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package zzzzzzzz;
import java.io.*;
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public class Text {
    public static void main(String[] args) throws MyException, IOException {
        Login l=new Login();
        l.login();
    }
}
class Student{
    private String stunumber;
    private String name;
    private String age;
    private String sex;
    private String score;
    public void set_stunumber(String stu){
        stunumber=stu;
    }
    public String get_stunumber(){
        return stunumber;
    }
    void set_name(String na){
        name=na;
    }
    String get_name(){
        return name;
    }
    void set_age(String agee){
        age=agee;
    }
    String get_age(){
        return age;
    }
    void set_sex(String sexx){
        sex=sexx;
    }
    String get_sex(){
        return sex;
    }
    void set_score(String scoree){
        score=scoree;
    }
    String get_score(){
        return score;
    }
}
class StudentManager{
    int n=0;
    Student ss[]=new Student[50];
    //遍历学生信息
    void showStudent(){
        for(int i=0;i<=n;i++){
            System.out.println("学号: "+ss[i].get_stunumber()+"姓名: "+ss[i].get_name()+"年龄: "+ss[i].get_age()+"性别: "+ss[i].get_sex()+"分数: "+ss[i].get_score()+"\t\n");
        }
    }
    //判断学号是否已经存在
    boolean panduan(String st)
    {
        boolean flag=true;
        for(int i=0;i<n;i++)
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    {
        if(ss[i].get_stunumber().equals(st))
            flag= false;
        else
            flag= true;
    }
    return flag;
}
//添加学生信息
void addStudent(String stunumber,String name,String age,String b,String score){
    ss[n]=new Student();
    ss[n].set_stunumber(stunumber);
    ss[n].set_name(name);
    ss[n].set_age(age);
    ss[n].set_sex(b);
    ss[n].set_score(score);
    n++;
}
//删除学生信息
void deleteStudent(String stunumber) throws MyException{
    for(int i=0;i<=n;i++){
        if(ss[i].get_stunumber().equals(stunumber)){
            System.out.println("学号为: "+stunumber+"的学生已被删除!");
            if(n==1){
                System.out.println("数组为空");
                ss[0]=new Student();
            }
            else {
                for(int j=i;j<=n;j++){
                    ss[j]=ss[j+1];
                }
                n--;
            }
        }
        else{
            throw new MyException("该学生不存在!");
        }
    }
}
//修改学生信息
void updateStudent(String stu1,String name,String age,String sex,String score) throws MyException{
    for(int i=0;i<=n;i++){
        if(ss[i].get_stunumber().equals(stu1)){
            ss[i]=new Student();
            ss[i].set_stunumber(stu1);
            ss[i].set_name(name);
            ss[i].set_age(age);
            ss[i].set_sex(sex);
            ss[i].set_score(score);
        }
        else
            throw new MyException("没有找到该学生!");
    }
}
//查询学生信息
void selectStudent(String number) throws MyException{
    for(int i=0;i<=n;i++){
        if(ss[i].get_stunumber().equals(number)){
            System.out.println("学号: "+ss[i].get_stunumber()+"姓名: "+ss[i].get_name()+"年龄: "+ss[i].get_age()+"性别: "+ss[i].get_sex()+"分数: "+ss[i].get_score()+"\t\n");
        }
        else
            throw new MyException("没有找到该学生!");
    }
}

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    }
}
//统计不及格的人数
void tongji() {
    int s=0;
    for(int i=0;i<=n;i++) {
        int a=Integer.parseInt(ss[i].get_score());
        if(a<60) {
            s=s+1;
            System.out.println("学号: "+ss[i].get_stunumber()+"姓名: "+ss[i].get_name()+"年龄: "+ss[i].get_age()+"性别: "+ss[i].get_sex()+"分数: "+ss[i].get_score()+"\t\n");
        }
    }
    System.out.println("不及格的人数为: "+s+"人");
}
//输入界面
void showface() {
    System.out.println("*****");
    System.out.println("石家庄铁道大学学生信息管理系统");
    System.out.println("*****");
    System.out.println("1. 遍历输出学生信息");
    System.out.println("2. 新学生信息录入");
    System.out.println("3. 删除学生信息");
    System.out.println("4. 修改学生信息");
    System.out.println("5. 查询学生信息");
    System.out.println("6. 学生信息统计");
    System.out.println("7退出.");
}
}
}
class Login{
    User users=new User("001","123456");//用户名, 密码
    //登录
    void login() throws MyException, IOException{
        BufferedReader in=new BufferedReader(new InputStreamReader(System.in));
        DataOutputStream out=new DataOutputStream(new BufferedOutputStream(new FileOutputStream("Student.txt", true)));
        for(int i=1;i<=3;i++){
            System.out.println("请输入用户ID: ");
            String id=in.readLine();
            System.out.println("请输入密码: ");
            String pass=in.readLine();
            if((users.urname.equals(id))&&(users.passage.equals(pass))) {
                StudentManager sm=new StudentManager();
                while(true) {
                    sm.showface();
                    System.out.println("请选择: ");
                    String choose=in.readLine();
                    if(choose.startsWith("1")) {
                        sm.showStudent();
                    }
                    else if(choose.startsWith("2")) {
                        System.out.print("请输入学号: ");
                        String stu=in.readLine();
                        System.out.print("请输入姓名: ");
                        String name=in.readLine();
                        System.out.print("请输入年龄: ");
                        String age=in.readLine();
                        System.out.println("请输入性别 (true男, false女): ");
                        String sex=in.readLine();
                        System.out.print("请输入分数: ");
                        String score=in.readLine();
                        if(sm.panduan(stu)) {
                            sm.addStudent(stu, name, age, sex, score);
                            System.out.println("创建成功!");
                        }
                    }
                }
            }
        }
    }
}

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        out.writeUTF("学号: "+stu+"姓名: "+name+"年龄: "+age+"性别: "+sex+"分数: "+score+"\t\t\n\n");
    }
    else
        throw new MyException("该学生已存在, 请勿重复添加");
}
else if(choose.startsWith("3")){
    System.out.println("请输入学号: ");
    String stu=in.readLine();
    if(! (sm.panduan(stu))){
        sm.deleteStudent(stu);
    }
    else
        throw new MyException("该学号不存在!");
}
else if(choose.startsWith("4")){
    System.out.println("请输入学号: ");
    String stu=in.readLine();
    System.out.println("请输入姓名: ");
    String name=in.readLine();
    System.out.println("请输入年龄: ");
    String age=in.readLine();
    System.out.print("请输入性别 (true男, false女): ");
    String sex=in.readLine();
    System.out.print("请输入分数: ");
    String score=in.readLine();
    if(! (sm.panduan(stu))){
        sm.updateStudent(stu, name, age, sex, score);
        out.writeUTF("学号: "+stu+"姓名: "+name+"年龄: "+age+"性别: "+sex+"分数: "+score+"\t\t\n\n");
    }
    else
        throw new MyException("该学号不存在!");
}
else if(choose.startsWith("5")){
    System.out.println("请输入学号: ");
    String stu=in.readLine();
    if(! (sm.panduan(stu))){
        sm.selectStudent(stu);
    }
    else
        throw new MyException("该学号不存在!");
}
else if(choose.startsWith("6")){
    sm.tongji();
}
else if(choose.startsWith("7")){
    in.close();
    out.close();
    System.exit(0);
}
else {
    throw new MyException("选择错误, 请重新选择");
}
}
}
else
    System.out.println("用户ID或密码错误, 请重新输入");
}
throw new MyException("该卡已锁定!");
}
}
}
class User{
    String uername;

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String passage;
User(String user, String pass) {
    this.uername=user;
    this.passage=pass;
}
void set_uername(String use) {
    uername=use;
}
String get_uername() {
    return uername;
}
void set_passage(String pass) {
    passage=pass;
}
String get_passage() {
    return passage;
}
}
class MyException extends Exception{
    public MyException(String e) {
        super(e);
    }
}
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