UNIVERSITY RECORD MANAGEMENT SYSTEM

Introduction

This is a project that implements "University Record Management System" using concepts of data structure and basic programming

Motivation

- Educational Institution has to maintain the list and details of its students

- It gets hectic to track, search and create the Student Record manually

- So through development of this project, the task is automated and easy

- This project will help the school and colleges to keep record of their students

OBJECTIVE

The main objective is to keep track of the students and manage the details of students.

It has the functionality to create, update, delete, display information about the students with details including; name, roll number, courses enrolled, CGPA.

These details are used to search for a particular student(s) as well.

PROBLEM STATEMENT

Program to build a simple Software for Student Record Management System which can perform the following operations:-
Store the First name of the student.
Store the Last name of the student.
Store the unique Roll number of every student.
Store the CGPA of every student.
Store the courses registered by the student.

BENEFITS TO THE SURROUNDING SOCIETY

Education is a very important aspect for a civilized society. Thus, Schools and Colleges have a prominent role. By implementing this, schools and colleges' can increase their productivity. Thus, it benefits the ecosystem.

EQUIPMENTS AND FACILITIES REQUIRED

The source code is written in C language. The executable file can run in any basic system. The program runs in any low-end computer.

PROPOSED TECHNIQUE or METHODOLOGY

The idea is to form an individual functions for every operation. All the functions are unified together to form software.

- Add Student Details: Get data from user and add a student to the list of students. While adding the students into the list, check for the uniqueness of the roll number.

- Find the student by the given roll number: This function is to find the student record for the given roll number and print the details.

- Find the student by the given first name: This function is to find all the students with the given first name and print their details.

- Find the students registered in a course: This function is to find all the students who have registered for a given course.

- Count of Students: This function is to print the total number of students in the system

- Delete a student: This function is to delete the student record for the given roll number.

- Update Student: This function is to update the student records. This function does not ask for new details for all fields but the user should be able to pick and choose what he wants to update.

ADVANTAGES

- Students Records can be created
- Helpful for Colleges and Schools to keep a log of their students
- Students Marks can be stored. It can be useful to track their performance.
- Unique Roll Number can be assigned to each student.
- Individual Students can be searched using their Roll Number, or Name.
- Any field of Student Data can be updated or modified.

LIMITATIONS

- Since the project is computer-based, a computer infrastructure is required.
- Only the specified fields are available to store data. The user cannot add a separate field.

REFERENCES

- Ellis Horowitz and Sartaj Sahni, Fundamentals of Data Structures in C, 2nd Ed, Universities Press, 2014.

- Reema Thareja, Data Structures using C, 3rd Ed, Oxford press, 2012.