STUDENT RECORD SYSTEM IN C

Submitted in partial fulfillment of the requirements of the degree

BACHELOR OF ENGINEERING IN **COMPUTER ENGINEERING**

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(AY 2020-21)

CERTIFICATE

This is to certify that the Mini Project entitled **"Student Record System in C"** is a Bonafide work of **Pooja Bhagat (104), Priyanka Korde (118), Rohit Mishra (125), Raghuwardayal Maurya (123)** submitted to the University of Mumbai in partial fulfillment of the requirement for the award of the degree of **"Bachelor of Engineering"** in **"Computer Engineering"**.

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Mini Project Approval

This Mini Project entitled "**Student Record System in C**" by **Pooja Bhagat (104), Priyanka Korde (118), Rohit Mishra (125), Raghuwardayal Maurya (123)** is approved for the degree of **Bachelor of Engineering** in **Computer Engineering.**

Examiners

1.………………………………………
(Internal Examiner Name & Sign)

2.……………………………………
(External Examiner name & Sign)

Date:

Abstract

The success of any organization depends on its ability to acquire accurate and timely data about its operations, to manage this data effectively, and to use it to analyze and guide its activities. The Student Record Management system offer users (Registrar) with a unified view of data from multiple sources. The main objective of this project is to build a student database system that will store records of students. It is purposed to reduce time spent on administrative tasks. The system is intended to accept process, generate students reports and grades and transcripts accurately. The system is also intended to provide better services to users, provide meaningful, consistent, and timely data and information and finally promotes efficiency by converting paper processes to electronic form. The system is free of errors, very efficient and less time consuming due to the care taken to develop it. All the phases of software development cycle are employed and it is worthwhile to state that the system is user friendly and strong.

Acknowledgement

We are grateful to AICTE for introducing the new syllabus which provides an opportunity to work as a team for mini-project and also enhances one's ability to contribute their skills in this project.

We wish to acknowledge our supervisor at Lokmanya Tilak College of Engineering, Mr. Rajendra Gawali, who was instrumental in bringing this project to light and had spent a lot of his time and effort by giving us advices, ideas and morale support.

We also want to thank our family for all their supports and advices during the process of completing this project. Not to forget all of our friends who helped us in so many ways.

We are thankful to the entire staff of LTCE, for making us feel so welcomed at LTCE from day one. Lastly, we are also grateful to various authors of the research papers which we reviewed. The generosity and expertise of one and all have improved this project in many ways and have saved us from notable errors.

Contents

INTRODUCTION

1.1 **Introduction**:

Background study

In most of the institutions, information of management for student records are recorded every semester, and at the end of the year the summary is done. The recording is done by the secretary registrar and recruitment office. In spite of being a developing nation and with the latest technology still the paper-based methods during recording are used whereby it takes long hours just to capture one's information from paper into system. And the students sometimes are counted using the registered student or counting; this system is characterized by manual form filling to get bio data of the students, and later transfer of the information from manual data, capture forms to computerized data sheets, therefore, it has led to an excessive number of mistakes to the final displacement of some students formed hence leading to confusion at the time of comparing the results. Over the years that have been number of talks that the management organization should introduce electronic capturing, storing at academic Department or recruitment Department this will simplify on capturing and storing of data for a longer period of time.

1.2 **Motivation**:

Running a School / Institute is not an easy task. Manually maintaining Students fees record , search Students information and more can prove to be tedious and are prone to human errors. To bring more efficiency , it is essential to shift to the automation of tasks in this technological-driven world . This is where Students Record Management software comes into the picture.

1.3 **Problem Statement and objectives:**

1.3(a) **Problem Statement:**

Student record system is the process of collecting, processing and storing transmitting relevant information to support the management operations in any organization. Where it helps to provide accurate and timely information necessary to facilitate the decision-making process and enable the organization planning, control and operational functions to be carried out effectively. But accessing students record in any organization or institution has always been problematic for example cases of delay in registration processes, spelling errors have all been too common therefore findings will reveal poor records management as the biggest problem facing by the organization or in institutions.

1.3(b) **Objectives:**

- To store or maintain the records of students studying or passed in previous years.

- To provide data security and full data compliance.

- To enable real-time communication and engagement.

- To bring more efficiency in this technological-driven world.

- To offer an easy-to-use and intuitive interface.

Literature Survey

2.1 **Survey of Existing System**

2.2 **Limitation Existing system or research gap**

Here both the sub-topics can be understood by the table given below:

Year	Author /websites	Title	Review
2015	Utpal Chaudhary	Students Record Management systems	It is developed in turbo c which makes it very easily accessible and the project was Desktop application type.
2014	Ishant Sharma (Lovely Professional uni.)	School Management System	In this we get to know a lot about header files and various syntax's that can make the project easy.
2019	www.articlew orld.com	Student Record System in C	This mini-project "Student Record System Project in C" is made by using the C programming language. The project compiled in Code Blocks with the GCC compiler. In this application, you can do basic Student Record tasks like adding the student info, view the added student, search the students, ..etc

2014	www.codewithc.com	Student Record System	In this the window is virtually divided into 2 parts – one is static and it does not change, while the other is dynamic and it changes from time to time. The text are coded using various color-related functions to make them static.

Proposed System

3.1 **Introduction**:

A student database system intended to track and store student records as the outcome of the project after a critical analysis, design, building and testing of the system Systems analysis is a problem-solving technique that decomposes a system into its component pieces for the purpose of the studying how well those component parts work and interact to accomplish. Evaluation was properly done to ensure that the system meets all the requirements and specifications. A stringent plan to monitor the implementation of the new system is laid-out and the entire project documented.

Architecture:

Login Page:	Logo of Student Management System
Password Page:	Password Validation • Access Granted • Access Denied
Main Page:	1. Add Student Information 2. Student Info Full view 3. Search 4. Modify 5. Delete 6. Sort 7. Exit
1. Add Student Info	Student Name, Father Name, Mother Name Mobile number, Fees Status, Date, Roll no., Class Gender, Address, Street, Landmark, City, pin, Country
2. Student Information	Search by Roll: Above Whole Information of Student in Full View
3. Search	• Search by Roll • Search by name
4. Modify	Modification of Student Information is possible and can be viewed again
5. Delete	By Roll the Student whole Information can be Deleted
6. Sort	• Sort by Roll • Sort by Name Student info in short table view for reference

7. Exit	Exiting the System Thankyou to visit!!

3.2. Algorithm and Process Design:

Login window:

This year we learned Computer Graphics in C , this login window has beautiful graphics implementation of current year knowledge over here we have used

- Function like Square, Circle, Ellipse, Rectangle

- Flood fill Algorithm

Password page:

We have password validation method by we have used a lot of while, for, Switch and if loop and graphics for hiding the password "*".

Sound effects are there for user friendly after putting correct password user will be allowed to login in.

Main page:

- Switch is Used.

- Structure of Date, Student and Address is used.

- Auto increment Roll no and current date for admission can be taken.

Add Student Record:

- File Handling is used

- Functions like fflush, fread , fopen, fclose ,fwrite are used to open , close and read & write the File.

- For Deleting 2 files are used one for copying and other for deleting previous

- For Sorting : Sort Method is used

- For Modifying : fseek method is used

The process Design is very smooth and user friendly.

3.3 HARDWARE

Hardware devices includes:

- Windows Operating System
- Keyboard
- Mouse
- Hard Disk-5GB
- Monitor
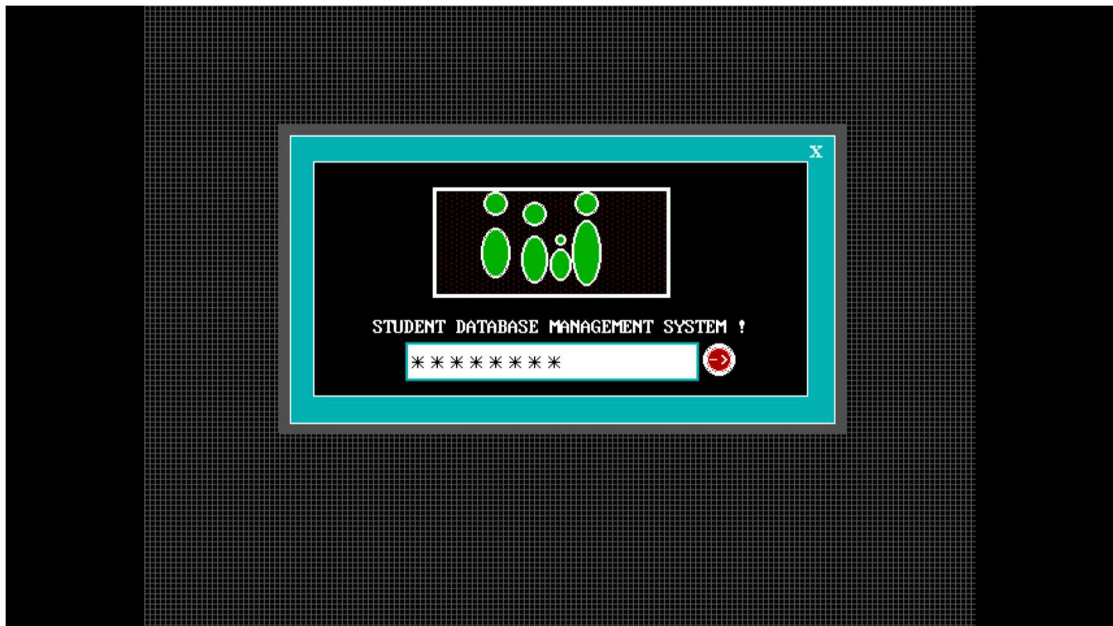- RAM-4GB, ROM

SOFTWARE
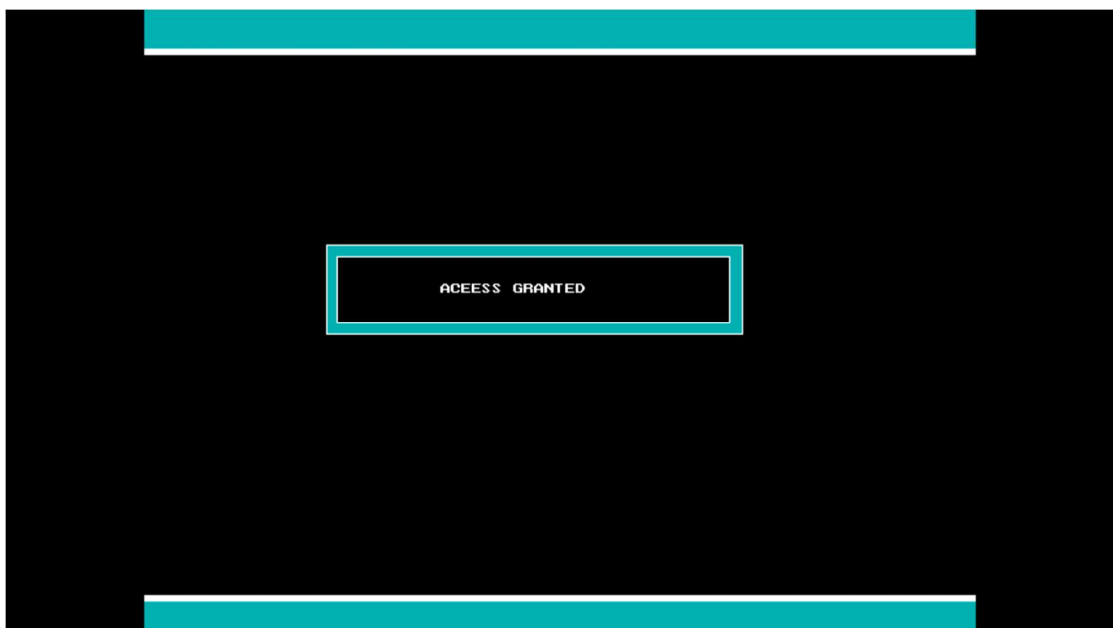
Software devices includes:

- TurboC
- C Complier

- Any other Running platform can also be used

3.4. Experiment and Results:

Login and Password page:

Access Granted or Denied after putting password:

Student Panel Main page:

```
<-----STUDENT MANAGEMENT SYSTEM----->
1.Take Addmission
2.Student Info
3.Search
4.Modify
5.Delete
6.Sort
0.exit
Enter your choice:
```

Taking Student info:

```
<-----STUDENT MANAGEMENT SYSTEM----->
1.Take Addmission
2.Student Info
3.Search
4.Modify
5.Delete
6.Sort
0.exit
Enter your choice: 1
Enter Name: Priyanka Korde
Enter Class: Java
Enter Roll no: 78
Enter Father Name: Dilip
Enter Mother Name: Neha
Sex:Female/Male: Female
Mobile Number: 7890456732
Enter Fees status: Due
Enter Date in format DD/MM/YY: 07/12/20
Address[Street]: mp
Land Mark: MCdonald
City: Mumbai
Pin: 400078
Country : India
***************Thankyou***************
Record Saved Successfully
```

Student Information successfully saved showing in short view:

```
<---School Management--->
<---Sort By Roll--->
Name                    Class           Roll    Date
Aditya Bhagat           SE              4       07/12/20
Siddharth Bhagat        Java            24      07/12/20
Raghu Bhagat            C               24      07/12/20
Pooja Bhagat            Java            34      08/12/20
Priyanka Korde          Java            78      07/12/20
```

Student Information Full View:

```
<----Student Info:---->
Enter Roll to search:
```

```
<----Student Info:---->
Enter Roll to search: 4
NAME :: Aditya Bhagat
FATHER NAME:: Girish
MOTHER NAME:: Guddi
Roll:: 4              Class:: SE
SEX:: M         MOBILE NO:: 894356790
FEES STATUS :: Paid
***************** ADDRESS *****************
MP              Rd
Ch      -Mumbai India
Enter 0 to back Main menu:
```

Search Information of Student in Table View:

By Roll method:


```
<---Student Management System--->
<---Search--->
1.Search By Rollno
2.Search By Name
0.Back to Main Menu


Enter your choice:
1
Enter Roll to search: 4
Name                    Class         Roll    Date
Aditya Bhagat           SE            4       07/12/20
```

By Name method:

```
<---Student Management System--->
<---Search--->
1.Search By Rollno
2.Search By Name
0.Back to Main Menu


Enter your choice:
2
Enter name to search: Pooja Bhagat
Name                    Class           Roll    Date
Pooja Bhagat            Java            34      08/12/20
Record found successfully
```

Modify Student Info:

```
<-----STUDENT MANAGEMENT SYSTEM----->
1.Take Addmission
2.Student Info
3.Search
4.Modify
5.Delete
6.Sort
0.exit
Enter your choice: 4
Enter Roll to Modify: 12
Enter New Name: Jack jone
Enter Class:C
Enter New Roll: 33
```

```
<---School Management--->
<---Sort By Roll--->
Name                     Class          Roll      Date
Aditya Bhagat            SE             4         07/12/20
Jack jone                C              33        07/12/20
Pooja Bhagat             Java           34        08/12/20
Priyanka Korde           Java           78        07/12/20
```

Delete a Student Information:

```
<-----STUDENT MANAGEMENT SYSTEM----->
1.Take Addmission
2.Student Info
3.Search
4.Modify
5.Delete
6.Sort
0.exit
Enter your choice: 5
Enter roll to delete: 33
```

```
<---School Management--->
<---Sort By Roll--->
Name                    Class           Roll    Date
Aditya Bhagat           SE              4       07/12/20
Pooja Bhagat            Java            34      08/12/20
Priyanka Korde          Java            78      07/12/20
```

Sorting By Roll number and Name method:

```
<---Student Management System--->
<---Search--->
1.Sort By Rollno
2.Sort By Name
0.Back to Main Menu


Enter your choice:
```

```
<---School Management--->
<---Sort By Roll--->
Name                    Class           Roll    Date
Aditya Bhagat           SE              4       07/12/20
Siddharth Bhagat        Java            24      07/12/20
Raghu Bhagat            C               24      07/12/20
Pooja Bhagat            Java            34      08/12/20
Priyanka Korde          Java            78      07/12/20
```

Exiting the System:

```
<-----STUDENT MANAGEMENT SYSTEM----->
1.Take Addmission
2.Student Info
3.Search
4.Modify
5.Delete
6.Sort
0.exit
Enter your choice: 0
Thankyou for visting!!
```

3.6 Conclusion and future work:

(A) Conclusion:

➢ Students Record System can be used by educational institutions to maintain their student records easily.

➢ Achieving this objective is difficult using the manual system as the information is scattered, can be redundant and collecting relevant information may be very time-consuming.

➢ Good management offers better productivity and hence more progress towards Development.

➢ It helps the institutions to achieve the target, reduce work, increase efficiency, eliminating error, and monitoring progress.

➢ All these problems are solved by this project. This system helps in maintaining the information of pupil of the organization

(B) Future work:

1. Since Student Record system(SRS) is very broad ,the scope oof this project covers only a small aspect of SRS due to fact that COVID-19 which disabled us for teaming.

2. Students who are interested in building information system should be encouraged to work in other aspect of SRS in that all the available related student information system could be linked together.

3. As per new education system the programming courses offered in that will encourage to work in a team to develop a application at an early age.

4. Further we can make Attendance and Report practical Submission system of students which will be modified only by concern staffs and not by students, providing information to students about submission and easy to students and staffs.

References

https://www.softwaresuggest.com/blog/best-student-record-management-system/

https://www.codewithc.com/mini-project-in-c-student-record-system/

https://www.technhit.in/student-management-system-project-c-language/

https://www.youtube.com/watch?v=kqCEynlwKZI