CI/CD Deployment for Springboot Application.

Project 1

DESCRIPTION

As a Full Stack Developer, you have to build a CI/CD pipeline to demonstrate continuous deployment and host the application on AWS EC2 instance.

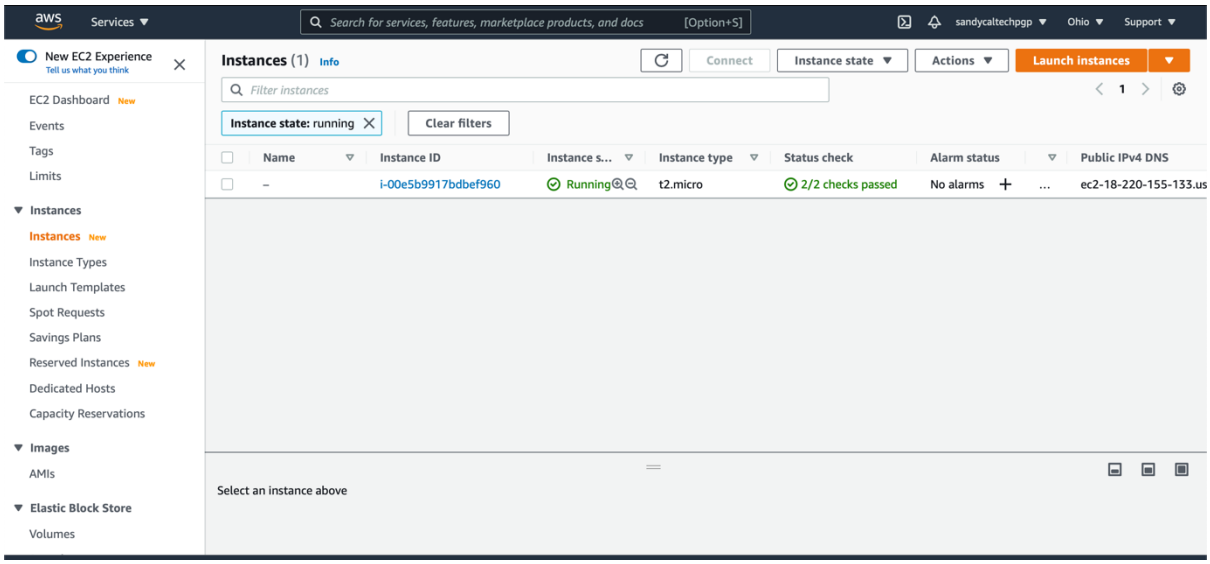
Background of the problem statement:

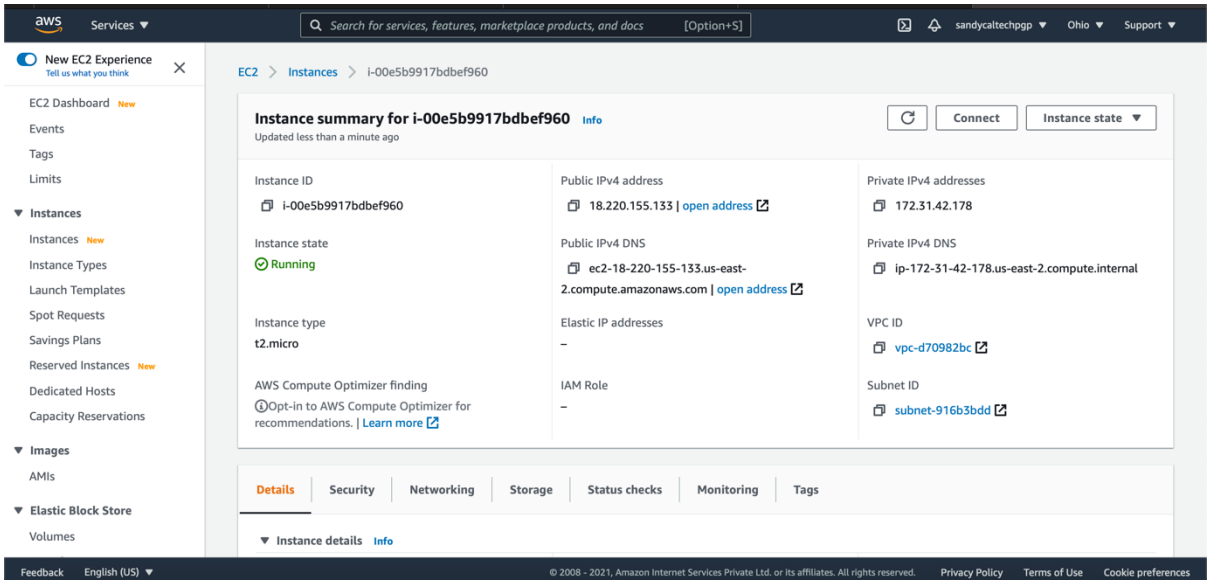
As the project is in the final stage, management has asked you to automate the integration and deployment of the web application. You are required to set up an environment where the application will be hosted and accessed by users. The source code is supposed to be fetched from a GitHub repository.

You must use the following:

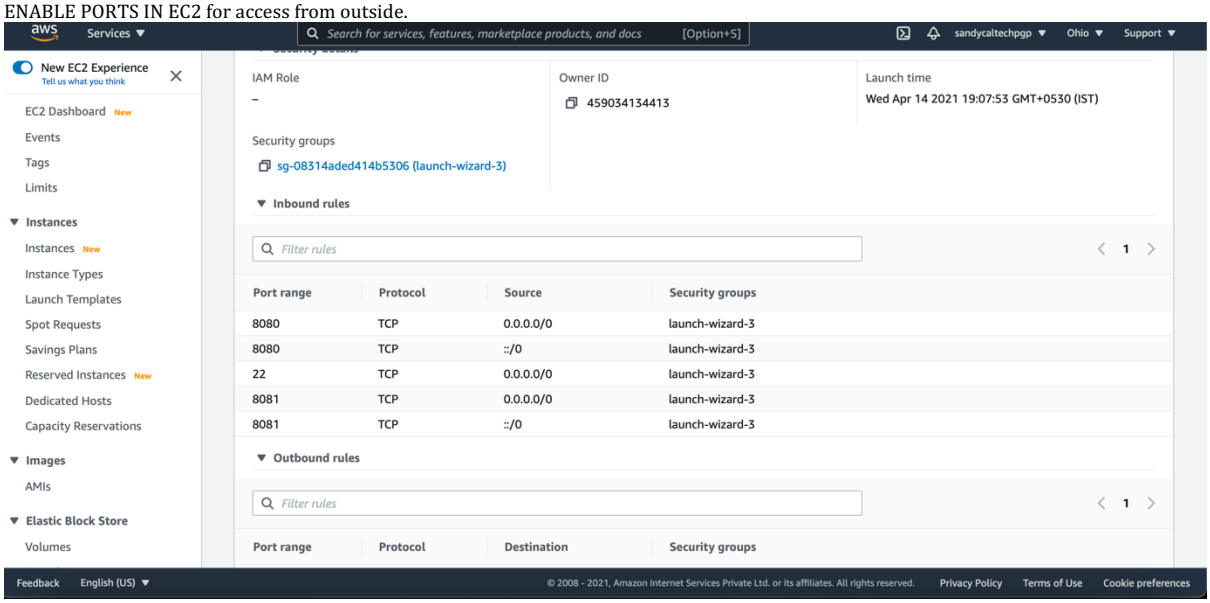
- Eclipse
- GitHub
- Jenkins
- AWS EC2/ Virtual machine

Launch a EC2 machine in AWS:

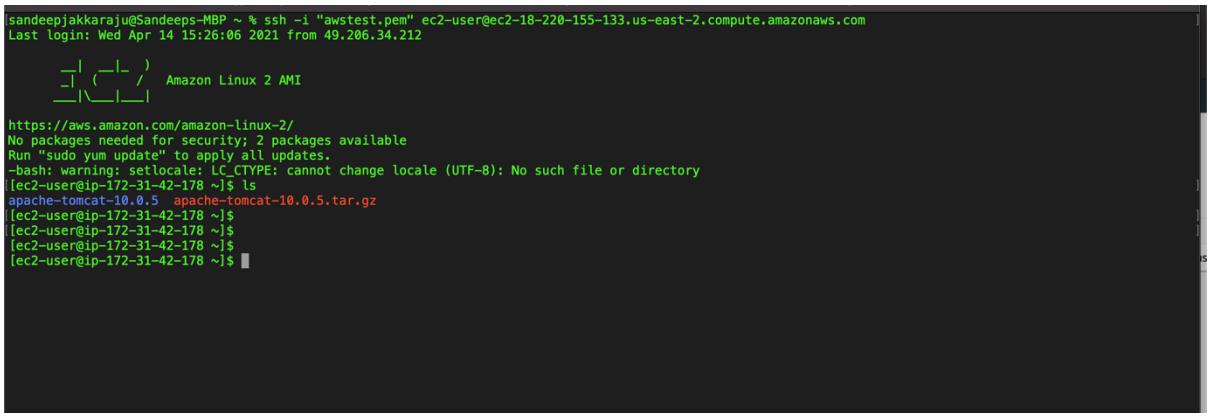




ENABLE PORTS IN EC2 for access from outside.



SSH into the EC2 machine



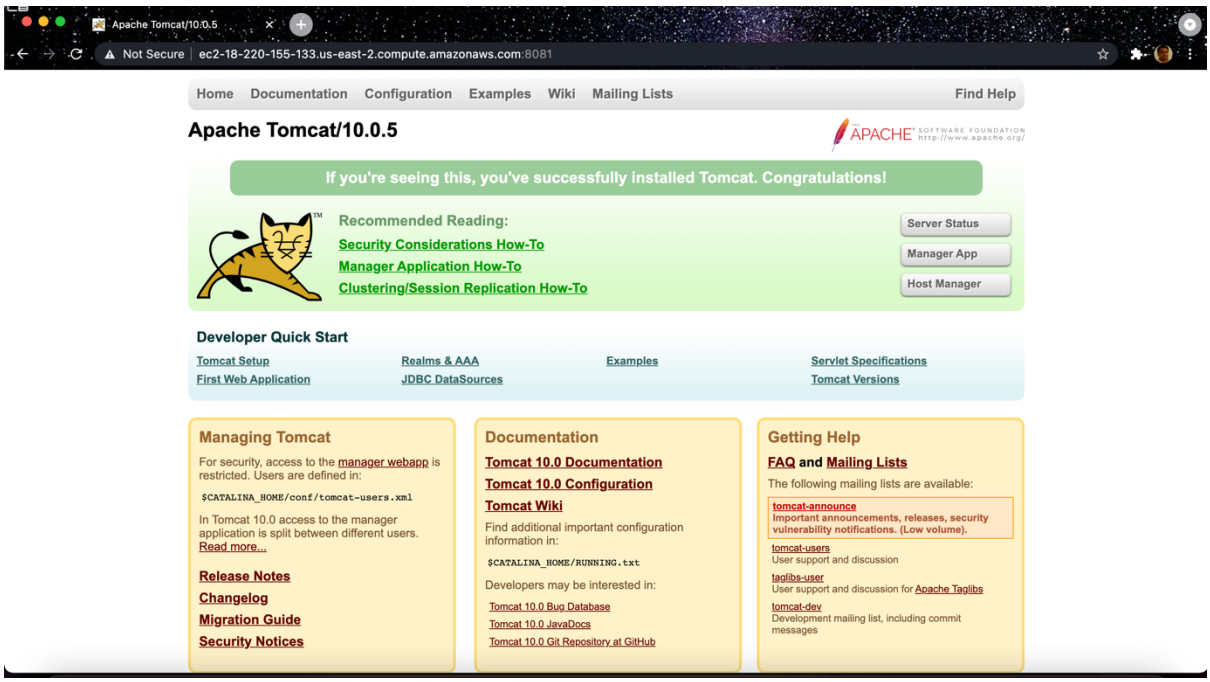
INSTALL JDK : $ sudo yum install java-1.8.0

INSTALL JENKINS:
https://www.jenkins.io/doc/book/installing/linux/#red-hat-centos

DOWNLOAD TOMCAT :
$ wget https://mirrors.estointernet.in/apache/tomcat/tomcat-10/v10.0.5/bin/apache-tomcat-10.0.5.tar.gz

UNZIP AND START TOMCAT:

/opt/tomcat/bin $$$ ./startup.sh

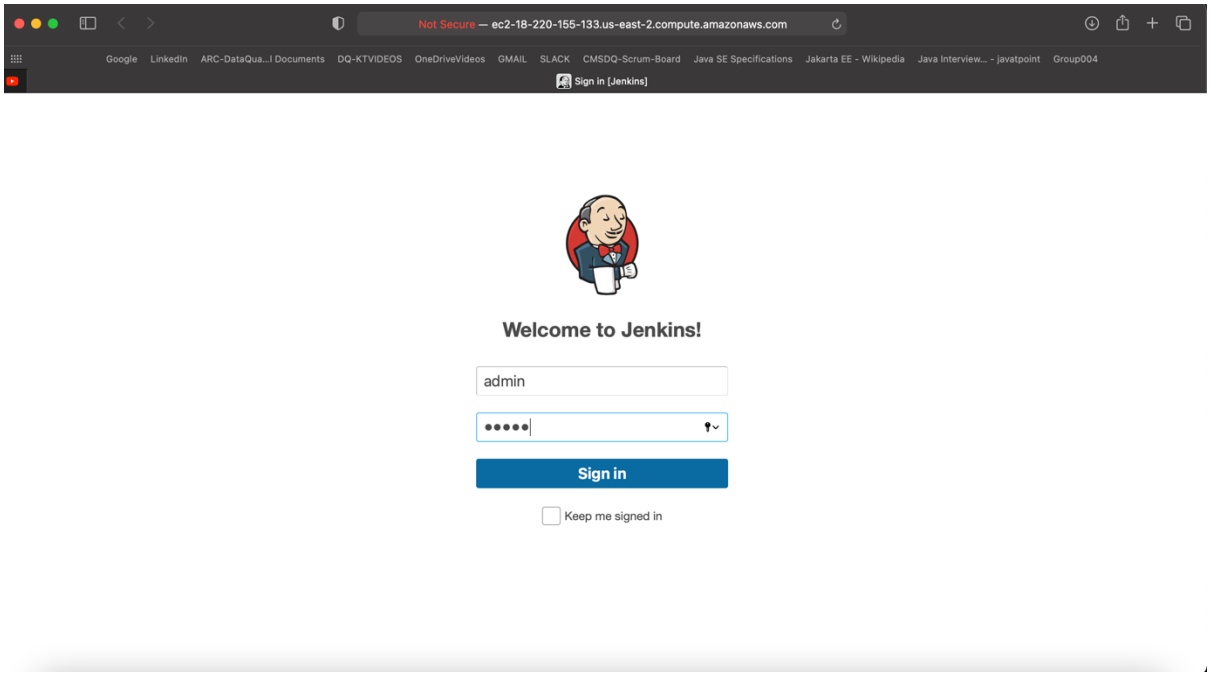


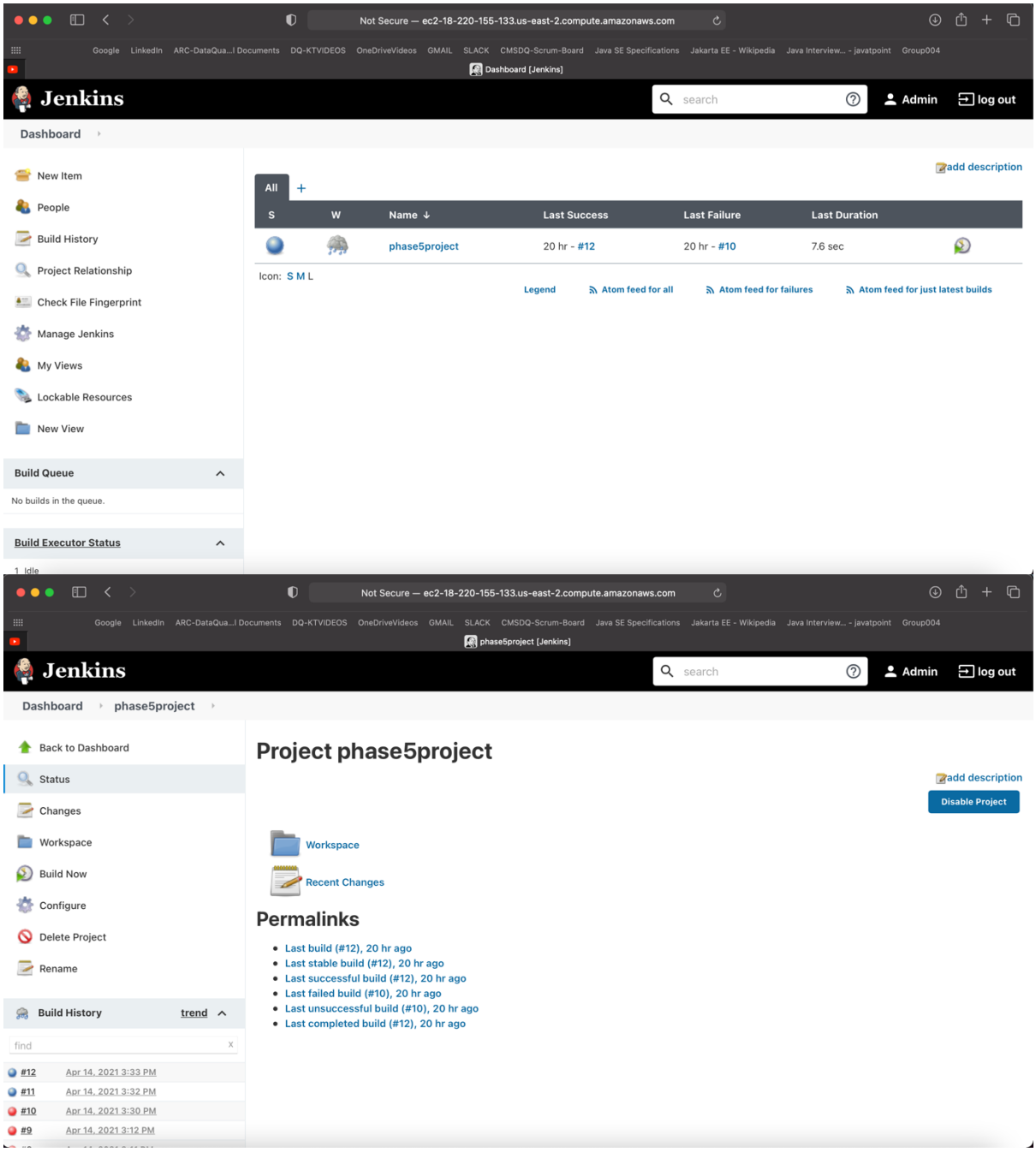
http://ec2-18-220-155-133.us-east-2.compute.amazonaws.com:8081/

JENKINS CONSOLE:

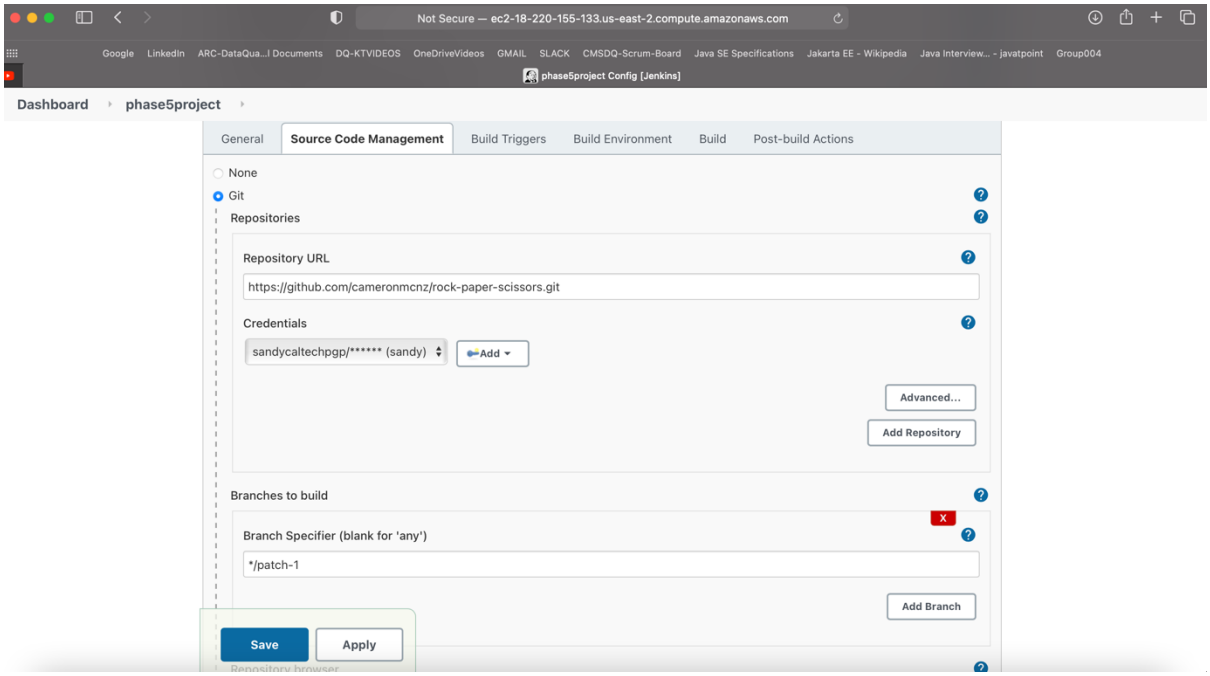
http://ec2-18-220-155-133.us-east-2.compute.amazonaws.com:8080/

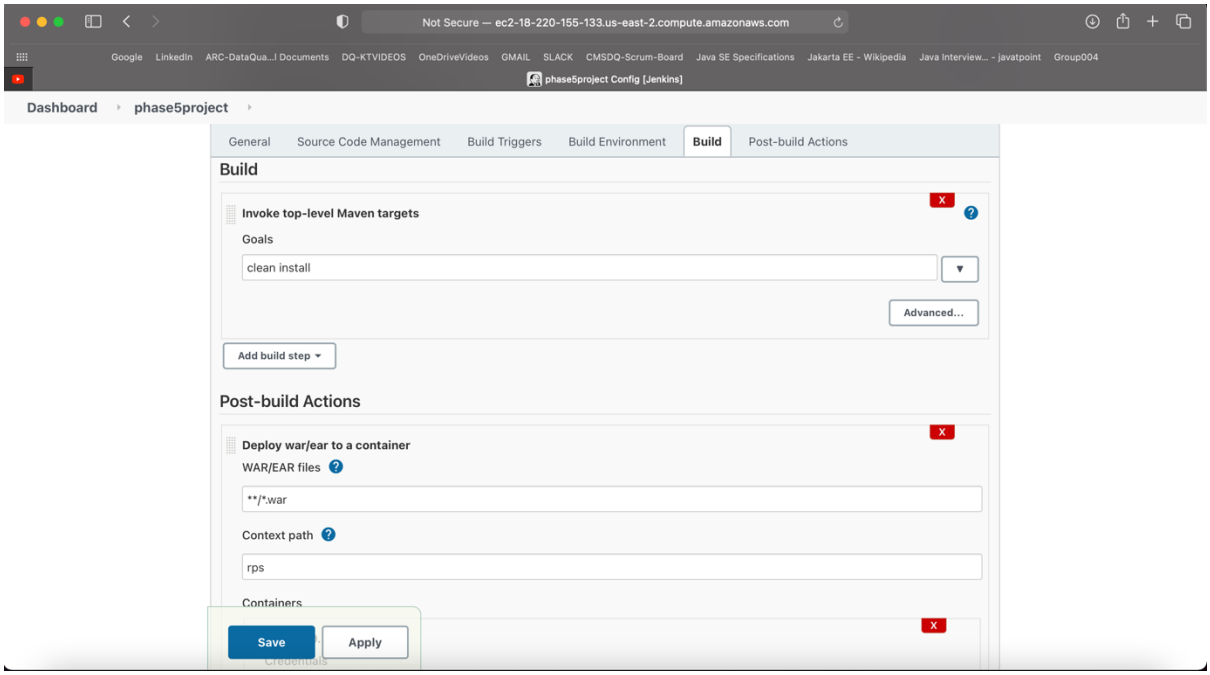
LOGIN : admin/admin

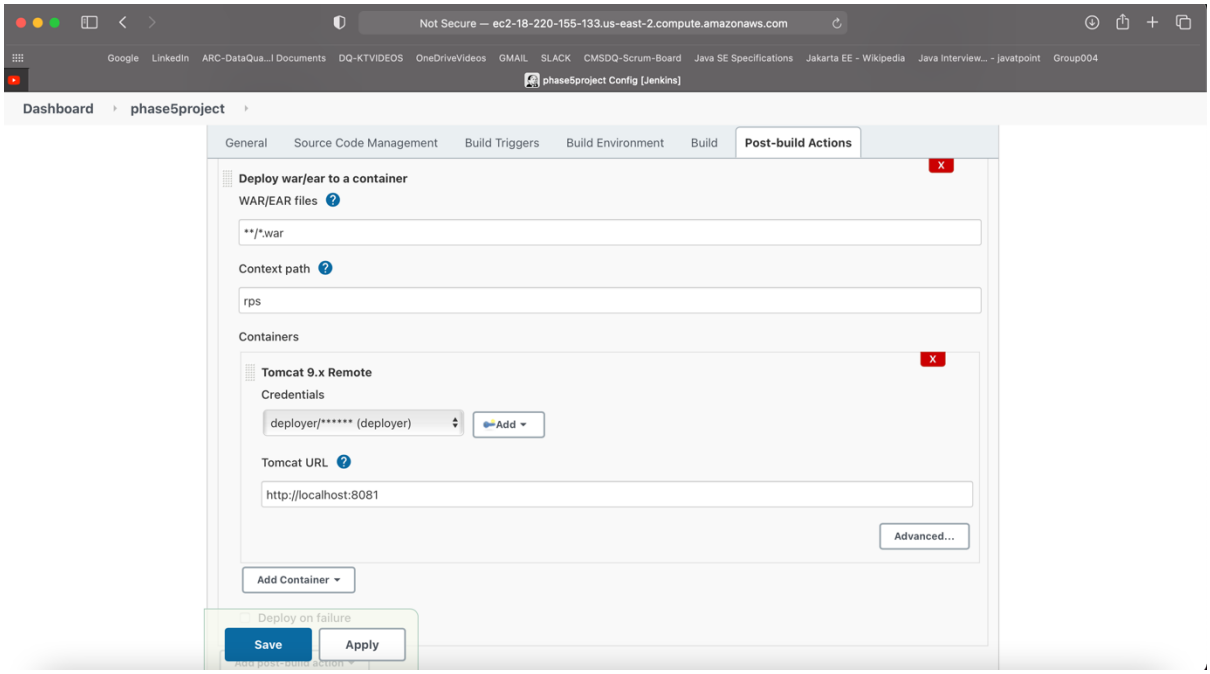




GIT HUB PROJECT TO BE DEPLOYED in TOMCAT


Not Secure — ec2-18-220-155-133.us-east-2.compute.amazonaws.com
Google LinkedIn ARC-DataQua...l Documents DQ-KTVIDEOS OneDriveVideos GMAIL SLACK CMSDQ-Scrum-Board Java SE Specifications Jakarta EE - Wikipedia Java Interview... - javatpoint Group004
phase5project Config [Jenkins]
Dashboard phase5project
General Source Code Management Build Triggers Build Environment Build Post-build Actions
None
Git
Repositories
Repository URL
https://github.com/cameronmcnz/rock-paper-scissors.git
Credentials
sandycaltechpgp/****** (sandy)
Add
Advanced...
Add Repository
Branches to build
Branch Specifier (blank for 'any')
*/patch-1
Add Branch
Save
Apply

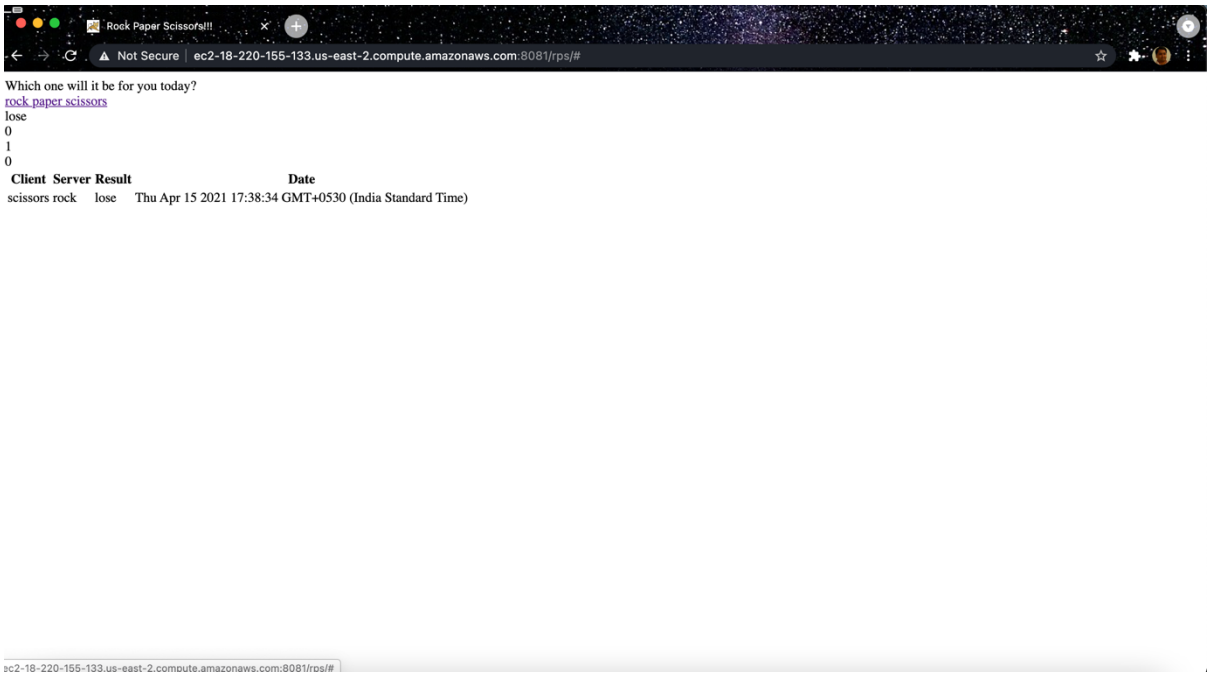

Not Secure — ec2-18-220-155-133.us-east-2.compute.amazonaws.com
Google LinkedIn ARC-DataQua...l Documents DQ-KTVIDEOS OneDriveVideos GMAIL SLACK CMSDQ-Scrum-Board Java SE Specifications Jakarta EE - Wikipedia Java Interview... - javatpoint Group004
phase5project Config [Jenkins]
Dashboard phase5project
General Source Code Management Build Triggers Build Environment Build Post-build Actions
Build
Invoke top-level Maven targets
Goals
clean install
Advanced...
Add build step
Post-build Actions
Deploy war/ear to a container
WAR/EAR files
**/*.war
Context path
rps
Containers
Save
Apply



BUILD THE PROJECT IN JENKINS

SEE THE APP DEPLOYED IN TOMCAT

http://ec2-18-220-155-133.us-east-2.compute.amazonaws.com:8081/rps/



We successfully build a project from GITHUB and deploy on to the EC2 Machine.

THE END