Create a Java program to demonstrate JDBC and Spring Integration

Pom.xml

<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 https://maven.apache.org/xsd/maven-4.0.0.xsd">

<modelVersion>4.0.0</modelVersion>

<groupId>coms</groupId>

<artifactId>SpringJDBCApp</artifactId>

<version>0.0.1-SNAPSHOT</version>

<dependencies>

<!-- https://mvnrepository.com/artifact/org.springframework/spring-core -->

<dependency>

<groupId>org.springframework</groupId>

<artifactId>spring-core</artifactId>

<version>5.3.27</version>

</dependency>

<!-- https://mvnrepository.com/artifact/org.springframework/spring-context -->

<dependency>

<groupId>org.springframework</groupId>

<artifactId>spring-context</artifactId>

<version>5.3.27</version>

</dependency>

<!-- https://mvnrepository.com/artifact/org.springframework/spring-jdbc -->

<dependency>

<groupId>org.springframework</groupId>

<artifactId>spring-jdbc</artifactId>

<version>5.3.27</version>

</dependency>

<!-- https://mvnrepository.com/artifact/com.mysql/mysql-connector-j -->

<dependency>

<groupId>com.mysql</groupId>

<artifactId>mysql-connector-j</artifactId>

<version>8.0.33</version>

</dependency>

</dependencies>

</project>

Db config

<?**xml** version=*"1.0"* encoding=*"UTF-8"*?>

<**beans** xmlns:xsi=*"http://www.w3.org/2001/XMLSchema-instance"*

xmlns=*"http://www.springframework.org/schema/beans"*

xmlns:context=*"http://www.springframework.org/schema/context"*

xsi:schemaLocation=*"http://www.springframework.org/schema/beans*

*http://www.springframework.org/schema/beans/spring-beans-3.0.xsd*

*http://www.springframework.org/schema/context*

*http://www.springframework.org/schema/context/spring-context-3.0.xsd"*>

<**bean** id=*"ds"* class=*"org.springframework.jdbc.datasource.DriverManagerDataSource"*>

<**property** name=*"driverClassName"* value=*"com.mysql.cj.jdbc.Driver"* />

<**property** name=*"url"* value=*"jdbc:mysql://localhost:3306/spring?useSSL=false"* />

<**property** name=*"username"* value=*"root"* />

<**property** name=*"password"* value=*"sonikaSHETTY#17"* />

</**bean**>

<!--

<bean id="dbConnObj" class="com.service.DeptOperations">

<property name="ds" ref="ds"/>

</bean>

-->

<**bean** id=*"dbConnObj"* class=*"com.service.DeptOperations"* autowire=*"byName"* />

</**beans**>

bean file

package com.beans;

public class Dept {

private int deptno;

private String dname;

private String location;

public int getDeptno() {

return deptno;

}

public void setDeptno(int deptno) {

this.deptno = deptno;

}

public String getDname() {

return dname;

}

public void setDname(String dname) {

this.dname = dname;

}

public String getLocation() {

return location;

}

public void setLocation(String location) {

this.location = location;

}

}

Dept operation

package com.service;

import java.util.List;

import javax.sql.DataSource;

import org.springframework.jdbc.core.BeanPropertyRowMapper;

import org.springframework.jdbc.core.JdbcTemplate;

import com.beans.Dept;

public class DeptOperations {

private DataSource ds;

private JdbcTemplate jdbc;

public DataSource getDs() {

return ds;

}

public void setDs(DataSource ds) {

this.ds = ds;

jdbc = new JdbcTemplate(this.ds);

System.out.println("Connected");

}

public String AddDept(Dept dept)

{

String res = "Err";

String sql = "Insert into Dept(deptno, dname, location) values(?,?,?)";

int n = jdbc.update(sql, new Object[] {dept.getDeptno(), dept.getDname(), dept.getLocation()});

if(n>=1)

res = "Success";

return res;

}

}

DeptApp1

package com.apps;

import java.util.Scanner;

import org.springframework.context.ApplicationContext;

import org.springframework.context.support.ClassPathXmlApplicationContext;

import com.beans.Dept;

import com.service.DeptOperations;

public class DeptApp1 {

public static void main(String[] args) {

ApplicationContext fact = new ClassPathXmlApplicationContext("dbConfig.xml");

DeptOperations dos = (DeptOperations)fact.getBean("dbConnObj");

Scanner sc = new Scanner(System.in);

Dept dept = new Dept();

System.out.println("Deptno : ");

dept.setDeptno(sc.nextInt());

System.out.println("Dept Name : ");

dept.setDname(sc.next());

System.out.println("Location : ");

dept.setLocation(sc.next());

if(dos.AddDept(dept).equals("Success"))

System.out.println("Row Added...");

else

System.out.println("Row Not Added...");

}

}

database

