DevOps Certification Training

Jenkins Assignment 1

- By Swapnil Jadhav

You are working for an MNC - Software Solutions company as a DevOps Engineer and Company would

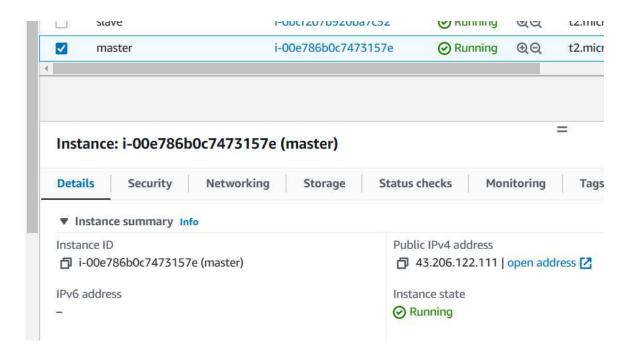
want you to establish the CICD pipeline in their organization by automating various workflows. You are

requested to establish following task.

- 1. Setup a Jenkins server on AWS ubuntu machine.
- 2. Create a freestyle project.
- 3. Configure below git repository to code checkout.

GitHub: Repo URL

- 4. Compile the source code using Maven
- 5. Execute the Junit test cases using Maven
- 6. Package the application as war.
- 7. Install the tomcat9 server on AWS ubuntu machine.
- 8. Deploy the packaged application on Tomcat9.
- 9. Verify the application after successful deployment using browser.



```
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] skip non existing resourceOirectory /root/workspace/jermavengit/src/main/resources
[[NFO]
[INFO] --- maven-compiler-plugin:3.8.1:compile (default-compile) @ addressbook ---
[INFO] Changes detected - recompiling the module!
[INFO] Compiling 13 source files to /root/workspace/jermavengit/target/classes
[INFO] /root/workspace/jermavengit/src/main/java/com/edurekademo/tutorial/addressbook/Addressbook/I.java/ Some input files use or override a
deprecated AP1.
[INFO] /root/workspace/jemmavengit/src/main/java/com/edurekademo/tutorial/addressbook/AddressbookUI.java: Recompile with -Xlint:deprecation for
details.
[INFO] /root/workspace/jenmavengit/src/main/java/com/edurekademo/tutorial/addressbook/backend/ContactService.java:
/root/workspace/jemmavengit/src/main/java/com/edurekademo/tutorial/addressbook/backend/ContactService.java uses unchecked or unsafe operations.
[IMFD] /root/workspace/jensavengit/src/main/java/com/edurekademo/tutorial/addressbook/backend/ContactService.java: Recompile with -Xlint:unchecked
for details.
[INFO]
[INFO] --- maven-resources-plugin:2.6:testResources (default-testResources) @ addressbook ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] Copying 1 resource
[INFO]
[INFO] --- maven-compiler-plugin:3.8.1:testCompile (default-testCompile) # addressbook ---
[TNFO] Changes detected - recompiling the module!
[IRFO] Commiling 5 source files to /root/workspace/jermavengit/target/test-classes
[INFO] /root/workspace/jermavengit/src/test/java/com/edurekademo/utilities/TestGenericComparator.java:
/root/workspace/jermavengit/src/test/java/com/edurekademo/utilities/TestGenericComparator.java uses or overrides a deprecated API.
[IRFO] /root/workspace/jemmavengit/src/test/java/com/edorekademo/utilities/TestGemericComparator.java: Recompile with -Xlint:deprecation for
details.
(INFO)
Hurming com.edurekademo.utilities.lestHexAscijConversion
74657374696e6720617363696920636F6e76657274696F6e20696e746F2068657861646563696d616c
testing ascii convertion into hexadecimal
Tests run: 4, Failures: 8, Errors: 8, Skipped: 8, Time elapsed: 8.832 sec - in com.edurekademo.utilities.TestMexAsciiConversion
Running com.edurekademo.utilities.TestGenericComparator
Tests run: 14, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.061 sec - in com.edurekademo.utilities.TestGenericComparator
Tests run: 23, Failures: 0, Errors: 0, Skipped: 0
[TMFO] --- maven-war-plugin:3.3.1:war (default-war) @ addressbook ---
[IMFO] Packaging webapp
[INFO] Assembling webapp [addressbook] in [/root/workspace/jermsvengit/target/addressbook]
[INFO] Processing war project
[IMFO] Building war: /root/workspace/jenwavengit/target/addressbook.war
[IMFO] -
[INFO] BUILD SUCCESS
[IMFO] -
[INFO] Total time: 9.176 s
[INFO] Finished at: 2023-03-06108:32:16Z
[IMFO]
[DeployPublisher][INFO] Attempting to deploy 1 war file(s)
[DeployPublisher][IBFO] Deploying /root/workspace/jermsevengit/target/addressbook.war to container Tomcat 9.x Remote with context addressbook.war
 [/root/workspace/jermavengit/target/addressbook.war] \ is \ not \ deployed. \ Doing \ a \ fresh \ deployment.
  Deploying [/root/workspace/jensavengit/target/addressbook.war]
Finished: SUCCESS
```

```
root@ip-172-31-6-206:/opt/tomcat# sudo systemctl status tomcat

• tomcat.service - Apache Tomcat Web Application Container

Loaded: loaded (/etc/systemd/system/tomcat.service; enabled; vendor prese≥

Active: active (running) since Mon 2023-03-06 07:17:20 UTC; 3min 21s ago

Main PID: 17470 (java)

Tasks: 29 (limit: 1143)

Memory: 125.6M

CPU: 3.848s

CGroup: /system.slice/tomcat.service

□17470 /usr/lib/jvm/java-11-openjdk-amd64/bin/java -Djava.util.l≥

Mar 06 07:17:20 ip-172-31-6-206 systemd[1]: Starting Apache Tomcat Web Applica≥

Mar 06 07:17:20 ip-172-31-6-206 startup.sh[17463]: Tomcat started.

Mar 06 07:17:20 ip-172-31-6-206 systemd[1]: Started Apache Tomcat Web Applicat≥

lines 1-13/13 (END)
```

