

Student details management system

Introduction:

In every school or colleges, administration will use books to write the details of the students. It very difficult to manage the details. That difficulties are

1. Searching of student records: It will takes lot of time to find the details of student. If the student was studied 10 years back, then need to check each and every entry in the register. Even student is correctly studying, then also it is very problem. Need to go through every record of each student of the insitution.

2. Modification & Deletion: Modification of students record is impossible. By mistake you enter the student names wrong, then will not be corrected. If it is mandatory then, need to write one more line and strike off the previous record. By this the register looks very ugly. This case is also for deletion.

3. Back Up & Restore: Can not make copy of the records every day. Unfortunately, if the book is missed, the whole data is lost. Again need to collect the details of every student and write every student record on the book.

Description :

STUDENT DETAILS MANAGEMENT SYSTEM(SDMS) gives solutions for the above problems. SDMS developed using purely C language. It uses the file as database. SDMS will provides following Features. They are 1. Add new student details, 2. Searching, 3. Displays all records, 4. Modification, 5.Deletion of previous students, 6.BackUp records and 7. Restore the records.

Features:

1.Add student details:

SDMS asks details of student. They are Name, Unique Id, Class roll number and Mobile number of the student one by one. After completion of adding details, It offers to enter another student details.

2. Searching of student details:

SDMS asks ID of the student whose records need to search. It displays the details of the student whose have the entered Id. If the id is not present the records, it displays "Record is not found" and offers to search another student details.

3. View recods of student details:

SDMS displays all recods of students.

4. Modification of student details:

SDMS asks ID of the student whose records need to modify. It displays the details of the student, again asks for confirmation. If confirmed, then it asks for the updated details of the student, need to give one by one. After modification if offers modification of another student details.\

5. Deletion of student details:

SDMS asks ID of the student whose records need to delete. To delete the confrmation, need confirmation. It deletes the records of the student and offers the deletion of another student.

6. BackUp of student details:

SDMS create a backup file as like whats app. Whats app create two files to back up the message. One is for restoring purpose where another is for back up history. User can backup his/her old messages from old backup file. In SDMS these backup history files store in "back" directory.

7. Restore of student details:

SDMS restore the students details from backup file which is latest among all backup files. The records which are not latest from back up time are lost.

Requirements:

- gcc 7.2.0 compiler

Usear Guid :

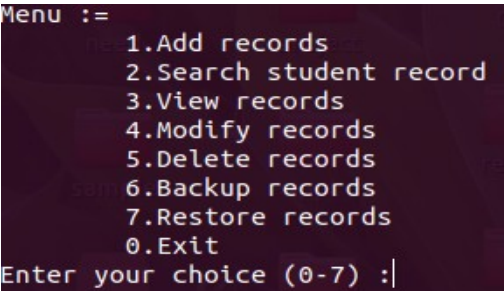
To run the file you need to type “gcc student_db.c” for compilation then run the ‘a.out’ file by typing “./a.out” in terminal for ubuntu users. For other users need to compile and run this student_db.c file.

SDMS displays the menu containing above features. User need to choose one option among

8. To select the operation you need to enter number which corresponding to required operation.

The numbers are

- 1 - for Adding,
- 2 - for Searching,
- 3 - for View the all records,
- 4 - for Modification
- 5 - for Deletion,
- 6 - for BackUp,
- 7 - for Restore and
- 0 - for Exit.



```
Menu :=
1.Add records
2.Search student record
3.View records
4.Modify records
5.Delete records
6.Backup records
7.Restore records
0.Exit
Enter your choice (0-7) :|
```

This below flow chat shows the working flow SDMS.

1.Add record:

- Enter name, ID, Roll number, Email and Mobile number of student.
- Displays new record details.
- Offer to add another student details.
- Press y if you want to add one more otherwise press n to continue.

2. Search student record:

- Enter the ID of the student
- Displays the student details if exists. Otherwise it shows Record is not found.
- Offer to search another student details.
- Press y if you want to search one more otherwise press n to continue.

3. View records :

- Displays all recods of students in table format.

4. Modify records:

- Enter the ID of the student
- Displays the student details if exists. Otherwise it shows Record is not found.
- Cofirm by pressing y if still you want to modify. Otherwise press n to ignore.
- Offer to modify another student details.
- Press y if you want to modify one more otherwise press n to continue.

5. Deletion of student details:

- Enter the ID of the student
- Cofirm by pressing y if still you want to delete. Otherwise press n to ignore.
- Displays “Record not found” if there is no record of student.
- Delete the record of student and Offer to Deletion of another student details.
- Press y if you want to delete one more otherwise press n to continue

6. BackUp of student details:

- SDMS creates backup file

7. Restore of student details:

- It shows a alert message that is “Your current records will be no long available? (y/n)”
- Press y if you want to restore otherwise press n to continue.

Tools & Technologies :

- Text editor
- gcc 7.2.0 compiler
- C laguage
- Draw.io

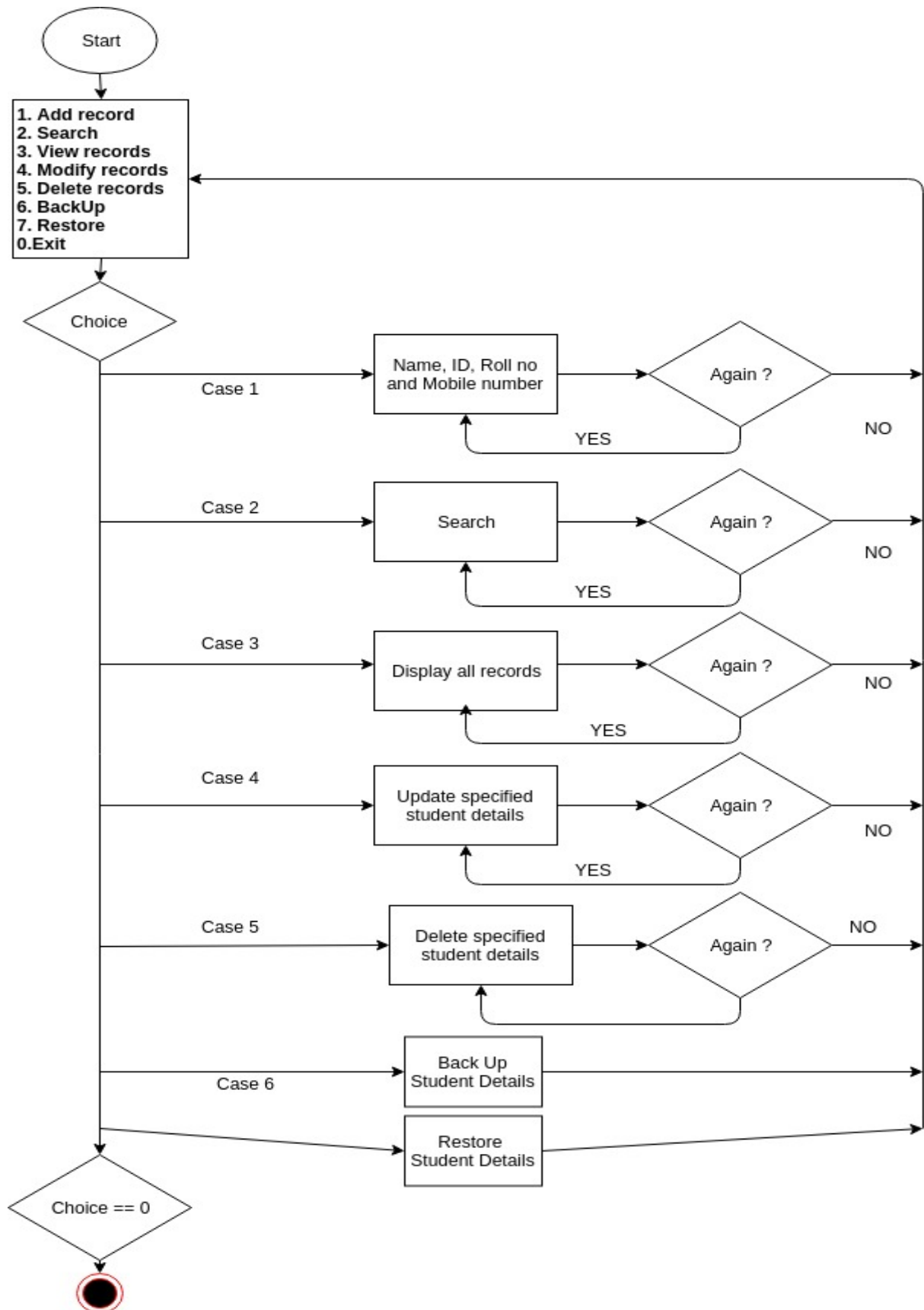
Concepts used in SDMS:

- Printing
- Scanning
- If – Else
- Switch
- While and For loops
- Break
- Structures
- Functions
- Files
 - fopen
 - fread
 - fwrite
 - fseek
 - SEEK_CUR
 - SEEK_SET
 - fclose
- Modes of file
 - rb
 - r+
 - w+
 -

Libraries used in SDMS:

- Stdio.h
- stdlib.h
- string.h
- time.h

Special Thanks to Shaik Rasheed.



Flow char of SDMS