pipeline {

agent none

environment {

GIT\_TOKEN = credentials('github-token') // GitHub token from Jenkins credentials

}

stages {

stage('Setup on Master') {

agent { label 'built-in' }

steps {

sh '''

sudo yum install git -y

sudo yum install java-17-amazon-corretto.x86\_64 -y

mkdir -p /mnt/build-tools

mkdir -p /mnt/project

cd /mnt/build-tools

wget https://archive.apache.org/dist/maven/maven-3/3.9.9/binaries/apache-maven-3.9.9-bin.zip

unzip -o apache-maven-3.9.9-bin.zip

rm -f apache-maven-3.9.9-bin.zip

echo 'export MAVEN\_HOME=/mnt/build-tools/apache-maven-3.9.9' >> ~/.bash\_profile

echo 'export PATH=$MAVEN\_HOME/bin:$PATH' >> ~/.bash\_profile

source ~/.bash\_profile

'''

}

}

stage('Clone and Build on Master') {

agent { label 'built-in' }

steps {

sh '''

rm -rf /mnt/project/project-1

git clone https://DeployWithDhruv:${GIT\_TOKEN}@github.com/DeployWithDhruv/project-1.git /mnt/project/project-1

'''

dir('/mnt/project/project-1') {

sh '/mnt/build-tools/apache-maven-3.9.9/bin/mvn clean install'

stash includes: 'target/LoginWebApp.war', name: 'warFile'

}

}

}

stage('Setup Tomcat on Slave') {

agent { label 'qa' }

steps {

sh '''

mkdir -p /mnt/servers

cd /mnt/servers

wget https://archive.apache.org/dist/tomcat/tomcat-9/v9.0.85/bin/apache-tomcat-9.0.85.zip

sudo rm -rf /mnt/servers/apache-tomcat-9.0.85

unzip apache-tomcat-9.0.85.zip

rm -f apache-tomcat-9.0.85.zip

# Give Jenkins user ownership

sudo chown -R root:root /mnt/servers/apache-tomcat-9.0.85

sudo chmod -R 755 /mnt/servers/apache-tomcat-9.0.85

'''

}

}

stage('Deploy WAR, Setup MySQL, and Start Tomcat') {

agent { label 'qa' }

steps {

unstash 'warFile'

withCredentials([usernamePassword(

credentialsId: 'db-credentials',

usernameVariable: 'DB\_USER',

passwordVariable: 'DB\_PASS'

)]) {

dir("${env.WORKSPACE}") {

sh '''

echo "Listing files in workspace:"

ls -l

mkdir -p /mnt/servers/apache-tomcat-9.0.85/webapps/

sudo cp target/LoginWebApp.war /mnt/servers/apache-tomcat-9.0.85/webapps/

# Start Tomcat

sudo /mnt/servers/apache-tomcat-9.0.85/bin/startup.sh

# Give time for Tomcat to extract WAR

echo "Waiting for WAR extraction..."

sleep 15

# Change ownership and permissions

sudo chown -R root:root /mnt/servers/apache-tomcat-9.0.85

sudo chmod -R 755 /mnt/servers/apache-tomcat-9.0.85

# Check if WAR extracted

if [ -d /mnt/servers/apache-tomcat-9.0.85/webapps/LoginWebApp ]; then

echo "WAR extracted successfully."

sudo chmod -R 755 /mnt/servers/apache-tomcat-9.0.85/webapps/LoginWebApp

# Replace DB credentials

sudo sed -i 's|jdbc:mysql://localhost:3306/test",[[:space:]]\*"root",[[:space:]]\*"root"|jdbc:mysql://database-1.c7yo2662ecdg.us-east-2.rds.amazonaws.com:3306/test", "admin", "admin123"|' /mnt/servers/apache-tomcat-9.0.85/webapps/LoginWebApp/userRegistration.jsp

else

echo "LoginWebApp directory not found! Tomcat may not have extracted WAR yet."

exit 1

fi

'''

}

}

}

}

}

}

