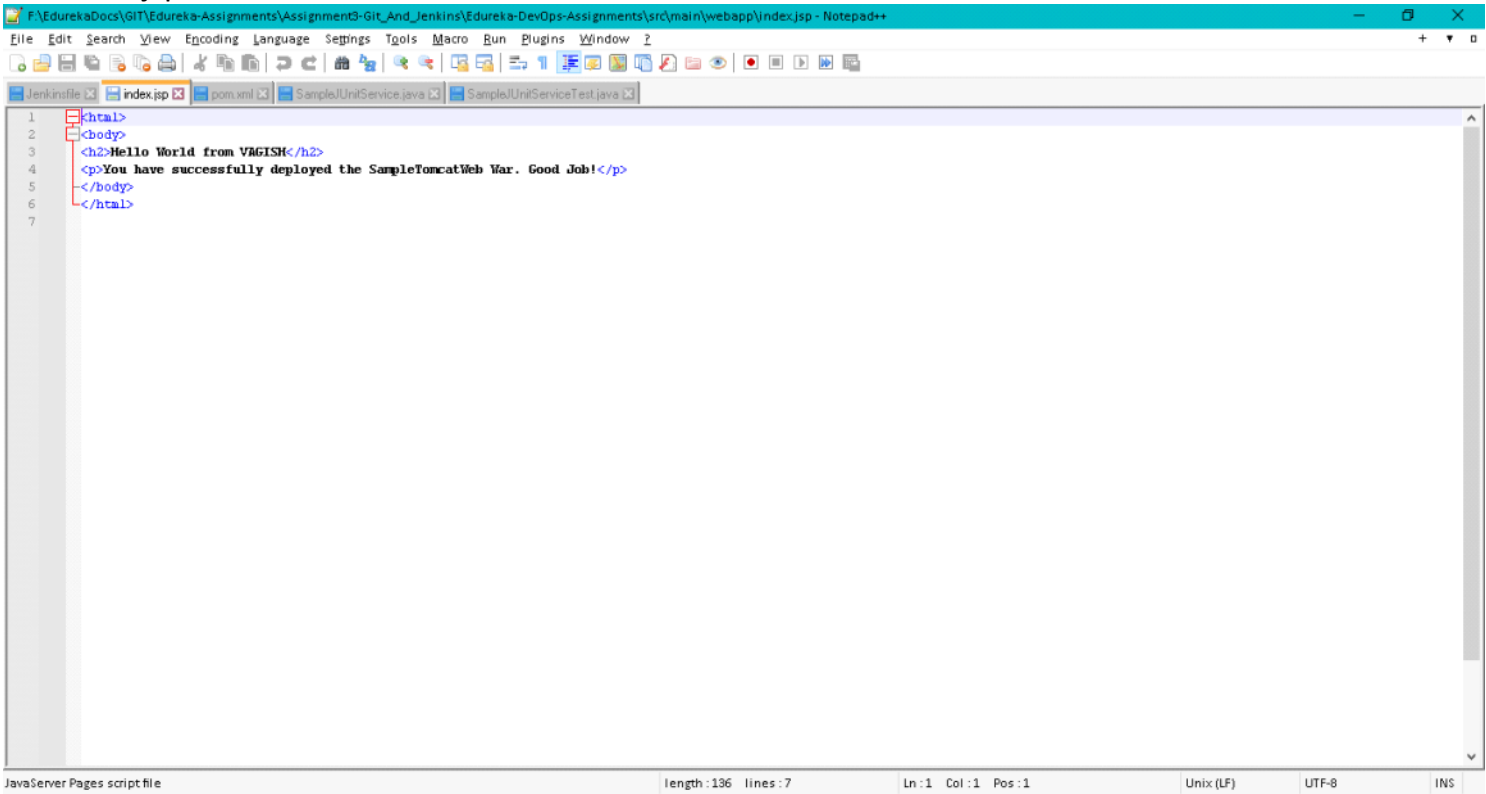
You have to complete your job within the given time frame.

Creating Jenkinsfile for creating Pipeline for the mentioned stages:

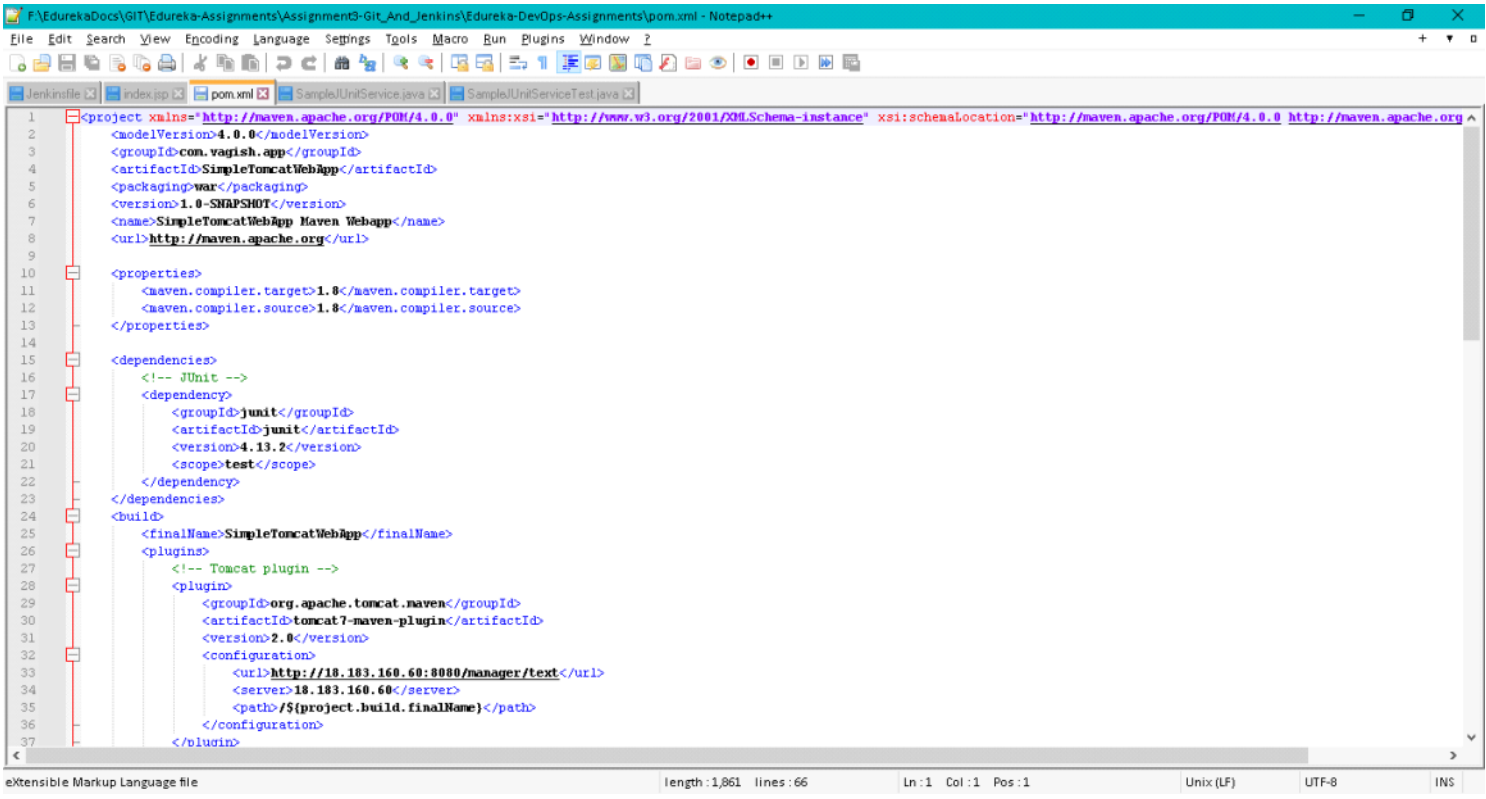


Creating sample Maven Project to be used via Jenkinsfile from SCM:

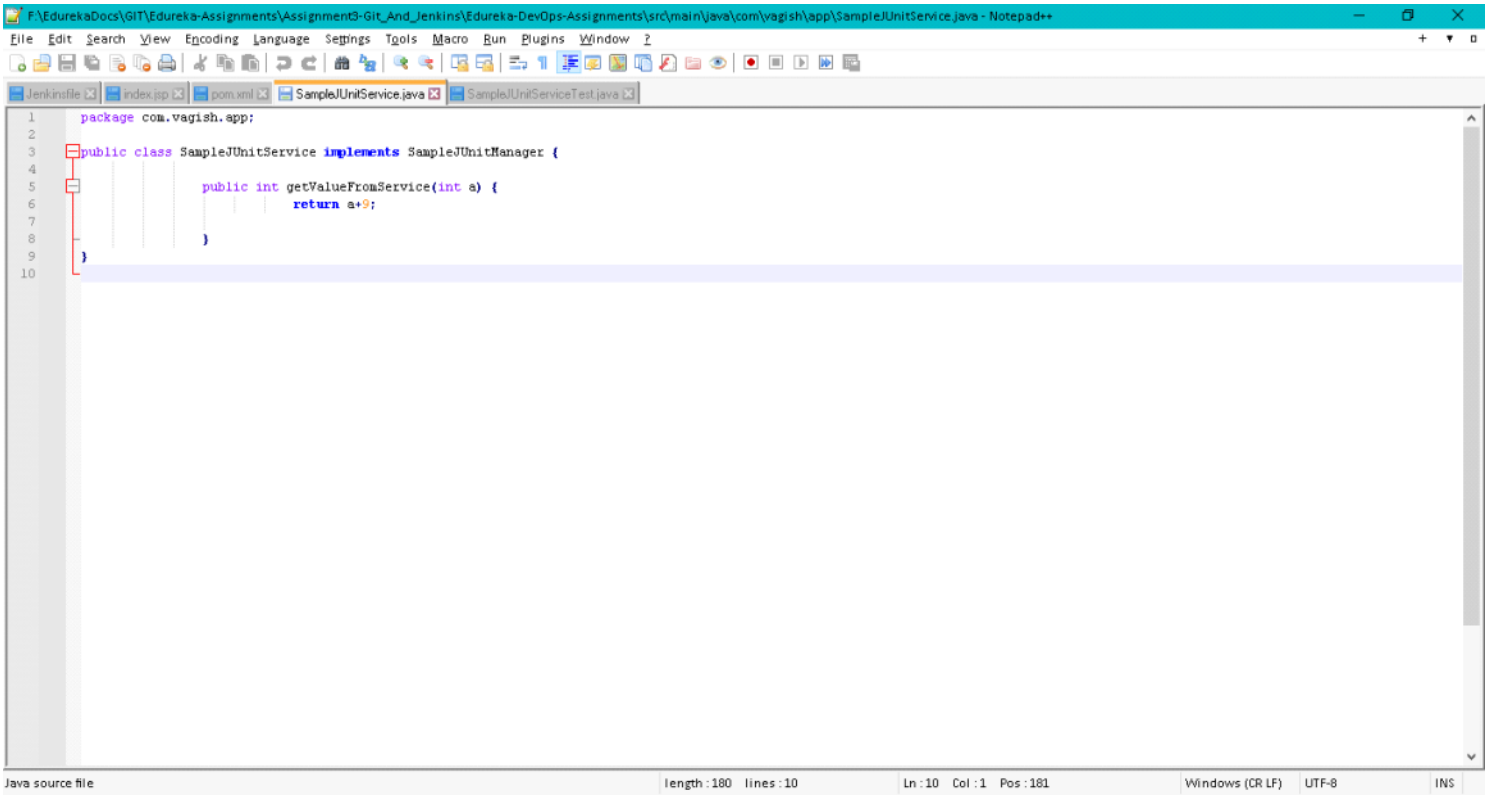
1-> Index.jsp



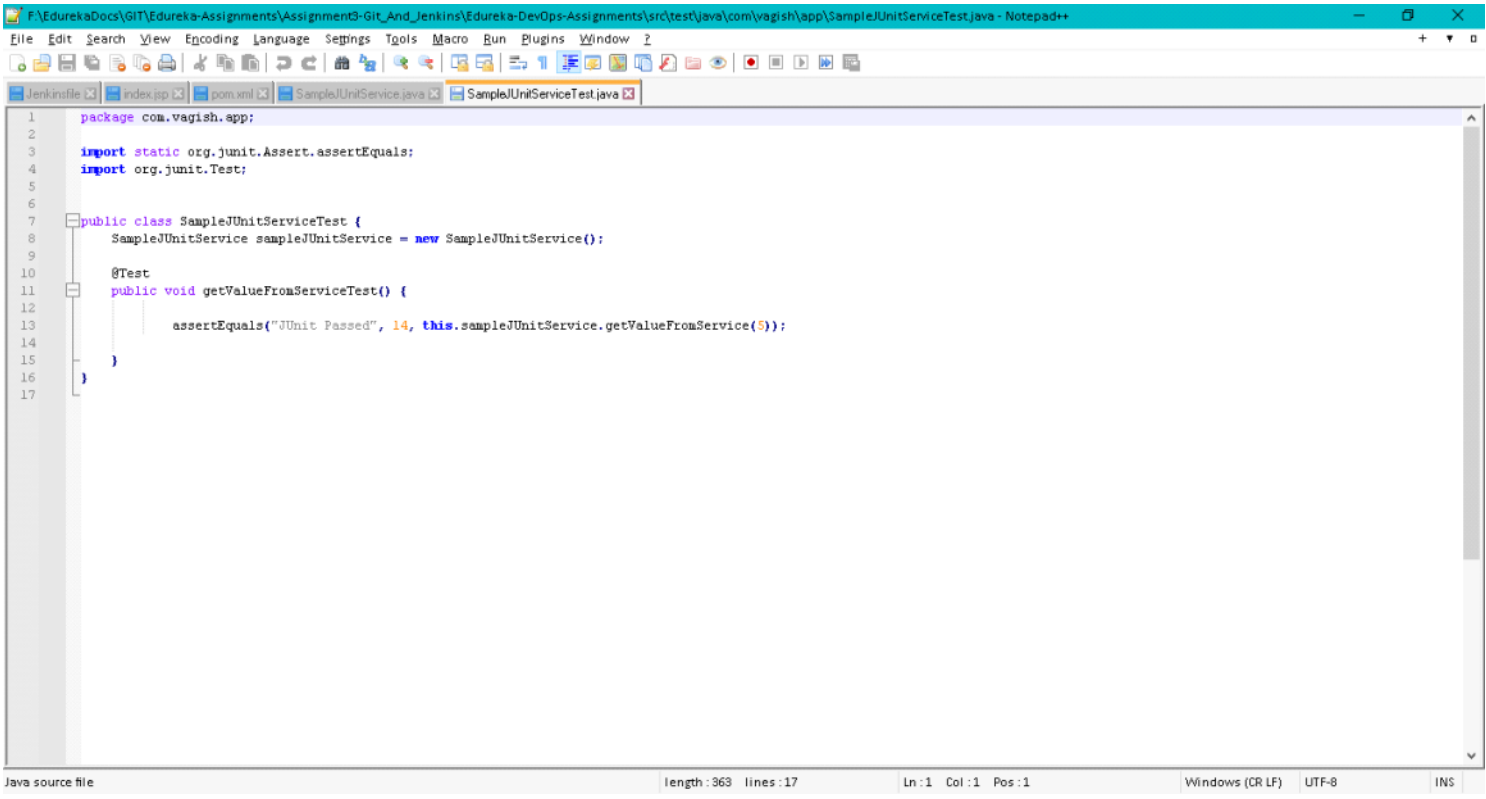
2-> pom.xml



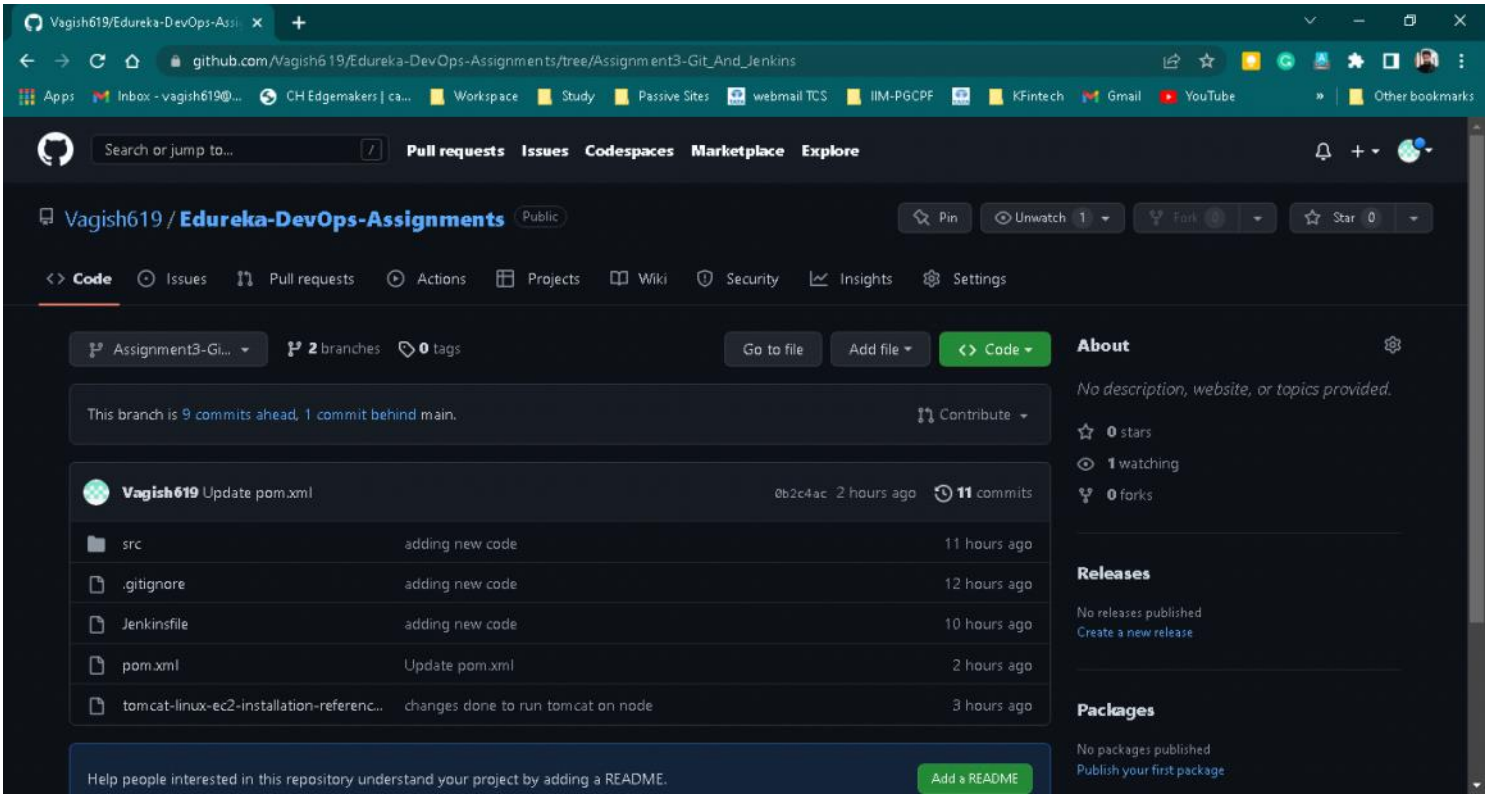
3-> Service Class



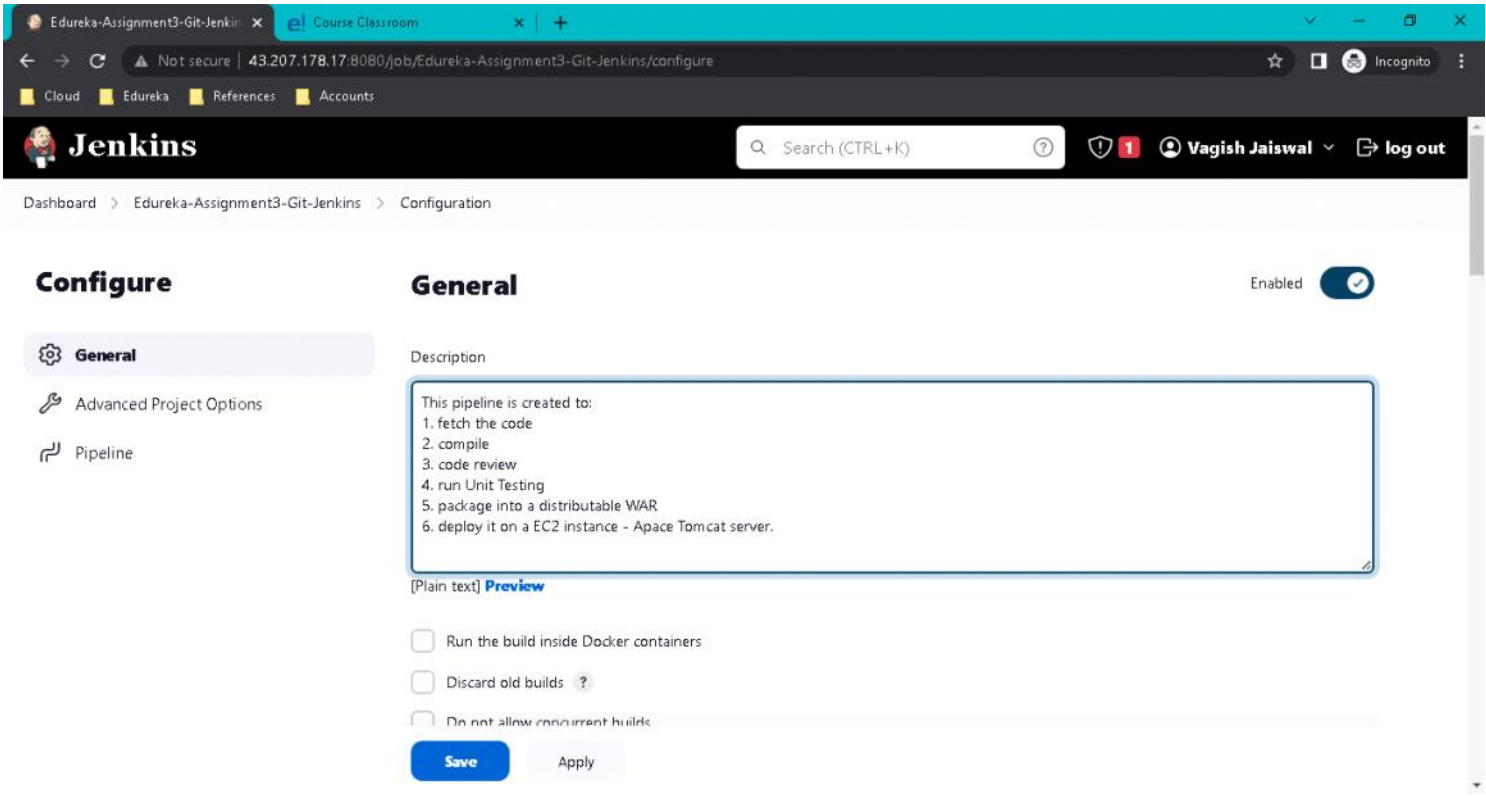
4-> Junit of Service class

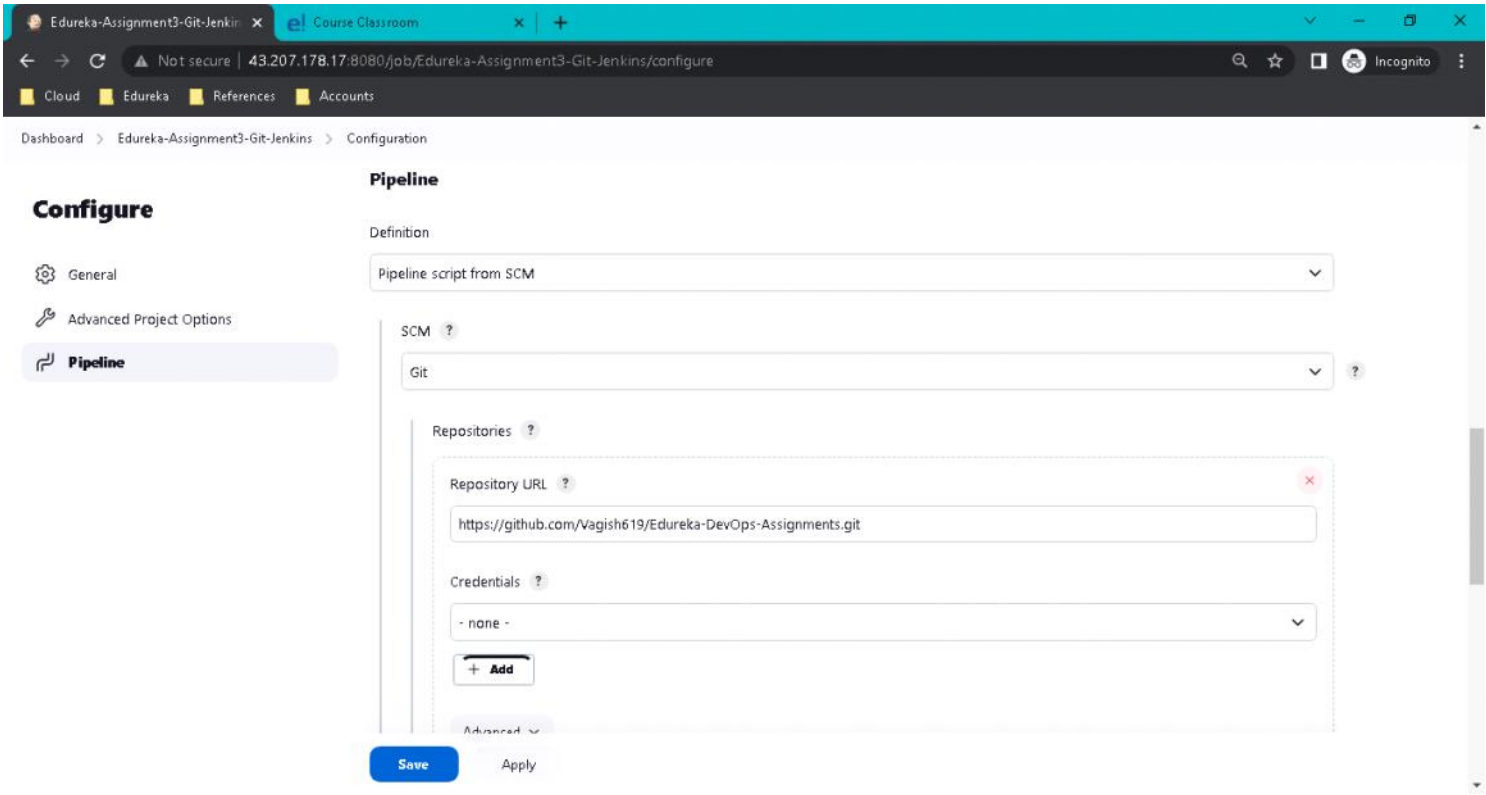


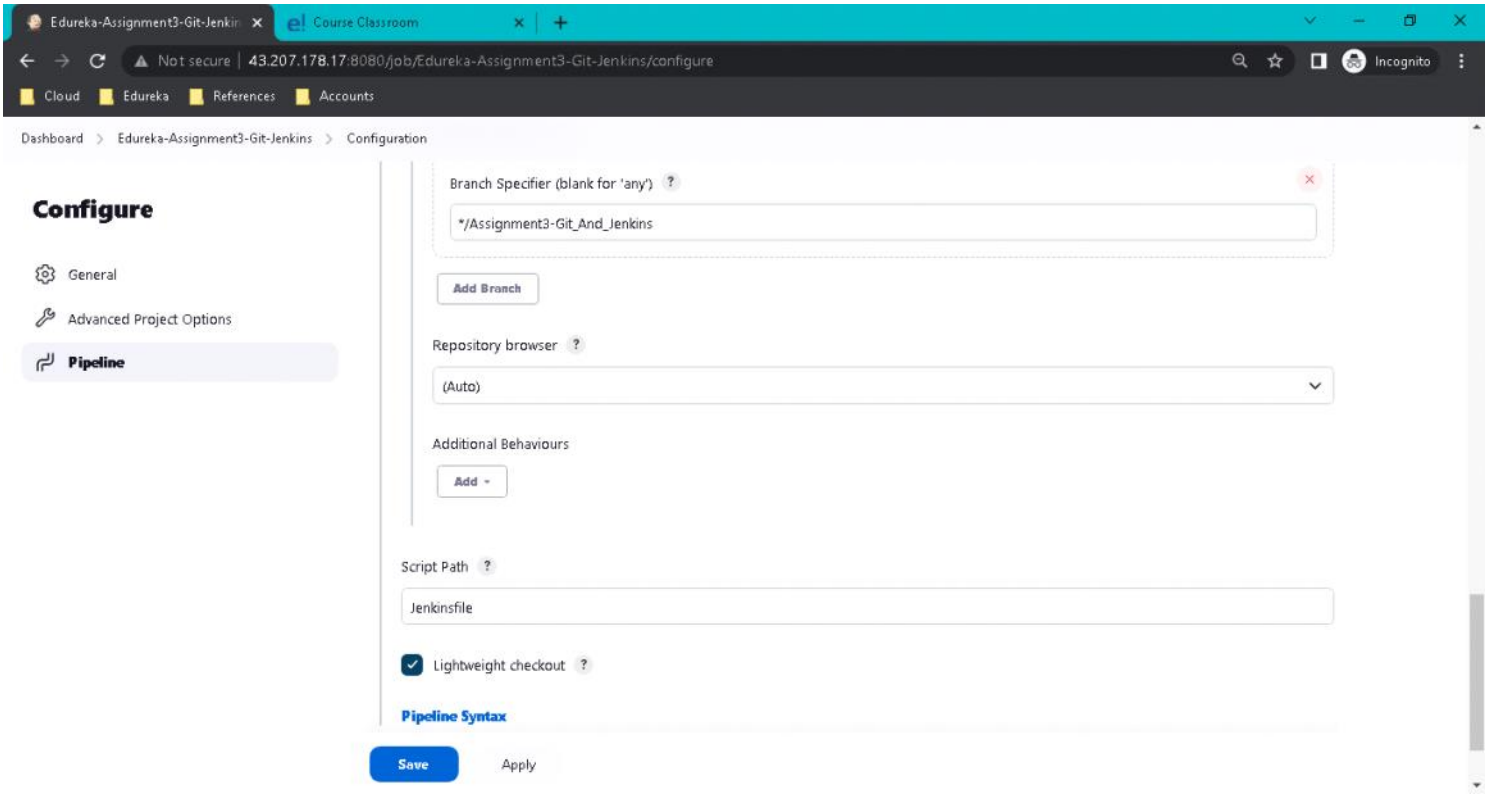
Adding code in SCM GIT Repo:



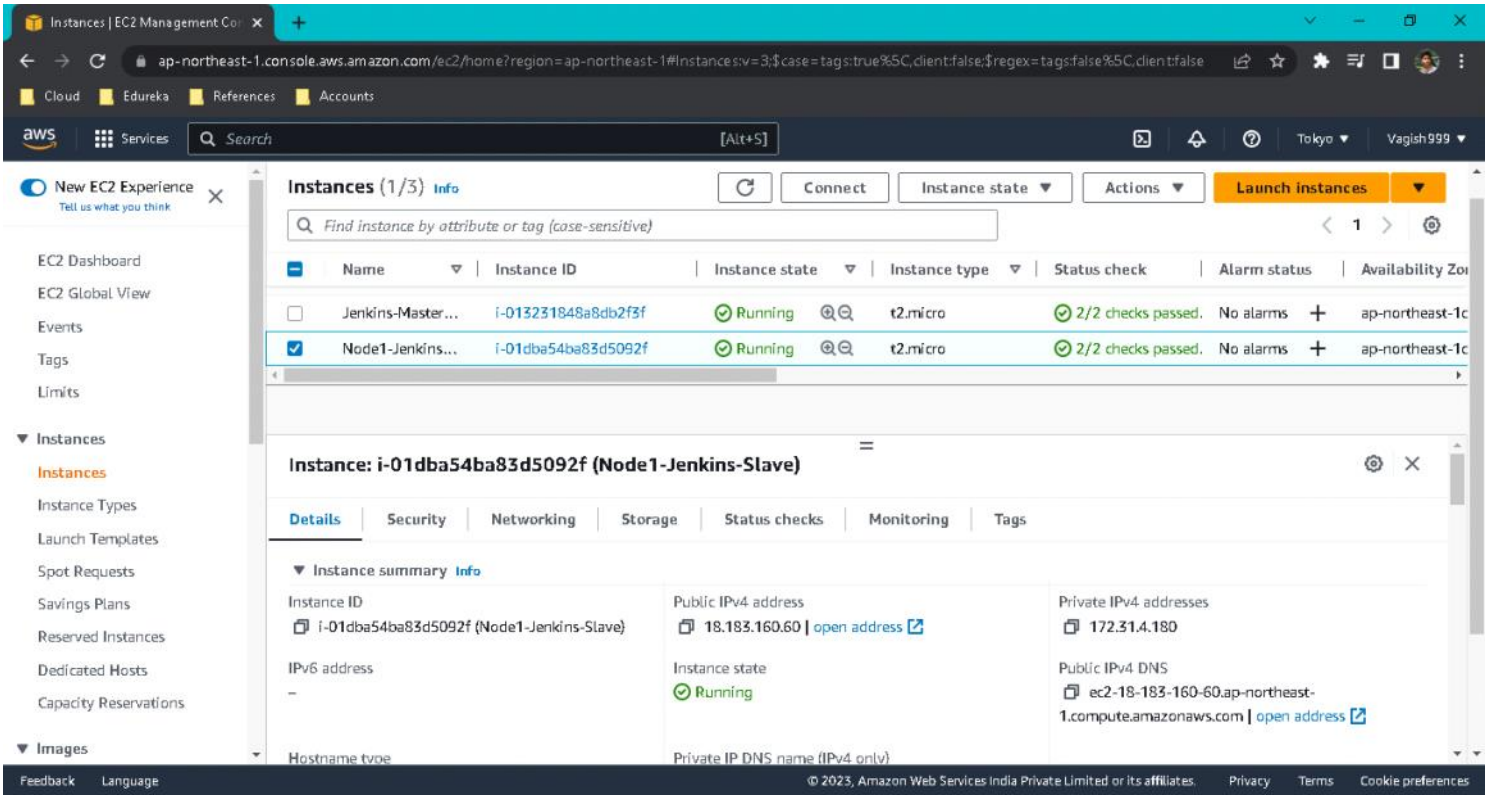
Creating Jenkins Pipeline to perform all the mentioned tasks:

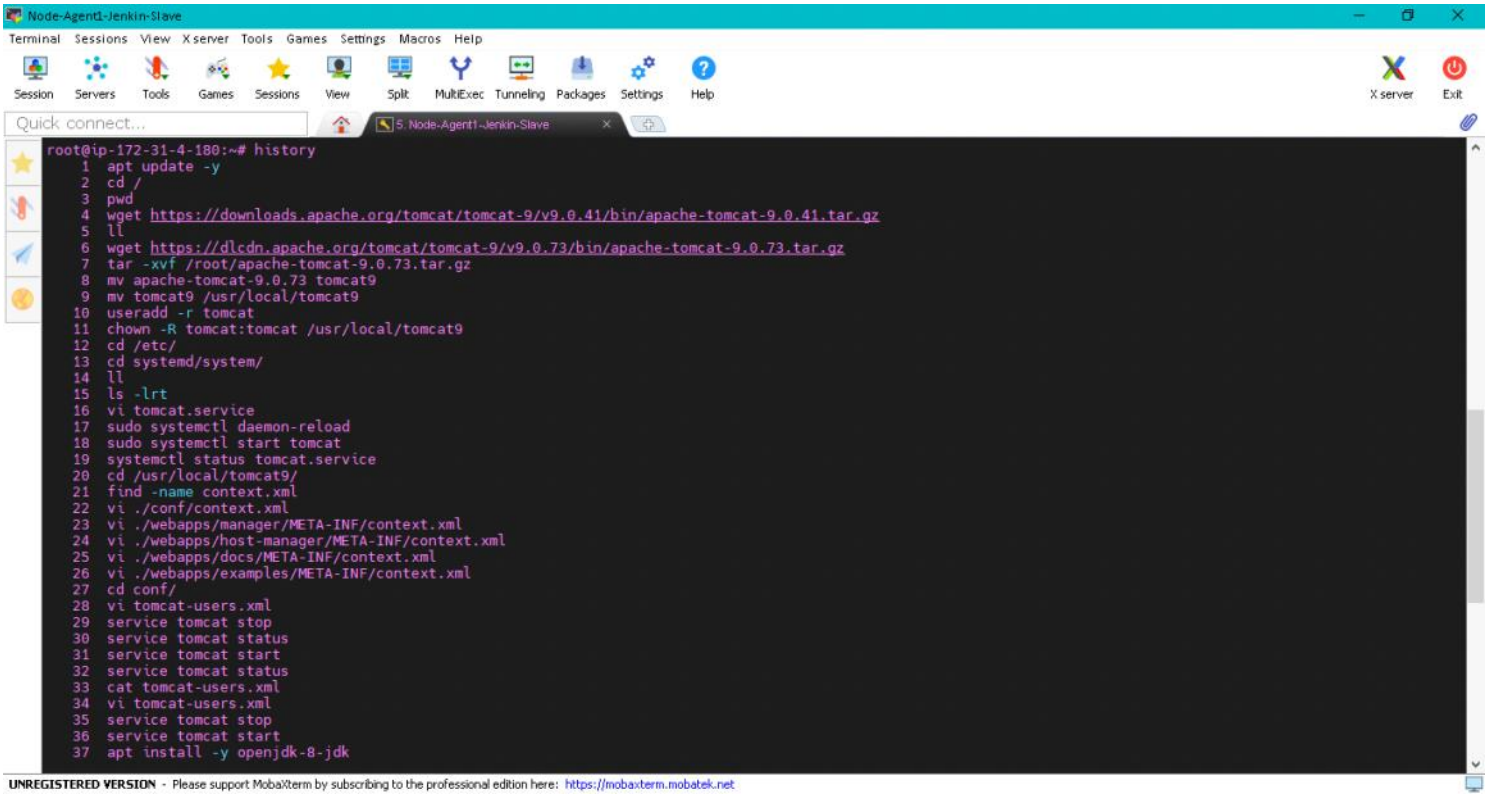

Edureka-Assignment3-Git-Jenkin
Course Classroom
Not secure | 43.207.178.17:8080/job/Edureka-Assignment3-Git-Jenkins/configure
Incognito
Cloud
Edureka
References
Accounts
Jenkins
Search (CTRL+K)
Vagish Jaiswal
log out
Dashboard > Edureka-Assignment3-Git-Jenkins > Configuration
Configure
General
Advanced Project Options
Pipeline
General
Enabled
Description
This pipeline is created to:
1. fetch the code
2. compile
3. code review
4. run Unit Testing
5. package into a distributable WAR
6. deploy it on a EC2 instance - Apace Tomcat server.
[Plain text] Preview
Run the build inside Docker containers
Discard old builds
Save
Apply


Edureka-Assignment3-Git-Jenkin
Course Classroom
Not secure | 43.207.178.17:8080/job/Edureka-Assignment3-Git-Jenkins/configure
Incognito
Cloud
Edureka
References
Accounts
Dashboard > Edureka-Assignment3-Git-Jenkins > Configuration
Configure
General
Advanced Project Options
Pipeline
Pipeline
Definition
Pipeline script from SCM
SCM
Git
Repositories
Repository URL
https://github.com/Vagish619/Edureka-DevOps-Assignments.git
Credentials
- none -
Add
Save
Apply

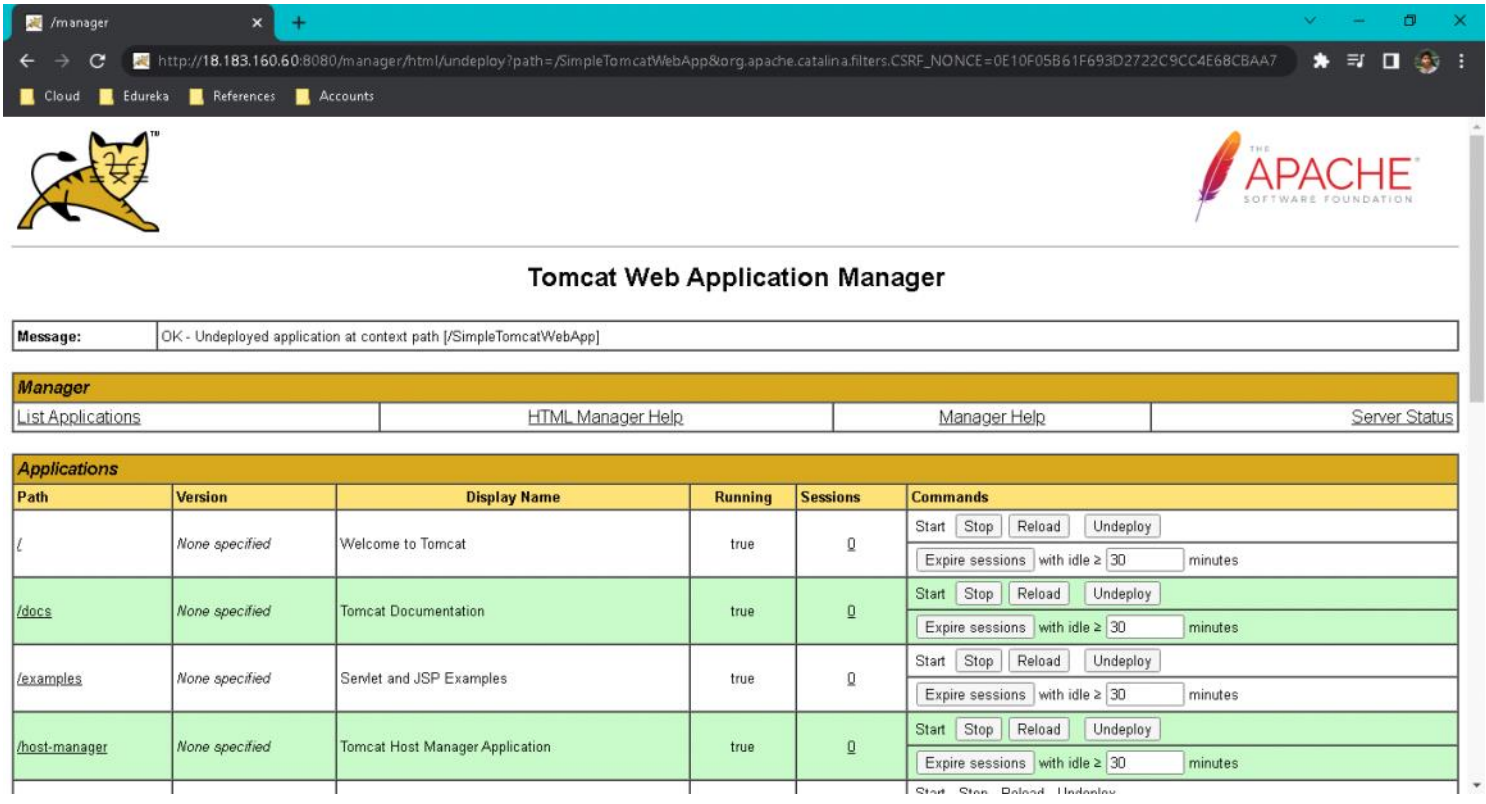


Installing tomcat on Slave Instance of EC2:

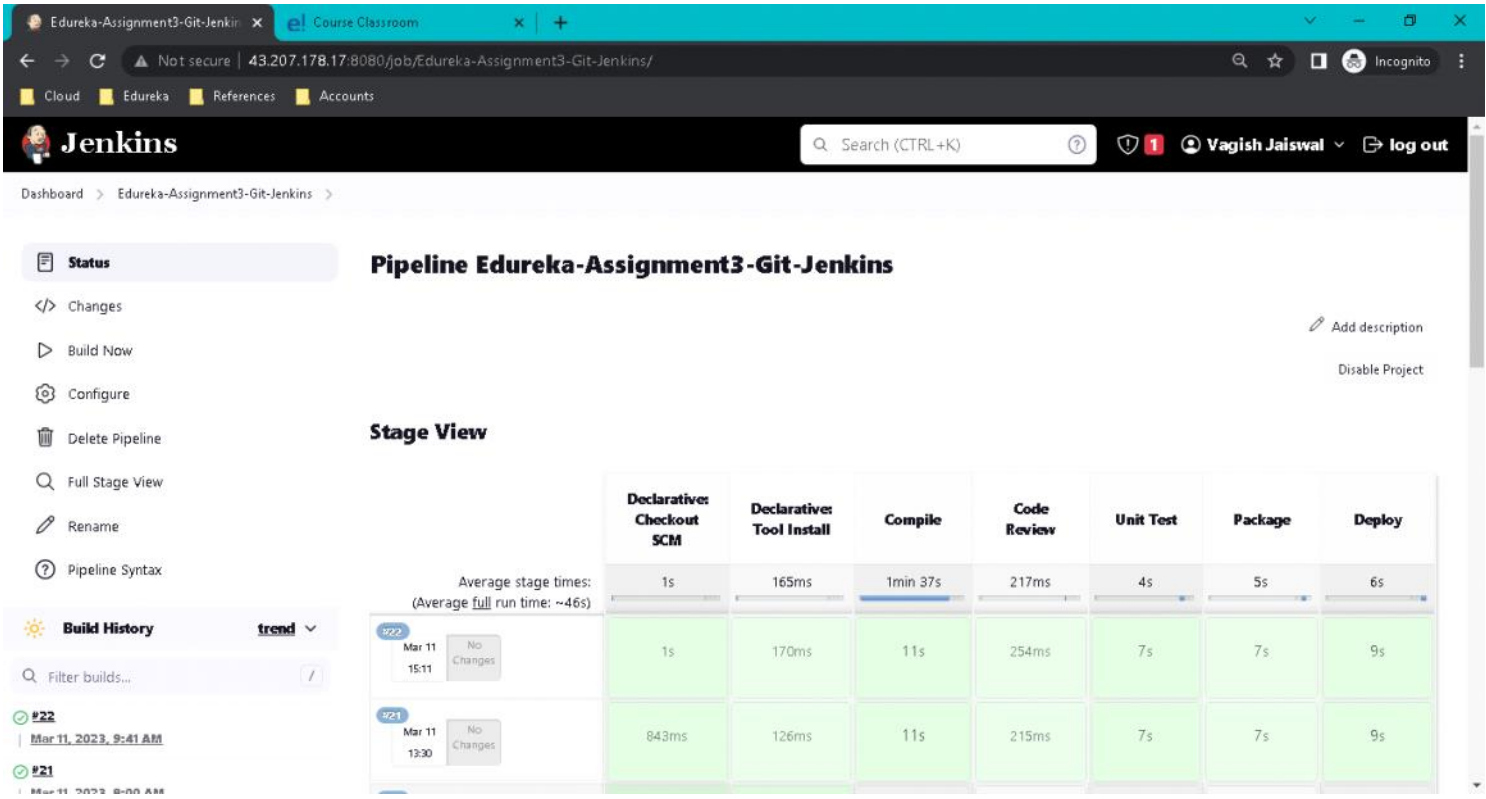


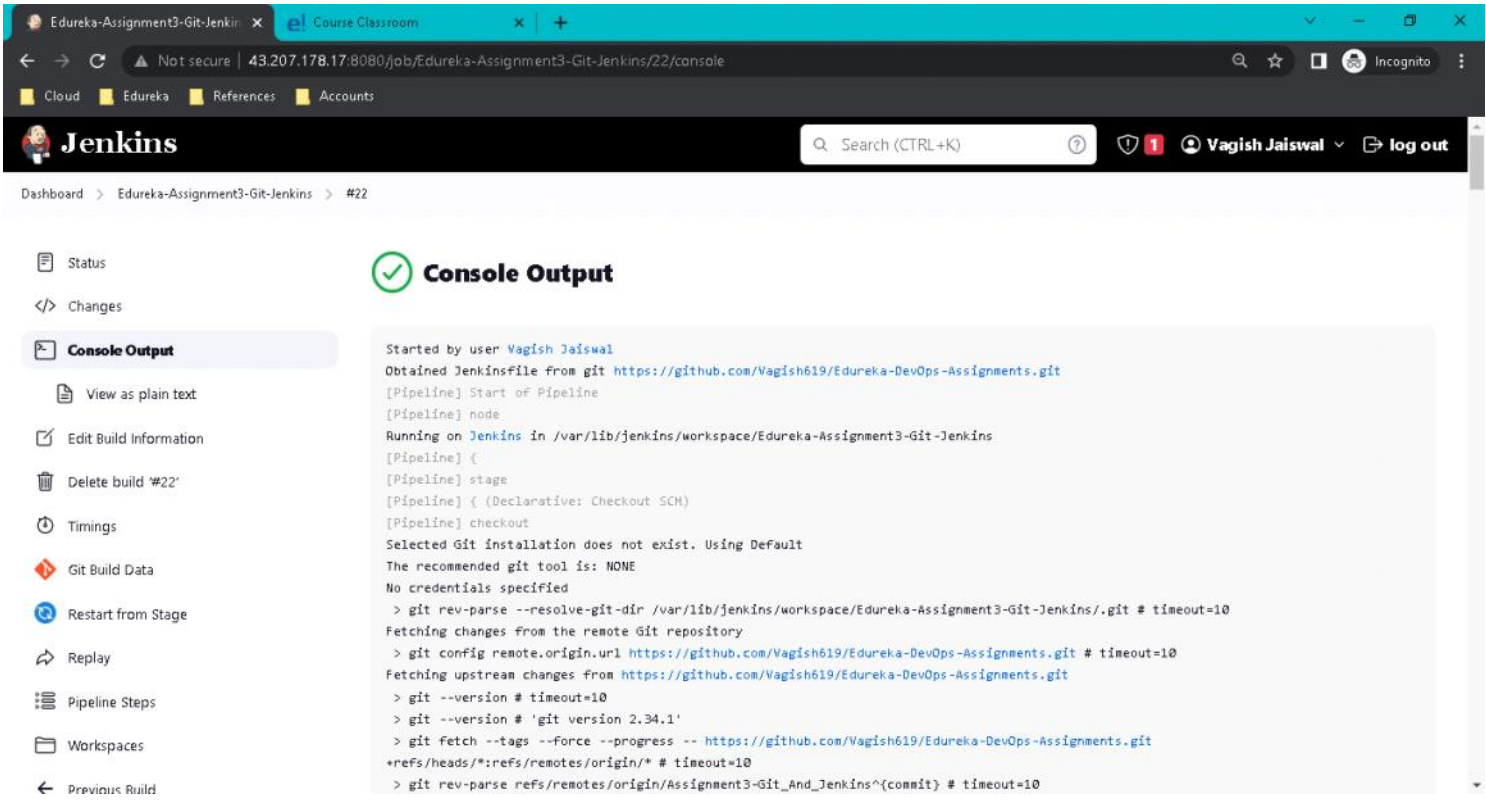


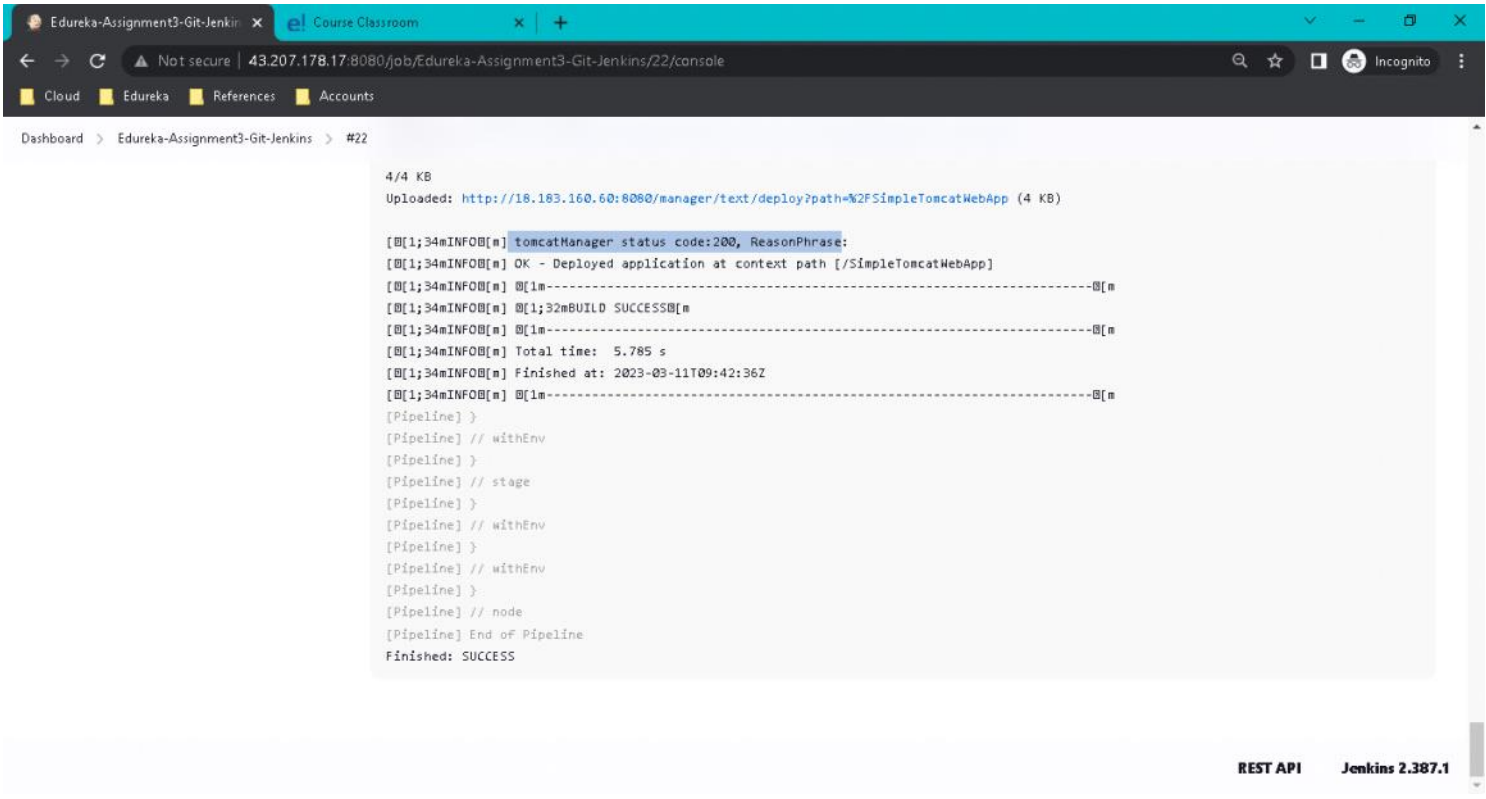
Checking tomcat server status:



Running Pipeline:

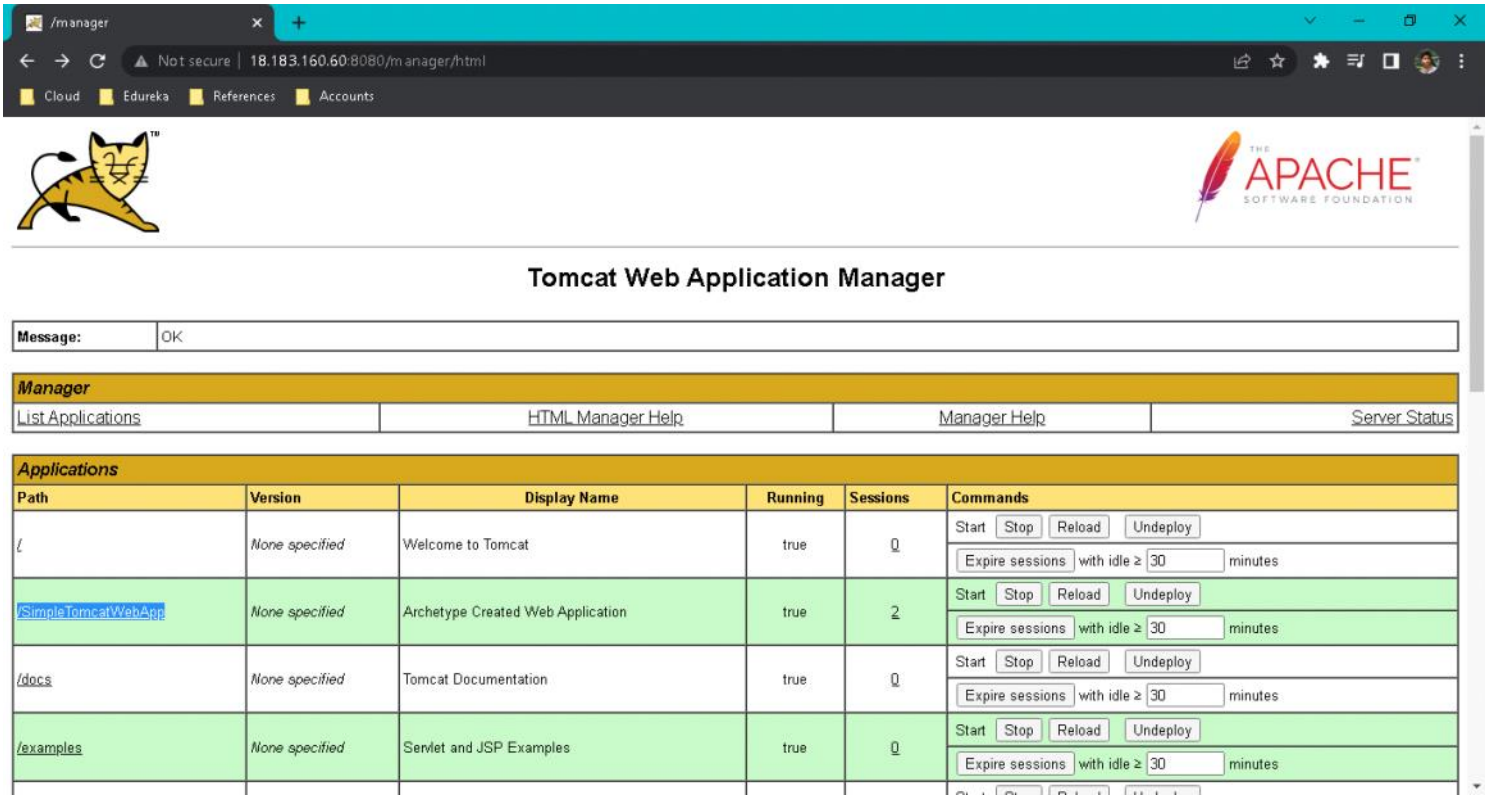

Edureka-Assignment3-Git-Jenkin
Course Classroom
Not secure | 43.207.178.17:8080/job/Edureka-Assignment3-Git-Jenkins/
Incognito
Cloud
Edureka
References
Accounts
Jenkins
Search (CTRL+K)
Vagish Jaiswal
log out
Dashboard > Edureka-Assignment3-Git-Jenkins >
Status
Changes
Build Now
Configure
Delete Pipeline
Full Stage View
Rename
Pipeline Syntax
Build History
trend
Filter builds...
#22
Mar 11, 2023, 9:41 AM
#21
Pipeline Edureka-Assignment3-Git-Jenkins
Add description
Disable Project
Stage View
Declarative: Checkout SCM
Declarative: Tool Install
Compile
Code Review
Unit Test
Package
Deploy
Average stage times:
(Average full run time: ~46s)
1s
165ms
1min 37s
217ms
4s
5s
6s
#22
Mar 11
15:11
No Changes
1s
170ms
11s
254ms
7s
7s
9s
#21
Mar 11
13:30
No Changes
843ms
126ms
11s
215ms
7s
7s
9s


Edureka-Assignment3-Git-Jenkin
Course Classroom
Not secure | 43.207.178.17:8080/job/Edureka-Assignment3-Git-Jenkins/22/console
Incognito
Cloud
Edureka
References
Accounts
Jenkins
Search (CTRL+K)
Vagish Jaiswal
log out
Dashboard > Edureka-Assignment3-Git-Jenkins > #22
Status
Changes
Console Output
View as plain text
Edit Build Information
Delete build '#22'
Timings
Git Build Data
Restart from Stage
Replay
Pipeline Steps
Workspaces
Previous Build
Console Output
Started by user Vagish Jaiswal
Obtained Jenkinsfile from git https://github.com/Vagish619/Edureka-DevOps-Assignments.git
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in /var/lib/jenkins/workspace/Edureka-Assignment3-Git-Jenkins
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Declarative: Checkout SCM)
[Pipeline] checkout
Selected Git installation does not exist. Using Default
The recommended git tool is: NONE
No credentials specified
> git rev-parse --resolve-git-dir /var/lib/jenkins/workspace/Edureka-Assignment3-Git-Jenkins/.git # timeout=10
Fetching changes from the remote Git repository
> git config remote.origin.url https://github.com/Vagish619/Edureka-DevOps-Assignments.git # timeout=10
Fetching upstream changes from https://github.com/Vagish619/Edureka-DevOps-Assignments.git
> git --version # timeout=10
> git --version # 'git version 2.34.1'
> git fetch --tags --force --progress -- https://github.com/Vagish619/Edureka-DevOps-Assignments.git
+refs/heads/*:refs/remotes/origin/* # timeout=10
> git rev-parse refs/remotes/origin/Assignment3-Git_And_Jenkins^{commit} # timeout=10



End Result:

1-> Tomcat Admin Page



2-> Web page from deployed WAR

Hello World from VAGISH

You have successfully deployed the SampleTomcatWeb War. Good Job!