JENKINS PROJECT:

DEPLOY A WAR FILE IN TOMCAT SERVER

CLIENT REQUIREMENT: TO DEVLOPE A STATIC WEBSITE

PLAN:

1. CODE: HTML, CSS TO DEVELOPE THE APP
2. WE WILL USE AWS TO DEPLOY
3. TO AUTOMATE THE PROJECT WE NEED TO USE JENKINS
4. 2 DEVELOPERS
5. 24 HOURS
6. COST

CODE:

1. HTML & CSS IS USED TO DEVELOP A BASIC WEBSITE

BUILD:

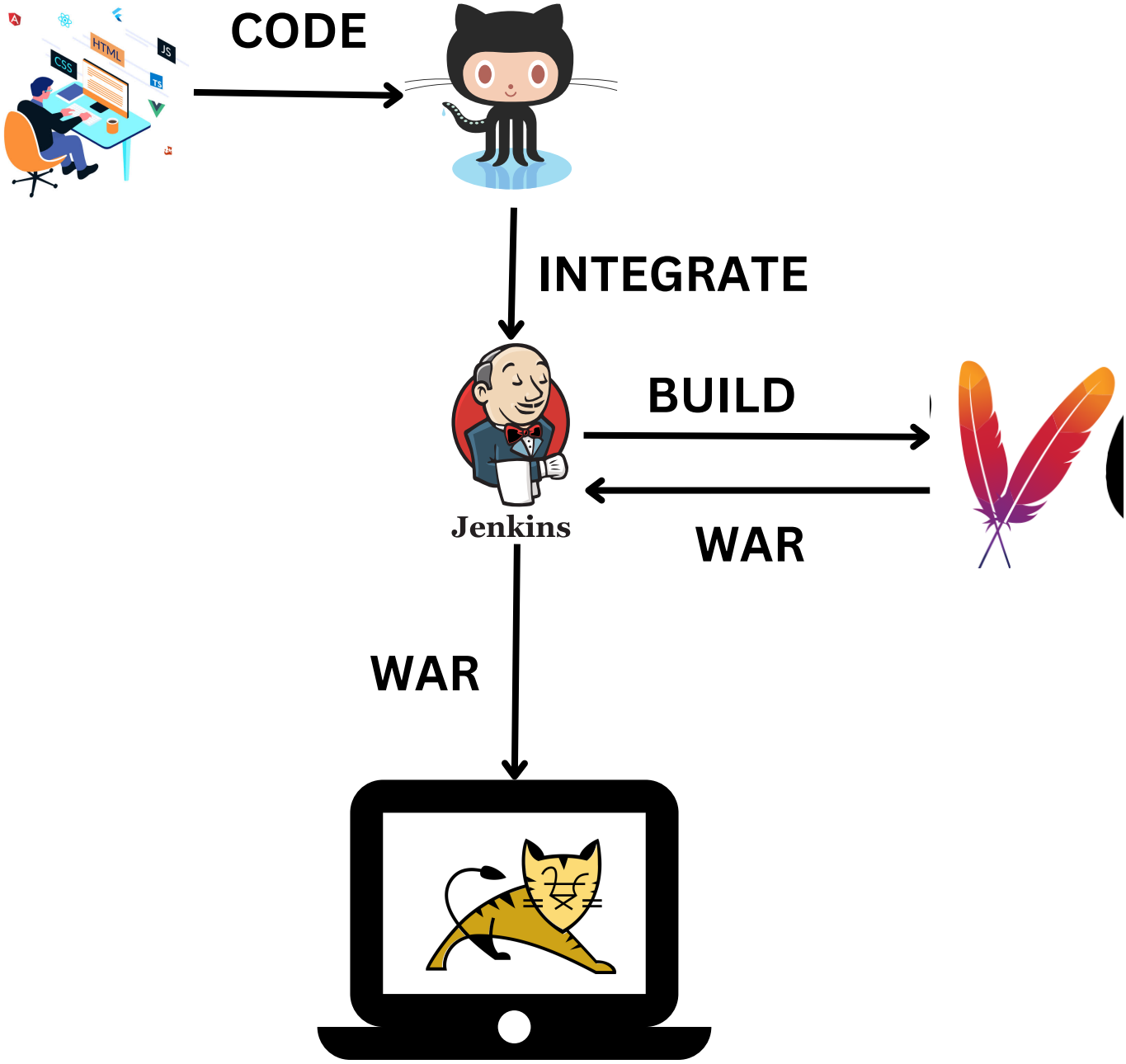
1. USE MAVEN TO BUILD THE SOURCE.
2. ONCE WE BUILD WE WILL GET A JAR/WAR
3. THESE FILES WE WILL USE TO TEST AND DEPLOY

TEST:

1. TESTING ENGINEERS WILL DO THE TESTING
2. SO WE WILL SKIP THIS PART.

DEPLOY:

1. TO DEPLOY THE WAR FILE WE NEED HAVE A CLIENT SERVER.
2. SETUP APACHE TOMCAT IN SERVER AND DEPLOY THE CODE IN SERVER.



REQUIREMENTS:

- LAUNCH 2 SERVER (jenkins, prod)
- GET THE CODE FROM THE DEVELOPERS
- SETUP JENKINS IN JENKINS SERVER
- SETUP TOMCAT IN PROD SERVER

PROCEDURE:

STEP-1: LAUNCH 2 INSTANCES WITH 8080 PORT

STEP-2: SETUP JENKINS IN SERVER

```
sudo wget -O /etc/yum.repos.d/jenkins.repo https://pkg.jenkins.io/redhat-stable/jenkins.repo
sudo rpm --import https://pkg.jenkins.io/redhat-stable/jenkins.io-2023.key
amazon-linux-extras install java-openjdk11 -y
yum install jenkins -y
 systemctl restart jenkins
```

STEP-3: FORK THE GITHUB
(https://github.com/devops0014/one.git)

STEP-4: INSTALL GIT IN OUR SERVER
yum install git -y

STEP-5: CREATE JOB AND INTEGRATE GIT TO JENKINS AND BUILD IT.
ONCE WE BUILD THE JOB, FILES PRESENT IN MASTER BRANCH WILL COMES INTO CI SERVER

STEP-6: NEXT STEP IS BUILD THE SOURCE CODE WHICH ARE PRESENT IN CI SERVER. TO BUILD THE WE NEED TO USE MAVEN

INSTALL JAVA-1.8.0 & MAVEN IN OUR SERVER

yum install java-1.8.0-openjdk -y
yum install maven -y

STEP-7: **CONFIGURE** THE SAME JOB AND CLICK ON **BUILD STEP** AND SELECT **ADD BUILD STEP** SELECT **invoke top level maven targer.**

in the goal : **clean package**

SAVE THE JOB AND BUILD.
SO WE WILL GET A WAR FILE IN TARGET FOLDER.

STEP-8: SETUP THE TOMCAT SERVER IN PROD SERVER.

- download tomcat file from dlcdn: wget https://dlcdn.apache.org/tomcat/tomcat-9/v9.0.70/bin/apache-tomcat-9.0.70.tar.gz
- untar the file: tar -zxvf apache-tomcat-9.0.70.tar.gz
- go to the folder: cd apache-tomcat-9.0.70//webapps/manager/META-INF
- open the context.xml in vim editor and make some change (delete 2 lines (21 and 22 lines))
- go to three steps back: cd ../../../
- and go to conf folder and open tomcat-user.xml file in vim editor

```
-->
<!--
  <role rolename="tomcat"/>
  <role rolename="role1"/>
  <user username="tomcat" password="<must-be-changed>" roles="tomcat"/>
  <user username="both" password="<must-be-changed>" roles="tomcat,role1"/>
  <user username="role1" password="<must-be-changed>" roles="role1"/>
-->
  <role rolename="manager-gui"/>
  <role rolename="manager-script"/>
  <user username="tomcat" password="123456" roles="manager-gui, manager-script"/>
</tomcat-users>
```

- go to one step back: cd ..
- go to bin folder and execute startup.sh file

./startup.sh

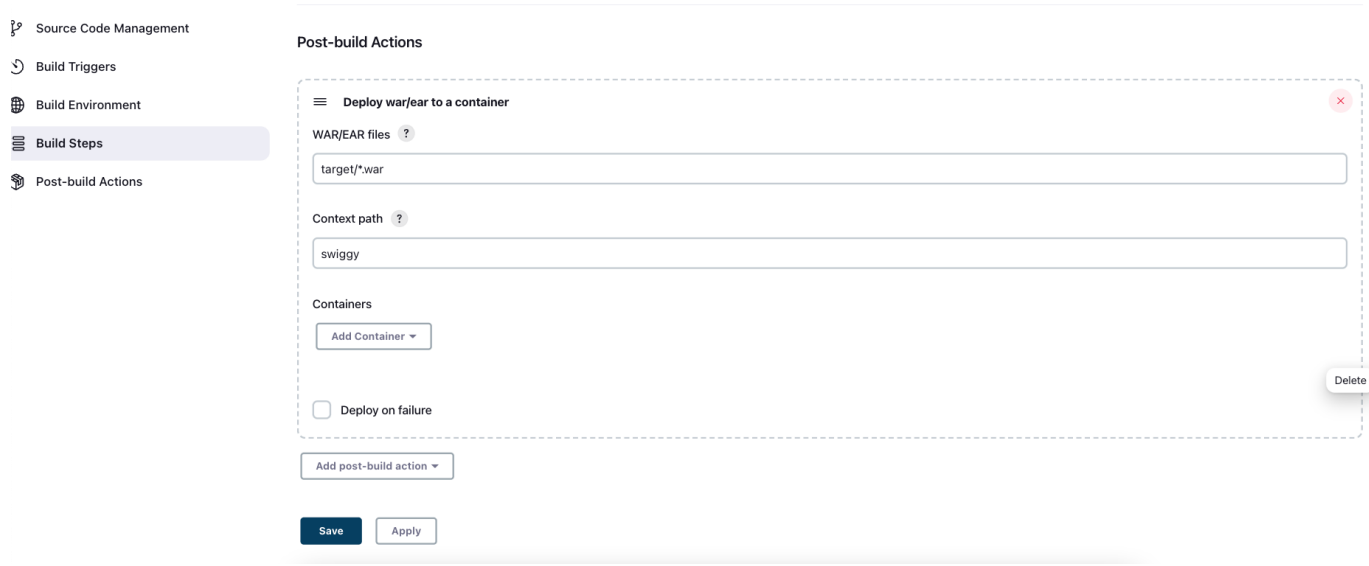
STEP-9:

GO to manager apps and it will ask the user name and password enter it

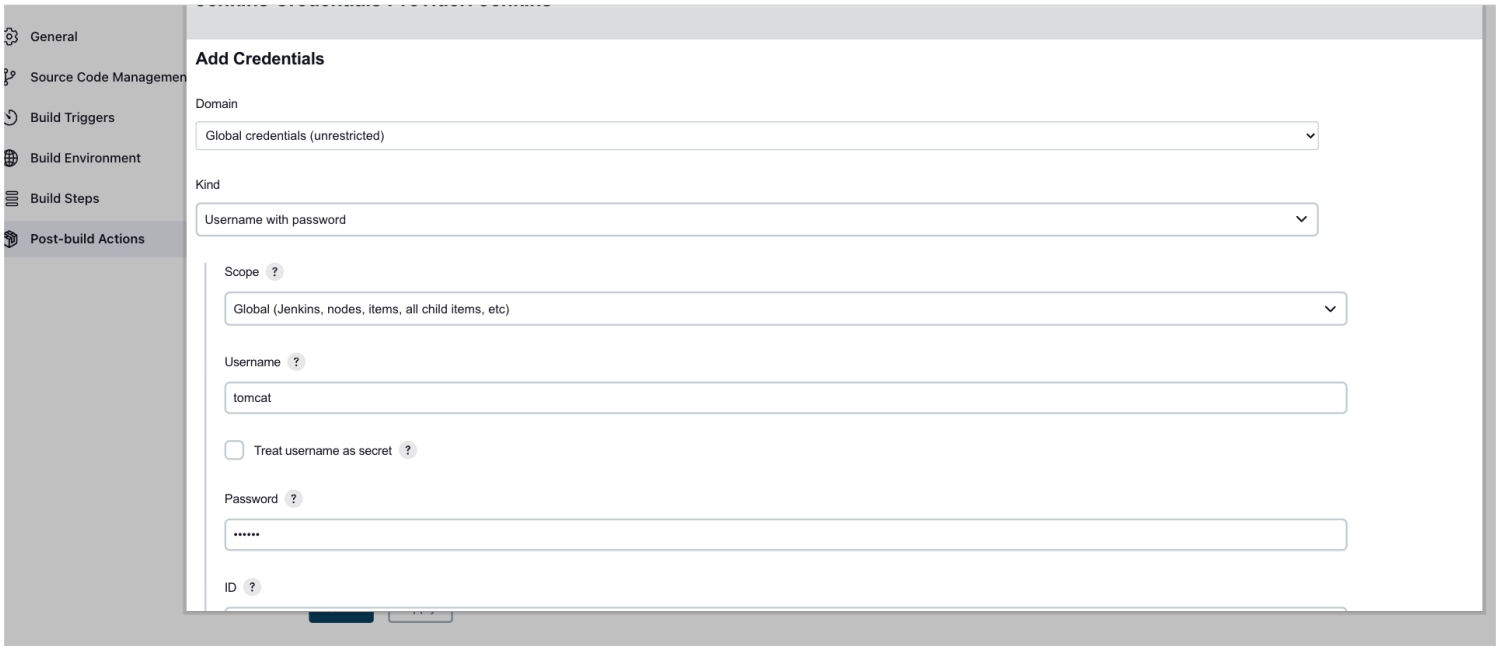
STEP-10: DEPLOY THE WAR FILE IN TOMCAT

- go to jenkins dashboard
- install plugin (manage jenkins --> manage plugin --> available plugin --> deploy to container
- after installing the plugin go to our job and select post build actions --> add post build actions

- select deploy war/ear to container



- click on add container(9th version). and add credentials (username & password of tomcat)



- add tomcat url

- save and build the job and go to tomcat

you will see swiggy folder. click on the folder you can access the client application