XuLyNgoaiLe.java

public class XuLyNgoaiLe extends Exception{

public XuLyNgoaiLe(String msg)

{

super(msg);

}

}

SinhVien.java

/\*

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\* Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Main.java to edit this template

\*/

package quanlysinhvien;

/\*\*

\*

\* @author Administrator

\*/

public class SinhVien {

private String id;

private String name;

private int age;

public String getId() {

return id;

}

public void setId(String 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 SinhVien(String \_id, String \_name, int \_age)

{

this.id=\_id;

this.name=\_name;

this.age=\_age;

}

}

//----------------------

QLSV.java

/\*

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\* Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template

\*/

package quanlysinhvien;

import java.util.ArrayList;

import java.util.List;

/\*\*

\*

\* @author Administrator

\*/

public class QLSV {

private List<SinhVien> svList;

public QLSV()

{

this.svList=new ArrayList<>();

}

public void ThemSV(SinhVien sv) throws XuLyNgoaiLe

{

if(sv==null)

{

throw new XuLyNgoaiLe("Sinh viên không null");

}

svList.add(sv);

}

public void XoaSV(String id) throws XuLyNgoaiLe

{

for(SinhVien sv:svList)

{

if(sv.getId().equals(id))

{

svList.remove(sv);

return ;

}

}

throw new XuLyNgoaiLe("Sin hvien voi ID"+id+"không tìm thấy");

}

public SinhVien TimSV(String id) throws XuLyNgoaiLe

{

for(SinhVien sv:svList)

{

if(sv.getId().equals(id))

{

return sv;

}

}

throw new XuLyNgoaiLe("Sin hvien voi ID"+id+"không tìm thấy");

}

public void CapNhatSV(String id, SinhVien newSV) throws XuLyNgoaiLe

{

if(newSV==null)

{

throw new XuLyNgoaiLe("Thông tin của sv mới phải có đầy đủ");

}

for(int i=0;i<svList.size();i++)

{

SinhVien sv=svList.get(i);

if(sv.getId().equals(id))

{

svList.set(i, newSV);

return;

}

}

throw new XuLyNgoaiLe("Không tìm thấy sinh viên");

}

public List<SinhVien> getSVList()

{

return svList;

}

}

//--------------------PHẦN TEST-----------------

/\*

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\* Click nbfs://nbhost/SystemFileSystem/Templates/UnitTests/JUnit4TestClass.java to edit this template

\*/

package quanlysinhvien;

import java.util.List;

import org.junit.After;

import org.junit.AfterClass;

import org.junit.Before;

import org.junit.BeforeClass;

import org.junit.Test;

import static org.junit.Assert.\*;

/\*\*

\*

\* @author Administrator

\*/

public class QLSVTest {

private QLSV qlsv;

@Before

public void setUp() {

qlsv=new QLSV();

}

@Test

public void testThemSV() throws Exception {

System.out.println("ThemSV");

SinhVien sv=new SinhVien("001", "Mai Lan",30);

qlsv.ThemSV(sv);

assertEquals(1, qlsv.getSVList().size());

}

/\*\*

\* Test of XoaSV method, of class QLSV.

\*/

@Test

public void testXoaSV() throws Exception {

System.out.println("XoaSV");

SinhVien sv=new SinhVien("002", "Nuong",30);

qlsv.ThemSV(sv);

qlsv.XoaSV("002");

assertEquals(0, qlsv.getSVList().size());

}

/\*\*

\* Test of TimSV method, of class QLSV.

\*/

@Test

public void testTimSV() throws Exception {

System.out.println("TimSV");

SinhVien sv=new SinhVien("003", "Thu",33);

qlsv.ThemSV(sv);

SinhVien timsv=qlsv.TimSV("003");

assertEquals("Thu",timsv.getName());

}

/\*\*

\* Test of CapNhatSV method, of class QLSV.

\*/

@Test

public void testCapNhatSV() throws Exception {

System.out.println("CapNhatSV");

SinhVien sv=new SinhVien("004", "Trinh",20);

qlsv.ThemSV(sv);

SinhVien cnsv=new SinhVien("004", "tinhanh",19);

qlsv.CapNhatSV("004",cnsv);

assertEquals("tinhanh", qlsv.TimSV("004").getName());

}

@Test(expected = IllegalAccessException.class)

public void testXoaKtontai() throws XuLyNgoaiLe

{

qlsv.XoaSV("005");

}

@Test(expected = IllegalAccessException.class)

public void testTimKTonTai() throws XuLyNgoaiLe

{

qlsv.TimSV("005");

}

@Test(expected = IllegalAccessException.class)

public void testCapNhatkTonTai() throws XuLyNgoaiLe

{

SinhVien sv=new SinhVien("007","sumo",25);

qlsv.CapNhatSV("008", sv);

}

}