import java.io.\*;

import java.io.File;

import java.util.\*;

public class StudentRecords {

static BufferedReader br = new BufferedReader(new InputStreamReader(System.in));

**public void addRecords() throws IOException** {

**// Create or Modify a file for Database**

PrintWriter pw = new PrintWriter(new BufferedWriter(new FileWriter("st.txt",true)));

String studentname, address;

int studentid, rollno, Class;

float marks;

String s;

boolean addMore = false;

**// Read Data**

do {

System.out.print("\nEnter Student Name: ");

studentname = br.readLine();

System.out.print("Student Id: ");

studentid = Integer.parseInt(br.readLine());

System.out.print("Roll no: ");

rollno = Integer.parseInt(br.readLine());

System.out.print("Address: ");

address = br.readLine();

System.out.print("Class: ");

Class = Integer.parseInt(br.readLine());

System.out.print("Marks : ");

marks = Float.parseFloat(br.readLine());

**// Print to File**

pw.println(studentname+" "+studentid+" "+rollno+" "+address+" "+Class+" "+marks);

System.out.print("\nRecords added successfully !\n\nDo you want to add more records ? (y/n) : ");

s = br.readLine();

if(s.equalsIgnoreCase("y")){

addMore = true;

System.out.println();

}

else

addMore = false;

}

while(addMore);

pw.close();

showMenu();

}

**public void readRecords() throws IOException** {

try{

**// Open the file**

BufferedReader file = new BufferedReader(new

FileReader("st.txt"));

String name;

int i=1;

**// Read records from the file**

while((name = file.readLine()) != null){

System.out.println(name);

System.out.println("");

}

file.close();

showMenu();

}

catch(FileNotFoundException e){

System.out.println("\nERROR : File not Found !!!");

}

}

**public void searchRecords() throws IOException**{

try{

// Open the file

BufferedReader file = new BufferedReader(new

FileReader("st.txt"));

String name;

int flag=0;

Scanner sc=new Scanner(System.in);

System.out.print("Enter an id of the student you want to search: ");

String searchname=sc.next();

// Read records from the file

while((name = file.readLine()) != null){

String[] line = name.split(" ");

//System.out.println(line[0]);

if(searchname.equalsIgnoreCase(line[1])){

System.out.println("Record found");

System.out.println(name);

System.out.println("");

flag=1;

break;

}

}

if(flag==0)

System.out.println("Record not found");

file.close();

showMenu();

}

catch(FileNotFoundException e){

System.out.println("\nERROR : File not Found !!!");

}

}

**public void deleteRecords() throws IOException** {

try{

// Open the file

BufferedReader file1 = new BufferedReader(new FileReader("st.txt"));

PrintWriter pw = new PrintWriter(new BufferedWriter(new FileWriter("st1.txt",true)));

String name;

int flag=0;

Scanner sc=new Scanner(System.in);

System.out.print("Enter the name of the student you want to delete: ");

String searchname=sc.next();

// Read records from the file

while((name = file1.readLine()) != null){

String[] line = name.split(" ");

//System.out.println(line[0]);

if(!searchname.equalsIgnoreCase(line[0])){

pw.println(name);

flag=0;

}

else{

System.out.println("Record found");

flag=1;

}

}

file1.close();

pw.close();

File delName = new File("st.txt");

File oldName = new File("st1.txt");

File newName = new File("st.txt");

if(delName.delete())

System.out.println("deleted successfully");

else

System.out.println("Error");

if (oldName.renameTo(newName))

System.out.println("Renamed successfully");

else

System.out.println("Error");

showMenu();

}

catch(FileNotFoundException e){

System.out.println("\nERROR : File not Found !!!");

}

}

**public void updateRecords() throws IOException**{

try{

// Open the file

BufferedReader file1 = new BufferedReader(new FileReader("st.txt"));

PrintWriter pw = new PrintWriter(new BufferedWriter(new FileWriter("st1.txt",true)));

String name;

int flag=0;

Scanner sc=new Scanner(System.in);

System.out.print("Enter the name of the student you want to update: ");

String searchname=sc.next();

// Read records from the file

while((name = file1.readLine()) != null){

String[] line = name.split(" ");

//System.out.println(line[0]);

if(!searchname.equalsIgnoreCase(line[0])){

pw.println(name);

flag=0;

}

else{

System.out.println("Record found");

System.out.println("Enter updated marks:");

String up\_mark=sc.next();

pw.println(line[0]+" "+line[1]+" "+line[2]+" "+line[3]+" "+line[4]+" "+up\_mark);

flag=1;

}

}

file1.close();

pw.close();

File delName = new File("st.txt");

File oldName = new File("st1.txt");

File newName = new File("st.txt");

if(delName.delete())

System.out.println("record updated successfully");

else

System.out.println("Error");

if (oldName.renameTo(newName))

System.out.println("Renamed successfully");

else

System.out.println("Error");

showMenu();

}

catch(FileNotFoundException e) {

System.out.println("\nERROR : File not Found !!!");

}

}

public void clear(String filename) throws IOException{

// Create a blank file

PrintWriter pw = new PrintWriter(new BufferedWriter(new FileWriter(filename)));

pw.close();

System.out.println("\nAll Records cleared successfully !");

for(int i=0;i<999999999;i++); // Wait for some time

showMenu();

}

public void showMenu() throws IOException{

System.out.println("");

System.out.print("1. Add Records\n2. Display Records\n3. Clear All Records\n4. Search Records\n5. Delete Records\n6. Update Records \n7. Exit\n\nEnter your choice : ");

int choice = Integer.parseInt(br.readLine());

System.out.println("");

switch(choice){

case 1:

addRecords();

break;

case 2:

readRecords();

break;

case 3:

clear("st.txt");

break;

case 4:

searchRecords();

break;

case 5:

deleteRecords();

break;

case 6:

updateRecords();

break;

case 7:

System.exit(0);

break;

default:

System.out.println("\nInvalid Choice !");

break;

}

}

public static void main(String args[]) throws IOException

{

StudentRecords call = new StudentRecords();

call.showMenu();

}

}

Output

1. Add Records

2. Display Records

3. Clear All Records

4. Search Records

5. Delete Records

6. Update Records

7. Exit

Enter your choice : 1

Enter Student Name: shubham

Student Id: 1

Roll no: 123

Address: samgmner

Class: 1

Marks : 100

Records added successfully !