SRM UNIVERSITY AP

Computer Science Department

Project Report on

“SRM STUDENT MANAGEMENT SYSTEM”

Submitted in partial fulfillment for the award of the degree in

**BACHELOR OF TECHNOLOGY**

In

**COMPUTER SCIENCE AND ENGINEERING**

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**ABSTRACT**

The **Student Management System** is also called the student information system. It is **student management** software for managing the students.

Student management is an easy way designed to make it easier to track information.

Student Management System (SMS) is a solution tool that is designed to track, sort and manage all the data generated by a university, including the grades of a student, their attendance, their interpersonal activities records, etc.

Think of it as a big database that stores all the day-to-day school information, and student records, it also manages the tasks. It simplifies the handling process of the administrative work.

**ABOUT PROJECT**

We are going to construct a code to make seamless interaction software for managing student pre post academic details of university.

It keeps track of student information like:

1. Student End:
2. Academic Qualifications

2.Personal Information

3.Course information

b. University End:

1. Verify Student Details

2.Verify Fee Information

3.Ask for more info

**WHAT YOU LEARN HERE**

**AND**

**TECHNIQUES USED**

By implementing this project, we have learned that there are various techniques to solve this problem like vectors and linked list, but we have chosen Trees, to reduce the time complexity for searching, inserting, and deleting and to store the student’s details dynamically. We also learned create a perfect code without having any errors or failed test cases. We learned how to store and manage the data in less time. We can modify and improve if there are any instances where the code is failing or the output is wrong. We are taking the student details one by one and it is stored in the node of the tree as per the SRMJEEE Rank of student using the logic of pre order. Same logic is used for entering comments and providing Scholarships.

**HOW CAN IT BE IMPROVED**

Since, there are a lot of ways to solve this project. There are other techniques which are more effective than the technique we used but the problem is that those techniques are very difficult and tricky to implement. Techniques such as using of AVL trees and Red Black Trees to implement this project can be done to make the code more effectively and the time complexity will be less. But It is very hard to make a code with AVL trees and Red black trees to self-balancing.

**Team Contribution:**

|  |  |
| --- | --- |
| Sai Dhanush G – AP21110011214 | **20%** |
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**ALGORITHM**

STEP-1: START

STEP-2: Display college information  
STEP-3: Enter the student details

STEP-4: after adding the details of all students then verify student details and put the comments to each student

STEP-5: if student is eligible for scholarship, then give scholarship, else procced to next step

STEP-6: verify the fee information

STEP-7: print student information

STEP-8: If student decided to leave from college, then remove the student

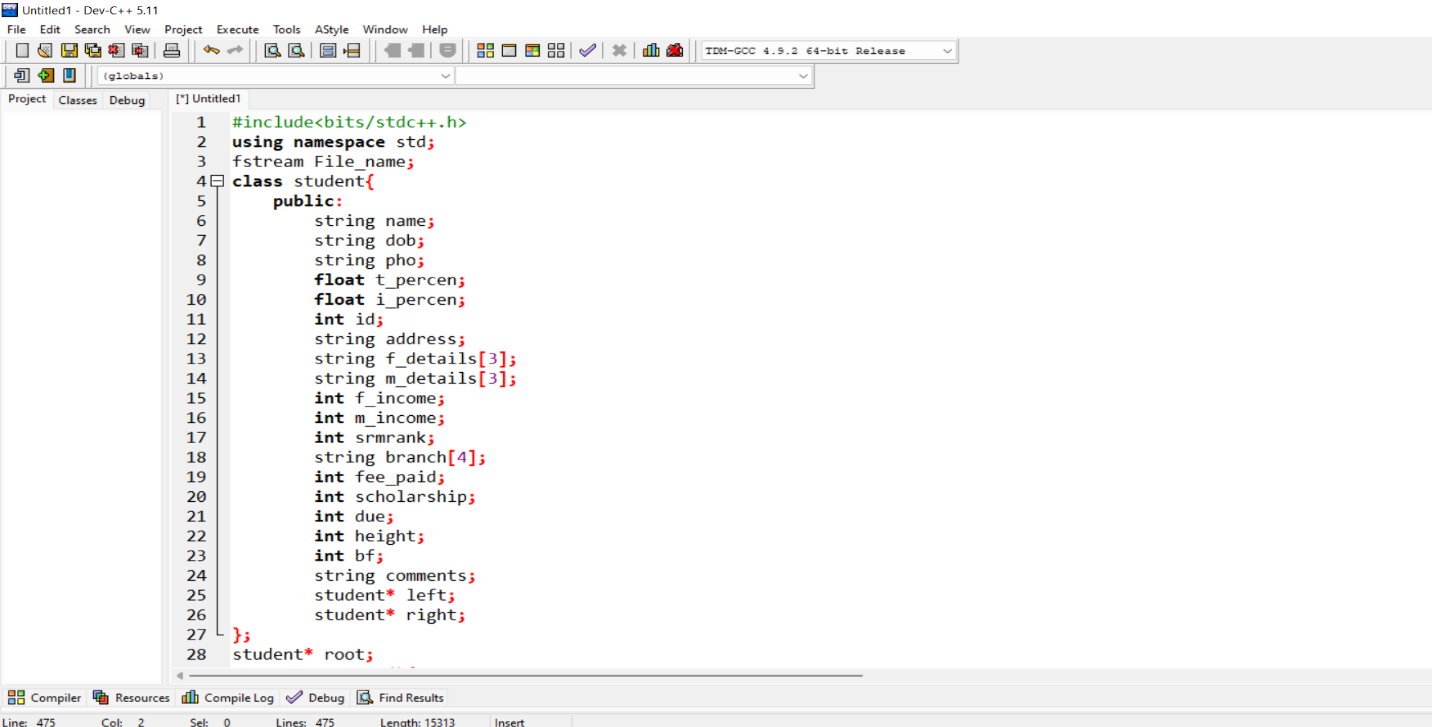
STEP-15: STOP.

**SYSTEM REQUIREMENTS:**

**OS:** Windows 7 or above

**Processor:** i3 or above

**Language:** C++

CODE ****

