**#jenkins-jon**

pipeline {

agent {

label {

label 'built-in'

customWorkspace '/mnt/ws'

}

}

stages {

stage('sg-1') {

steps {

sh '''

mvn clean install

'''

}

}

stage('sg-2') {

steps {

sh '''

rm -rf /mnt/ws/target/LoginWebApp/userRegistration.jsp

cp /root/userRegistration.jsp /mnt/ws/target/LoginWebApp/userRegistration.jsp

'''

}

}

stage('sg-3') {

steps {

sh '''

cd /root

docker system prune -a -f

docker-compose down || true

docker-compose up -d

'''

}

}

}

}

**#docker-compose.yml file**

services:

mysql:

image: mysql:8.0

container\_name: my-mysql

environment:

MYSQL\_ROOT\_PASSWORD: rootpass

MYSQL\_DATABASE: test

MYSQL\_USER: admin

MYSQL\_PASSWORD: admin123

ports:

- "3306:3306"

volumes:

- rahul:/var/lib/mysql

tomcat:

image: tomcat:9.0-jdk17

container\_name: my-tomcat

depends\_on:

- mysql

ports:

- "80:8080"

volumes:

- /mnt/ws/project1/target/LoginWebApp:/usr/local/tomcat/webapps/LoginWebApp

volumes:

rahul:

**#updated userregistration.jsp file**

<%@ page import="java.sql.\*" %>

<%

// Get form parameters

String userName = request.getParameter("userName");

String password = request.getParameter("password");

String firstName = request.getParameter("firstName");

String lastName = request.getParameter("lastName");

String email = request.getParameter("email");

// MySQL connection using environment variables from Docker

String dbHost = System.getenv("DB\_HOST");

String dbPort = System.getenv("DB\_PORT");

String dbName = System.getenv("DB\_NAME");

String dbUser = System.getenv("DB\_USER");

String dbPass = System.getenv("DB\_PASSWORD");

String jdbcUrl = "jdbc:mysql://" + dbHost + ":" + dbPort + "/" + dbName;

Connection con = null;

Statement st = null;

try {

Class.forName("com.mysql.cj.jdbc.Driver");

con = DriverManager.getConnection(jdbcUrl, dbUser, dbPass);

st = con.createStatement();

int i = st.executeUpdate("INSERT INTO USER(first\_name, last\_name, email, username, password, regdate) " +

"VALUES ('" + firstName + "','" + lastName + "','" + email + "','" + userName + "','" + password + "', CURDATE())");

if (i > 0) {

response.sendRedirect("welcome.jsp");

} else {

response.sendRedirect("index.jsp");

}

} catch(Exception e) {

out.println("<h3>Error: " + e.getMessage() + "</h3>");

e.printStackTrace(); // prints to Tomcat logs, not to JSP

} finally {

try { if(st != null) st.close(); } catch(Exception e) {}

try { if(con != null) con.close(); } catch(Exception e) {}

}

%>

**#some commands**

docker exec -i my-mysql mysql -u appuser -p'apppass' -D appdb -e "SELECT \* FROM USER;"

docker exec -i my-mysql mysql -u appuser -p

docker exec -it my-mysql mysql -u appuser -p

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environment:

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ports:

- "3306:3306"

volumes:

- rahul:/var/lib/mysql

tomcat:

image: tomcat:9.0-jdk17

container\_name: my-tomcat

depends\_on:

- mysql

ports:

- "80:8080"

volumes:

- /mnt/ws/target/LoginWebApp:/usr/local/tomcat/webapps/LoginWebApp

environment:

DB\_HOST: mysql

DB\_PORT: 3306

DB\_NAME: test

DB\_USER: admin

DB\_PASSWORD: admin123

volumes:

rahul:

