**带注解的IStudentDao.class**

package dao;

import java.util.List;

import java.util.Map;

import org.apache.ibatis.annotations.Delete;

import org.apache.ibatis.annotations.Insert;

import org.apache.ibatis.annotations.Select;

import org.apache.ibatis.annotations.Update;

import Entity.Student;

public interface IStudentDao {

@Insert("insert into student(id,name,age,score) values (#{id},#{name},#{age},#{score}")

void insertStu(Student student);

@Select("select \* from student")

List<Student> selectAllStu();

@Update("update student set name=#{name},age=#{age},score=#{score} where id=#{id}")

void updateStu(Student student);

@Delete("delete from student where id=#{xxx}")

void deleteStuById(int id);

@Select("select tid,tname,tage,score from student where tid=#{xxx}")

Student selectStuById(int id);

}

**IStudentDao.xml**

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

<!DOCTYPE mapper

PUBLIC "-//mybatis.org//DTD Mapper 3.0//EN"

"http://mybatis.org/dtd/mybatis-3-mapper.dtd">

<mapper namespace=*"dao.IStudentDao"*>

<!--这个是缓存-->

**<cache eviction=*"LRU"* flushInterval=*"10800000"***

**readOnly=*"true"* size=*"512"*/>**

<!-- 名字任意，需要注册。去主配文件。生效吗，怎么才能生效 -->

<insert id=*"IStudentDao"*>

insert into student(id,name,age,score) values (#{id},#{name},#{age},#{score})

<!-- #{}取值 ：取对象值,用属性值 O->R，任意传值：名字任意#{xxx}。属性是set/get方法去掉set/get之后首字母小写-->

</insert>

<delete id=*"deleteStuById"*>

delete from student where id=#{xxx}

</delete>

<update id=*"updateStu"*>

update student

set name=#{name},age=#{age},score=#{score}

where id=#{id}

</update>

<select id=*"selectAllStu"* resultType=*"Entity.Student"*>

select \* from student

</select>

<resultMap type=*"Entity.Student"* id=*"StudentMapper"*>

<id column=*"tid"* property=*"id"*/>

<result column=*"tname"* property=*"name"*/>

<result column=*"tage"* property=*"age"*/>

</resultMap>

<select id=*"selectStuById"* resultMap=*"StudentMapper"*>

select tid,tname,tage,score

from student where tid=#{xxx}

</select>

</mapper>

**实体类文件**

**package** Entity;

**import** java.io.Serializable;

//实现接口启用二级缓存

**public** **class** Student **implements** Serializable{

**private** Integer id;

**private** String name;

**private** **int** age;

**private** **int** score;

**public** Student(String name, **int** age, **int** score) {

**super**();

**this**.name = name;

**this**.age = age;

**this**.score = score;

}

**public** Student() {

**super**();

}

**public** Integer getId() {

**return** id;

}

**public** **void** setId(Integer id) {

**this**.id = id;

}

**public** String getName() {

**return** name;

}

**public** **void** setName(String name) {

**this**.name = name;

}

**public** **int** getAge() {

**return** age;

}

**public** **void** setAge(**int** age) {

**this**.age = age;

}

**public** **int** getScore() {

**return** score;

}

**public** **void** setScore(**int** score) {

**this**.score = score;

}

@Override

**public** String toString() {

**return** "Student [id=" + id + ", name=" + name + ", age=" + age + ", score=" + score + "]";

}

}

**工具类**

import java.io.IOException;

import java.io.InputStream;

import org.apache.ibatis.io.Resources;

import org.apache.ibatis.session.SqlSession;

import org.apache.ibatis.session.SqlSessionFactory;

import org.apache.ibatis.session.SqlSessionFactoryBuilder;

public class MyBatisUtils {

private static SqlSessionFactory factory;

public static SqlSession getSqlSession() {

try {

if(factory==null) {

InputStream inputstream=Resources.getResourceAsStream("mybatis.xml");

factory=new SqlSessionFactoryBuilder().build(inputstream);

}

}

catch(IOException e) {

e.printStackTrace();

}

return factory.openSession();

}

}

**测试类**

package test;

import java.util.HashMap;

import java.util.List;

import java.util.Map;

import org.apache.ibatis.session.SqlSession;

import org.junit.After;

import org.junit.Before;

import org.junit.Test;

import Entity.Student;

import dao.IStudentDao;

public class test {

private IStudentDao dao;

private SqlSession session;

public test() {

}

@Before

public void before() {

this.session = MyBatisUtils.getSqlSession();

this.dao = session.getMapper(IStudentDao.class);

}

@After

public void after() {

if (this.session != null) {

this.session.close();

}

}

@Test

public void test01() {

Student student = dao.selectStuById(5);

System.out.println(student);

Student student2 =dao.selectStuById(5);

System.out.println(student2);

}

@Test

public void test02() {

dao.deleteStuById(1);

session.commit();

}

@Test

public void test03() {

Student student=new Student("youwei",20,100);

student.setId(1);

dao.updateStu(student);

}

@Test

public void test04() {

List<Student>students=dao.selectAllStu();

for(Student student:students) {

System.out.println(student);

}

}

@Test

public void test05() {

Map<String,Object>map=new HashMap<String,Object>();

map.put("sname", "you");

map.put("sage", 20);

List<Student>students =dao.selectStuByMap(map);

for(Student student:students) {

System.out.println(student);

}

}

}

**主配文件**

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

<!DOCTYPE configuration

PUBLIC "-//mybatis.org//DTD Config 3.0//EN"

"http://mybatis.org/dtd/mybatis-3-config.dtd">

<configuration>

<environments default=*"development"*>

<environment id=*"development"*>

<transactionManager type=*"JDBC"*/>

<dataSource type=*"POOLED"*>

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

<property name=*"url"* value=*"jdbc:mysql:///ustl"*/>

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

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

</dataSource>

</environment>

</environments>

<mappers>

<mapper resource=*"dao/IStudentDao.xml"*/><!-- 全限定类名：包名+类名 ，映射文件注册-->

</mappers>

</configuration>

**一对多 多对一（国家大臣表）**

**ISomeDao.class**

package dao;

import java.util.List;

import Entity.Country;

import Entity.Minister;

public interface ISomeDao {

Country selectCountryById(int id);

List<Minister> selectMinisterByCountry(int id);

Minister selectMinisterById(int mid);

}

**ISomeDao.xml 映射文件**

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

<!DOCTYPE mapper

PUBLIC "-//mybatis.org//DTD Mapper 3.0//EN"

"http://mybatis.org/dtd/mybatis-3-mapper.dtd">

<mapper namespace=*"dao.ISomeDao"*>

<!-- 一对多 查的是一（Country） -->

<!-- 多表连接查询方式 -->

<resultMap type=*"Country"* id=*"countryMapper"*>

<id column=*"cid"* property=*"cid"*/>

<result column=*"cname"* property=*"cname"*/>

<collection property=*"ministers"* ofType=*"Minister"*>

<id column=*"mid"* property=*"mid"*/>

<result column=*"mname"* property=*"mname"*/>

</collection>

</resultMap>

<select id=*"selectCountryById"* resultMap=*"counrtyMapper"*>

select cid,cname,mid,mname

from country,minister

where cid=#{xxx} and cid=counntryId

</select>

<!-- 多表单独查询方式 -->

<select id=*"selectMinisterByCountry"* resultType=*"Minister"*>

select mid,mname from minister where countryId=#{xxx}

</select>

<resultMap type=*"Country"* id=*"countryMapper"*>

<id column=*"cid"* property=*"cid"*/>

<result column=*"cname"* property=*"cname"*/>

<collection property=*"ministers"* ofType=*"Minister"*

select=*"selectMinisterByCountry"*

column=*"cid"*/>

</resultMap>

<select id=*"selectCountryById"* resultMap=*"countryMapper"*>

select cid,cname from country where cid=#{xxx}

</select>

<!-- 多对一 查的是多（Minister） -->

<!-- 多表连接查询方式 -->

<resultMap type=*"Minister"* id=*"ministerMapper"*>

<id column=*"mid"* property=*"mid"*/>

<result column=*"mname"* property=*"mname"*/>

<association property=*"country"* javaType=*"Country"*>

<id column=*"cid"* property=*"cid"*/>

<result column=*"cname"* property=*"cname"*/>

</association>

</resultMap>

<select id=*"selectMinisterById"* resultMap=*"ministerMapper"*>

select mid,mname,cid,cname

from country,minister

where mid=#{xxx} and cid=countryId

</select>

<!-- 多表单独查询方式 -->

<select id=*"selectCountryById"* resultType=*"Country"*>

select \* from country where cid=#{xxx}

</select>

<resultMap type =*"Minister"* id=*"ministerMapper"*>

<id column=*"mid"* property=*"mid"*/>

<result column=*"mname"* property=*"mname"*/>

<association property=*"country"*

javaType=*"Country"*

select=*"selectCountryById"*

column=*"countryId"*/>

</resultMap>

<select id=*"selectMinisterById"* resultMap=*"ministerMapper"*>

select mid,mname,countryId from minister

where mid=#{xxx}

</select>

</mapper>

**实体类**

**package** Entity;

**import** java.util.Set;

**public** **class** Country {

**private** Integer cid;

**private** String cname;

**private** Set<Minister> minister;

**public** Integer getCid() {

**return** cid;

}

**public** **void** setCid(Integer cid) {

**this**.cid = cid;

}

**public** String getCname() {

**return** cname;

}

**public** **void** setCname(String cname) {

**this**.cname = cname;

}

**public** Set<Minister> getMinister() {

**return** minister;

}

**public** **void** setMinister(Set<Minister> minister) {

**this**.minister = minister;

}

@Override

**public** String toString() {

//两个实体类输出时候避免都输出对方造成递归死循环

**return** "Country [cid=" + cid + ", cname=" + cname + ", minister=" + minister + "]";

}

}

**package** Entity;

**public** **class** Minister {

**private** Integer mid;

**private** String mname;

**private** Country country;

**public** Integer getMid() {

**return** mid;

}

**public** **void** setMid(Integer mid) {

**this**.mid = mid;

}

**public** String getMname() {

**return** mname;

}

**public** **void** setMname(String mname) {

**this**.mname = mname;

}

**public** Country getCountry() {

**return** country;

}

**public** **void** setCountry(Country country) {

**this**.country = country;

}

**public** Minister(Integer mid, String mname, Country country) {

**super**();

**this**.mid = mid;

**this**.mname = mname;

**this**.country = country;

}

**public** Minister() {}

@Override

**public** String toString() {

**return** "Minister [mid=" + mid + ", mname=" + mname + "]";

}

}

测试类

package test;

import java.util.HashMap;

import java.util.List;

import java.util.Map;

import org.apache.ibatis.session.SqlSession;

import org.junit.After;

import org.junit.Before;

import org.junit.Test;

import Entity.Country;

import Entity.Minister;

import Entity.Student;

import dao.ISomeDao;

public class test {

private ISomeDao dao;

private SqlSession session;

public test() {

}

@Before

public void before() {

this.session = MyBatisUtils.getSqlSession();

this.dao = session.getMapper(ISomeDao.class);

}

@After

public void after() {

if (this.session != null) {

this.session.close();

}

}

@Test

public void test01() {

Country country=dao.selectCountryById(2);

System.out.println(country);

}

@Test

public void test02() {

List<Minister> ministers=dao.selectMinisterByCountry(1);

for(Minister minister:ministers) {

System.out.println(minister);

}

}

}

**自身连接**

**实体类**

**package** Entity;

**import** java.util.Set;

**public** **class** NewsLabel {

**private** Integer id;

**private** String name;

**private** Set<NewsLabel> children;

**public** Integer getId() {

**return** id;

}

**public** **void** setId(Integer id) {

**this**.id = id;

}

**public** String getName() {

**return** name;

}

**public** **void** setName(String name) {

**this**.name = name;

}

**public** Set<NewsLabel> getChildren() {

**return** children;

}

**public** **void** setChildren(Set<NewsLabel> children) {

**this**.children = children;

}

**public** NewsLabel(String name, Set<NewsLabel> children) {

**super**();

**this**.name = name;

**this**.children = children;

}

@Override

**public** String toString() {

**return** "NewsLabel [id=" + id + ", name=" + name + ", children=" + children + "]";

}

}

**INewsLabelDao.class**

package dao;

import java.util.List;

import Entity.NewsLabel;

public interface INewsLabelDao {

List<NewsLabel>selectChildrenByParentId(int pid);

}

**INewsLabelDao.xml**

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

<!DOCTYPE mapper

PUBLIC "-//mybatis.org//DTD Mapper 3.0//EN"

"http://mybatis.org/dtd/mybatis-3-mapper.dtd">

<mapper namespace=*"dao.INewsDao"*>

<resultMap type=*"NewsLabel"* id=*"newsLabelMapper"*>

<id column=*"id"* property=*"id"*/>

<result column=*"name"* property=*"name"*/>

<collection property=*"children"* ofType=*"NewsLabel"*

select=*"selectChildrenByParentId"*

column=*"id"*/>

</resultMap>

<select id=*"selectChildrenByParentId"* resultMap=*"newsLabelMapper"*>

select id,name from newslabel where pid=#{xxx}

</select>

</mapper>

**测试类**

package test;

import java.util.List;

import org.apache.ibatis.session.SqlSession;

import org.junit.After;

import org.junit.Before;

import org.junit.Test;

import Entity.NewsLabel;

import dao.INewsLabelDao;

public class test {

private INewsLabelDao dao;

private SqlSession session;

public test() {

}

@Before

public void before() {

this.session = MyBatisUtils.getSqlSession();

this.dao = session.getMapper(INewsLabelDao.class);

}

@After

public void after() {

if (this.session != null) {

this.session.close();

}

}

@Test

public void test01() {

List<NewsLabel> label=dao.selectChildrenByParentId(2);

for(NewsLabel newslabel:label) {

System.out.println(newslabel);

}

}

}

**多对多 学生选修表**

**实体类**

**package** Entity;

**import** java.util.Set;

**public** **class** Student {

**private** Integer sid;

**private** String sname;

**private** Set<Course> courses;

**public** Integer getSid() {

**return** sid;

}

**public** **void** setSid(Integer sid) {

**this**.sid = sid;

}

**public** String getSname() {

**return** sname;

}

**public** **void** setSname(String sname) {

**this**.sname = sname;

}

**public** Set<Course> getCourses() {

**return** courses;

}

**public** **void** setCourses(Set<Course> courses) {

**this**.courses = courses;

}

@Override

**public** String toString() {

**return** "Student [sid=" + sid + ", sname=" + sname + ", courses=" + courses + "]";

}

**public** Student(Integer sid, String sname, Set<Course> courses) {

**super**();

**this**.sid = sid;

**this**.sname = sname;

**this**.courses = courses;

}

}

**package** Entity;

**import** java.util.Set;

**public** **class** Course {

**private** Integer cid;

**private** String cname;

**private** Set<Student> students;

**public** Integer getCid() {

**return** cid;

}

**public** **void** setCid(Integer cid) {

**this**.cid = cid;

}

**public** String getCname() {

**return** cname;

}

**public** **void** setCname(String cname) {

**this**.cname = cname;

}

**public** Set<Student> getStudents() {

**return** students;

}

**public** **void** setStudents(Set<Student> students) {

**this**.students = students;

}

**public** Course(Integer cid, String cname, Set<Student> students) {

**super**();

**this**.cid = cid;

**this**.cname = cname;

**this**.students = students;

}

@Override

**public** String toString() {

**return** "Course [cid=" + cid + ", cname=" + cname + "]";

}

}

**IStudentDao.class**

**package** dao;

**import** Entity.Student;

**public** **interface** IStudentDao {

Student selectStudentById(**int** id);

}

**IStudentDao.xml**

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

<!DOCTYPE mapper

PUBLIC "-//mybatis.org//DTD Mapper 3.0//EN"

"http://mybatis.org/dtd/mybatis-3-mapper.dtd">

<mapper namespace=*"dao.IStudentDao"*>

<resultMap type=*"Student"* id=*"studnetMapper"*>

<id column=*"sid"* property=*"sid"*/>

<result column=*"sname"* property=*"sname"*/>

<collection property=*"courses"* ofType=*"Course"*>

<id column=*"cid"* property=*"cid"*/>

<result column=*"cname"* property=*"cname"*/>

</collection>

</resultMap>

<select id=*"selectStudentById"* resultMap=*"studentMapper"*>

select sid,sname,cid,cname

from student,middle,course

where sid=studentId and cid=courseId and sid=#{xxx}

</select>

</mapper>

**Test类**

package test;

import java.util.HashMap;

import java.util.List;

import java.util.Map;

import org.apache.ibatis.session.SqlSession;

import org.junit.After;

import org.junit.Before;

import org.junit.Test;

import Entity.Student;

import dao.IStudentDao;

public class test {

private IStudentDao dao;

private SqlSession session;

public test() {

}

@Before

public void before() {

this.session = MyBatisUtils.getSqlSession();

this.dao = session.getMapper(IStudentDao.class);

}

@After

public void after() {

if (this.session != null) {

this.session.close();

}

}

@Test

public void test01() {

Student student = dao.selectStudentById(1);

System.out.println(student);

}

}