Spring ORM

app.properties

#Connection keys#

db.driver=com.mysql.jdbc.Driver

db.url=jdbc:mysql://localhost:3306/orm

db.un=root

db.pwd=root

#ORM Keys#

orm.dialect=org.hibernate.dialect.MySQL55Dialect

orm.show=true

orm.format=true

orm.ddlauto=update

AppConfig.java

**package** com.app.config;

**import** java.util.Properties;

**import** org.springframework.beans.factory.annotation.Autowired;

**import** org.springframework.context.annotation.Bean;

**import** org.springframework.context.annotation.ComponentScan;

**import** org.springframework.context.annotation.Configuration;

**import** org.springframework.context.annotation.PropertySource;

**import** org.springframework.core.env.Environment;

**import** org.springframework.jdbc.datasource.DriverManagerDataSource;

**import** org.springframework.orm.hibernate5.HibernateTemplate;

**import** org.springframework.orm.hibernate5.HibernateTransactionManager;

**import** org.springframework.orm.hibernate5.LocalSessionFactoryBean;

**import** org.springframework.transaction.annotation.EnableTransactionManagement;

**import** com.app.model.Employee;

@Configuration

@PropertySource("app.properties")

@ComponentScan("com.app")

@EnableTransactionManagement

**public** **class** AppConfig {

@Autowired

**private** Environment env;

//1. DataSource

@Bean

**public** DriverManagerDataSource dsObj() {

DriverManagerDataSource d=**new** DriverManagerDataSource();

d.setDriverClassName(env.getProperty("db.driver"));

d. setUrl(env.getProperty("db.url"));

d.setUsername(env.getProperty("db.un"));

d.setPassword(env.getProperty("db.pwd"));

**return** d;

}

@Bean

**public** Properties props() {

Properties p=**new** Properties();

p.put("hibernate.dialect", env.getProperty("orm.dialect"));

p.put("hibernate.show\_sql", env.getProperty("orm.show"));

p.put("hibernate.format\_sql", env.getProperty("orm.format"));

p.put("hibernate.hbm2ddl.auto", env.getProperty("orm.ddlauto"));

**return** p;

}

//2. SessionFactory

@Bean

**public** LocalSessionFactoryBean sfObj() {

LocalSessionFactoryBean sf=**new** LocalSessionFactoryBean();

sf.setDataSource(dsObj());

sf.setHibernateProperties(props());

sf.setAnnotatedClasses(Employee.**class**);

**return** sf;

}

//3. HibernateTemplate

@Bean

**public** HibernateTemplate htObj() {

HibernateTemplate ht=**new** HibernateTemplate();

ht.setSessionFactory(sfObj().getObject());

**return** ht;

}

//4. Tx Manager

@Bean

**public** HibernateTransactionManager htmObj() {

HibernateTransactionManager htm=**new** HibernateTransactionManager();

htm.setSessionFactory(sfObj().getObject());

**return** htm;

}

}

Employee.java (model class)

**package** com.app.model;

**import** javax.persistence.Column;

**import** javax.persistence.Entity;

**import** javax.persistence.GeneratedValue;

**import** javax.persistence.Id;

**import** javax.persistence.Table;

//JPA

@Entity

@Table(name="emptab")

**public** **class** Employee {

@Id

@Column(name="eid")

@GeneratedValue

**private** **int** empId;

@Column(name="ename")

**private** String empName;

@Column(name="esal")

**private** **double** empSal;

**public** Employee() {

}

**public** Employee(**int** empId) {

**this**.empId = empId;

}

**public** **int** getEmpId() {

**return** empId;

}

**public** **void** setEmpId(**int** empId) {

**this**.empId = empId;

}

**public** String getEmpName() {

**return** empName;

}

**public** **void** setEmpName(String empName) {

**this**.empName = empName;

}

**public** **double** getEmpSal() {

**return** empSal;

}

**public** **void** setEmpSal(**double** empSal) {

**this**.empSal = empSal;

}

@Override

**public** String toString() {

**return** "Employee [empId=" + empId + ", empName=" + empName + ", empSal=" + empSal + "]";

}

}

IEmployeeDao.java

**package** com.app.dao;

**import** com.app.model.Employee;

**public** **interface** IEmployeeDao {

Integer saveEmployee(Employee e) ;

}

EmployeeDaoImpl.java

**package** com.app.dao.impl;

**import** org.springframework.beans.factory.annotation.Autowired;

**import** org.springframework.orm.hibernate5.HibernateTemplate;

**import** org.springframework.stereotype.Repository;

**import** com.app.dao.IEmployeeDao;

**import** com.app.model.Employee;

@Repository

**public** **class** EmployeeDaoImpl

**implements** IEmployeeDao

{

@Autowired

**private** HibernateTemplate ht;

**public** Integer saveEmployee(Employee e) {

**return** (Integer)ht.save(e);

}

}

IEmployeeService.java

**package** com.app.service;

**import** com.app.model.Employee;

**public** **interface** IEmployeeService {

Integer saveEmployee(Employee e) ;

}

EmployeeServiceImpl.java

**package** com.app.service.impl;

**import** org.springframework.beans.factory.annotation.Autowired;

**import** org.springframework.stereotype.Service;

**import** org.springframework.transaction.annotation.Transactional;

**import** com.app.dao.IEmployeeDao;

**import** com.app.model.Employee;

**import** com.app.service.IEmployeeService;

@Service

**public** **class** EmployeeServiceImpl

**implements** IEmployeeService

{

@Autowired

**private** IEmployeeDao dao;

@Transactional

**public** Integer saveEmployee(Employee e) {

**return** dao.saveEmployee(e);

}

}