

**Minor project  
on  
STUDENT MANAGEMENT SYSTEM USING C++**

**Submitted by**

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**In**

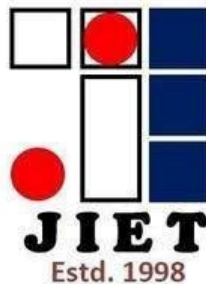
partial fulfilment of the requirement for the award of the  
degree of

**Bachelor of Technology  
In**

**Computer Science & Engineering**

**Under the Supervision of**

**Mrs. Pratibha Assistant Professor (CSE)**



**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING  
JIND INSTITUTE OF ENGINEERING & TECHNOLOGY, JIND**

Affiliated With Kurukshetra University

## **STUDENT DECLARATION AND CERTIFICATE**

We hereby certify that the work being presented in this report entitled, **Student Management System**, in partial fulfilment of the requirements for the degree of **Bachelor of Technology**, submitted in the **Computer Science and Engineering**, Jind Institute of Engineering and Technology, Jind by **Vishal Kumar (Roll. No. 2021217010) Joji (Roll. No. 2021217008)** and, **Rohit (Roll. No. 2021217005)** is the authentic record of our work carried out under the supervision of **Mrs. Pratibha (Assistant Professor)** at Jind Institute of Engineering and Technology, Jind. We further declare that the matter embodied in this report has not been submitted by me for the award of any other degree.

### **Signature of the Student**

This is to certify that the above statement made by the candidate is correct to the best of my/our knowledge.

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## **ACKNOWLEDGMENT**

We express our sincere gratitude to Mrs. Pratibha, Assistant Prof. (Computer Science & Engineering) at Jind Institute of Engineering & Technology, Jind for her stimulating guidance continuous encouragement, and supervision. Her generous guidance and useful suggestions help us throughout this research work.

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## **ABSTRACT**

An organized and systematic once solution is essential for all universities and organizations. There are many departments of administration for the maintenance of college information and student databases in any institution. All these departments provide various records regarding students. Most of these track records need to maintain information about the students. This information could be the general details like student name, address, performance, etc., or specific information related to departments like collection of data. All the modules in college administration are interdependent. They are maintained manually. So, they need to be automated and centralized as Information from one module will be needed by other modules. For example, when a student needs his course completion certificate it needs to check many details about the student like his name, reg. number, etc he attended, and many other details. So, it needs to contact all the modules that are once, department, and examination with that in mind, we created a project named Student Management System and made functions to streamline the processes. Our work is useful for an easy user interface. We are planning to utilize powerful database management, data retrieval, and data manipulation. We will provide more ease for managing the data than manually maintaining the documents. Our work is useful for saving valuable time and reducing the huge paperwork.

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# CHAPTER – 1 INTRODUCTION

**Why Student Management System:** Schools and Universities are the foundation of knowledge and an educational body upon which students rely. Therefore, they need to maintain a proper database of their students to keep all the updated records and easily share information with students.

Most schools and Universities count on an advanced software tool known as '**Student Information System (SIS)**' to keep all their student records and administrative operations including, examinations, attendance, and other activities.

Over the recent years, the performance and efficiency of the education Pratihya tries have been enhanced by using the **Student Management System**. This tool has productively taken over the workload of the admin department with its well-**organized, easy, and reliable online school management software**.

Certainly! Here's a simple Student Management System (SMS) project in C++ that allows you to create, display, and modify student records. The program lets you add student details, edit existing records, and search for specific students based on their roll numbers. Below, I'll provide an overview of the project along with the source code.

Student Management System Project in C++ Overview:

## **Objective:**

- To manage student data efficiently within an educational establishment.

## **Features:**

- Add student details (including name, student ID, course, mobile number, email ID, and address).
- Edit existing student records.
- Search for student details by roll number.

**Implementation:**

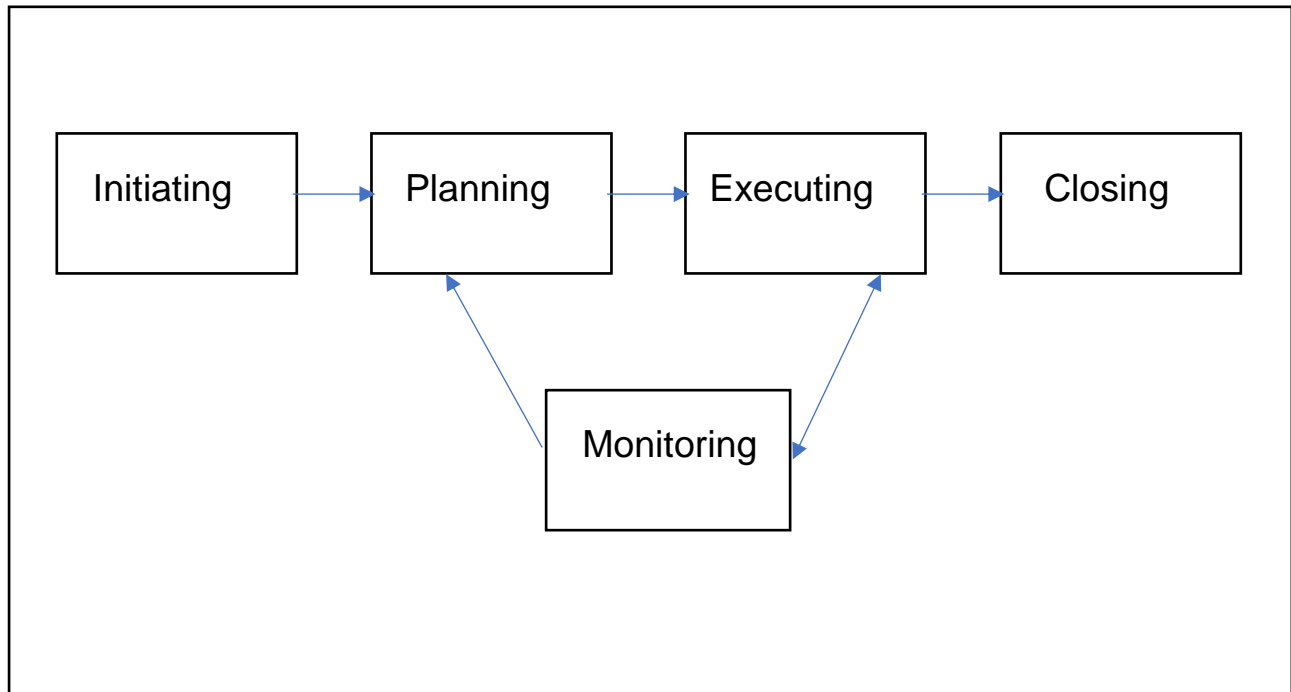
- Utilizes an array of structures to store student attributes.
- Provides a simple menu-driven interface for user interaction.



## CHAPTER-2 PROJECT REVIEW

### 2.1 Project management

Project management skills are put to good use for this project. Having gone through a project management module in time series analysis and optimization and with two interns in Project management for business and IT respectively, they enhanced my knowledge on managing a project. Project management focuses on achieving the objectives by applying processes presented in the figure below.



**Fig: Project Development Phases**

## **2.2 Student Management System**

Many software development companies are student management systems for schools in the market. There are records of the past year's projects on student management systems done by students. Through the research, it is observed that there are features that this project can adopt and implement. One of them will be with the addition of a new course or class, or even upgrading of students to the next level, the school administrator can easily register all of them within a particular class into the new one using just a page and not having to register one at a time. With this feature, it helps the administrator to save time as well as increase their efficiency

# CHAPTER – 3 AIM AND SCOPE OF PRESENT INVESTIGATION

## 3.1 AIM OF THE PROJECT

Enter the student management system (or SMS for short).

A student management system is designed to record, analyze, and manage information in a school. These systems are updated by teachers and school administrators on a rolling basis to better serve the needs of the greater student body.



Without a student management system, schools would become disorganized, staff would lack clarity on scheduling and student activity, and it would become increasingly difficult for school districts to leverage data in the decision-making process.

## **What Does a Student Management System Do?**

**The student management system has a few key parts that address the general needs of students.** While they can be customized further depending on niche and expertise, they usually look like this

### **3.2 SCOPE AND OBJECTIVE**

#### **SCOPE:**

The proposed system is intended to manage specific information of students such as personal details, course details, etc. It is not a Student Information Management System that has a broader application. It is only a part of the Student *Information Management System*

#### **OBJECTIVES:**

The main objective is to develop a robust Student Management System for the Institute of Engineering and Technology.

The student Management System project as the name indicates will be used for managing student's records will be used for various purposes. Accepting correct data will result in generating the desired output in the correct format without any delay.

So, this system has been enabled with validation data check-up while entering the data and before saving it to the particular file.

Students will also be able to check their data and modify their basic information as per their requirements.

## 3.3 SYSTEM REQUIREMENT

### 3.3.1 HARDWARE REQUIREMENTS

1. 532 MHz and above processor
2. Minimum 256 MB of RAM
3. 100 MB data space for installation
4. Other necessary input & output devices

### 3.3.2 SOFTWARE REQUIREMENTS

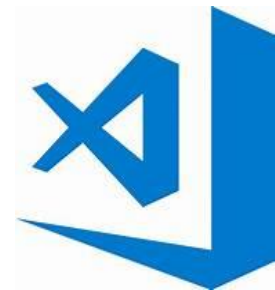
1. Windows XP and above
2. Vb.net

## 3.4 SOFTWARE USED

1. VISUAL CODE
2. DEV C++

### 3.4.1 Visual code

**Visual Studio Code (VS Code)** is a powerful, free, and lightweight code editor developed by **Microsoft**. It's designed for building and debugging modern web and cloud applications. Here are some key features and details about VS Code:



#### 1. Cross-Platform Availability:

- VS Code runs on **Linux**, **macOS**, and **Windows**.
- It's built on open-source technology, making it accessible to developers across different platforms.

## 2. Code Editing and Productivity:

- **IntelliSense:** Beyond basic syntax highlighting and autocomplete, IntelliSense provides smart completions based on variable types, function definitions, and imported modules.
- **Debugging:** Debug code directly from the editor. Launch or attach to running apps, set breakpoints, and inspect call stacks.
- **Built-in Git Integration:** Review diffs, stage files, and make commits without leaving the editor<sup>1</sup>.

## 3. Extensions and Customization:

- Install extensions to add new languages, themes, and debuggers, and connect to additional services.
- Extensions run in separate processes, ensuring they won't slow down your editor.
- VS Code supports a rich ecosystem of extensions for various languages and runtimes, including JavaScript, TypeScript, Node.js, C++, C#, Java, Python, PHP, Go, and more.

## 4. How to Get Started:

- Download VS Code for your preferred platform:
  - Windows (Windows 10, 11)

### 3.4.2 Dev-C++

Dev-C++ is a free, full-featured **Integrated Development Environment (IDE)** for **Windows** systems. Here are some key details about Dev-C++:



#### **Purpose and Features:**

- **C/C++ IDE:** Dev-C++ is specifically designed for writing, compiling, and executing **C++ programs**.
- **Lightweight and Portable:** It's an extremely lightweight and portable IDE.
- **Compiler Support:** Dev-C++ uses **MinGW** or **TDM-GCC** as its underlying compiler.
- **Code Creation:** You can quickly create both **Windows GUI** and **console applications** using its full-featured code editor.
- **Debugger:** It includes an integrated debugger for efficient debugging.
- **Code Completion:** Features like syntax highlighting, code completion, and code insight enhance productivity.
- **Customizable:** The IDE allows customizable code editing, project management, and more.
- **Available in Multiple Languages:** Dev-C++ supports over **30 languages**.
- 

#### **2. History and Licensing:**

- Dev-C++ was originally developed by **Colin Laplace** and first released in **1998**.
- It's written in **Delphi** and distributed under the **GNU General Public License (GPL)**.
- The project has been maintained and improved by various contributors over the years.

#### **3. Download Options:**

- You can download the original Dev-C++ 5 with **Mingw/GCC 3.4.2 compiler** and **GDB 5.2.1 debugger**.
- Alternatively, you can get the **IDE-only version** without the compiler included.
- Dev-C++ is also available on a **USB drive or CD**, making it convenient for portable programming.

## 3.5 LANGUAGE USED

### 3.5.1 C++ LANGUAGE

C++ is the most popular cross-platform programming language that is used to create high-performance applications and software like OS, Games, E-commerce software, etc. It was developed by Bjarne Stroustrup, as an extension of C language. C++ gives a high level of control over system resources and memory.

The language was updated 3 major times in 2011, 2014, and 2017 to C++11, C++14, and C++17.

### 3.5.2 Why learns C++

- C++ is one of the most used and popular programming languages.
- C++ is used in making operating systems, embedded systems, and Graphical User Interfaces.
- It is an object-oriented programming language that implements all the OOPs concepts such as Abstraction, Encapsulation, and Inheritance, which gives a clear structure to programs and allows code to be reused, lowering development costs and providing security.
- It is portable and can be used to create applications that can be adapted to multiple platforms.
- C++ is easy to learn so you can choose it as your first programming language.
- It makes programming easy for programmers to switch to C++ because its syntax is similar to C, Java, and C#.





### **3.5.3 C++ CHARACTERISTICS**

#### **1) Simple**

C++ is a simple language because it provides a structured approach (to break the problem into parts), a rich set of library functions, data types, etc.

#### **2) Abstract Data types**

In C++, complex data types called Abstract Data Types (ADT) can be created using classes.

#### **3) Portable**

C++ is a portable language and programs made in it can be run on different machines.

#### **4) Mid-level / Intermediate programming language**

C++ includes both low-level programming and high-level language so it is known as a mid-level and intermediate programming language. It is used to develop system applications such as kernel, driver, etc.

#### **5) Structured programming language**

C++ is a structured programming language. In this, we can divide the program into several parts using functions.

#### **6) Rich Library**

C++ provides a lot of inbuilt functions that make the development fast. Following are the libraries used in C++ programming are:

- <iostream>
- <cstdlib>
- <fstream>

## **7) Memory Management**

C++ provides very efficient management techniques. The various memory management operators help save the memory and improve the program's efficiency. These operators allocate and deallocate memory at run time. Some common memory management operators available in C++ are new, delete, etc.

## **8) Quicker Compilation**

C++ programs tend to be compact and run quickly. Hence the compilation and execution time of the C++ language is fast.

## **9) Pointer**

C++ provides the feature of pointers. We can use pointers for memory, structures, functions, arrays, etc. We can directly interact with the memory by using the pointers.

## **10) Recursion**

In C++, we can call the function within the function. It provides code reusability for every function.

## **11) Extensible**

C++ programs can easily be extended as it is very easy to add new features to the existing program.

## **12) Object-Oriented**

In C++, object-oriented concepts like data hiding, encapsulation, and data abstraction can easily be implemented using keyword class, private, public, and protected access specifiers. Object-oriented makes development and maintenance easier.

### **13) Compiler based**

C++ is a compiler-based programming language, which means no C++ program can be executed without compilation. C++ compiler is easily available, and it requires very little space for storage. First, we need to compile our program using a compiler, and then we can execute our program.

### **14) Reusability**

With the use of inheritance of functions programs written in C++ can be reused in any other program of C++. You can save program parts into library files and invoke them in your next programming projects simply by including the library files. New programs can be developed in less time as the existing code can be reused. It is also possible to define several functions with the same name that perform different tasks. For Example, `abs ()` is used to calculate the absolute value of an integer, float, and long integer.

### **15) National Standards**

C++ has national standards such as ANSI.

### **16) Errors are easily detected**

It is easier to maintain C++ programs as errors can be easily located and rectified. It also provides a feature called exception handling to support error handling in your program.

### **17) Power and Flexibility**

C++ is a powerful and flexible language because most of the powerful flexible and modern UNIX operating system is written in C++. Many compilers and interpreters for other languages such as FORTRAN, PERL, Python, PASCAL, BASIC, LISP, etc., have been written in C++. C++ programs have been used for solving physics and engineering problems and even for animated special effects for movies.

## 18) Strongly typed language

The list of arguments of every function call is typed and checked during compilation. If there is a type mismatch between actual and formal arguments, implicit conversion is applied if possible. A compile-time occurs if an implicit conversion is not possible or if the number of arguments is incorrect.

## 19) Redefine Existing Operators

C++ allows the programmer to redefine the meaning of existing operators such as +, and -. **For Example**, the "+" operator can be used for adding two numbers and concatenating two strings.

## 20) Modelling real-world problems

The programs written in C++ are well suited for real-world modeling problems as close as possible to the user perspective.

## 21) Clarity

The keywords and library functions used in C++ resemble common English words.

### 3.5.4 APPLICATION IN C++

C++ is a widely used programming language that is used for writing large-scale commercial applications for end-users. Some of the major applications built using C++ by major software vendors and giants are:

1. GOOGLE—Google file system, Google Chromium browser, and Map Reduce large cluster data processing are all written in C++. o MOZILLA—Mozilla Firefox and Thunderbird email chat client are both written using C++.
2. MYSQL—MySQL, an open source DBMS is written using C++.
3. MICROSOFT—Many Windows apps that you regularly use are written in C++.

## **CHAPTER – 4**

### **EXPERIMENTAL OR MATERIAL METHODS**

#### **4.1 DESIGN METHODOLOGY**

The main methodology involves feasibility study, data collection, system analysis and design, and developing and implementing a Student Management System.

##### **4.1.1 STUDENT MANAGEMENT SYSTEM**

The Student Management System Project system works on the concept of a manual system while file sharing is to be done between working departments to carry out their tasks. As a file system has been used to maintain records for each student, so each department also has to separate files for each task such as information on each student, physical records of each student's accessories, and teaching tools used within the institution. Making a final audit report is not an easy task and this task has to be achieved by the outside financial institution to prepare their financial report for a particular business session.

##### **4.1.2 REQUIREMENTS ANALYSIS**

Understand the needs and requirements of the system. Gather information about what functionalities the SMS should provide.

Define the scope of the SMS: What data it will manage (e.g., student profiles, attendance, grades), user roles, and interactions.

## **4.2 FUNCTIONAL DECOMPOSITION**

Analyze each function of the system and divide it into functional modules.

Ensure that the modules are interconnected but not overly coupled. High coupling can lead to maintenance challenges.

Consider modules like student registration, subject allocation, branch selection, and mark management.

### **4.3 Key features of our project are:**

1. Add student Records: This feature allows users to add new data to the student database management system application
2. show student records: this lists the details about all the student
3. Search student details: To display the details of the searched student
4. Modify student Records: A new student`s data can be added, or existing student data can be edited.
5. Delete Student Records: the student name is given to delete a student`s details in particular.
6. Display student Records: to display all the student's details.
7. Exit program: To close the student management database system application.

### **4.4 MANAGE STUDENTS:**

The manage student module will contain two modules, that is manage existing students and add new students. In the manage existing student module, we can manipulate the existing student information and update it.in adding a new student module we can add the new student to the database.

## **4.5 REPORT:**

This module contains all reports related to the student such as student details, marks of a student, fees information, etc., The admin or the clerk can print the reports.

## **4.6 ARCHITECTURE DIAGRAM**

An architecture diagram is a visual representation that outlines the components of a software system and their relationships. It helps engineers, designers, stakeholders, and other project participants understand the system's layout and constraints. Here are some key points about architecture diagrams:

### **4.6.1 Types of Architectural Diagrams:**

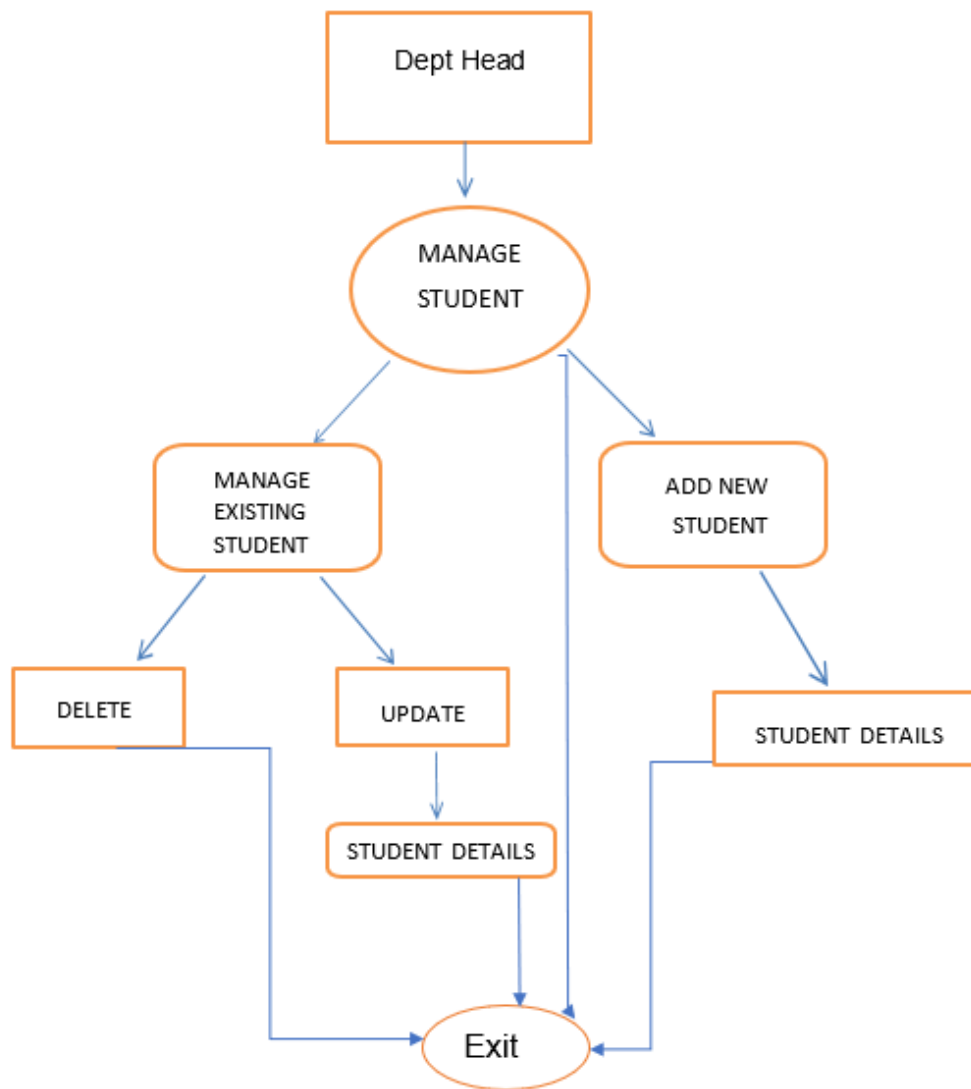
- Application Diagram: Depicts the overall structure of the software system, showing how different components interact.
- Integration Diagram: Focuses on interactions between different systems or modules.
- Deployment Diagram: Illustrates the physical deployment of components across servers or devices.
- DevOps Diagram: Represents the development and operational processes.
- Data Diagram: Visualizes data flow and storage within the system.

### **4.6.2 Benefits of Using Architecture Diagrams:**

- Increase Understanding: Provides an overview, helping teams assess the impact of updates and new features.
- Improve Communication: Aligns project goals across teams and keeps stakeholders informed.
- Encourage Collaboration: Facilitates discussions, pattern identification, and areas for improvement.

### **4.6.3 Creating Your Diagrams:**

- Use simple shapes and lines to show system interactions.
- Add annotations to provide context and nuanced details.
- Make diagrams visible and accessible by attaching them to Confluence, wikis, or chat platforms



**Department Head:** They create and implement policies and procedures aligned with the department's goals.

**Manage student: Student Management** is a comprehensive software solution designed to streamline and centralize various administrative and academic processes within educational institutions. It has the following options.

- Delete: This is used to delete existing student records from the database.



- Update: This is used to update existing details of a particular student.

**Manage existing students:** Manage existing used is used to edit or correct details of students.

**Add new student:** this function is used to add or update new student details in data.

**Exit:** This is used to exit the program.

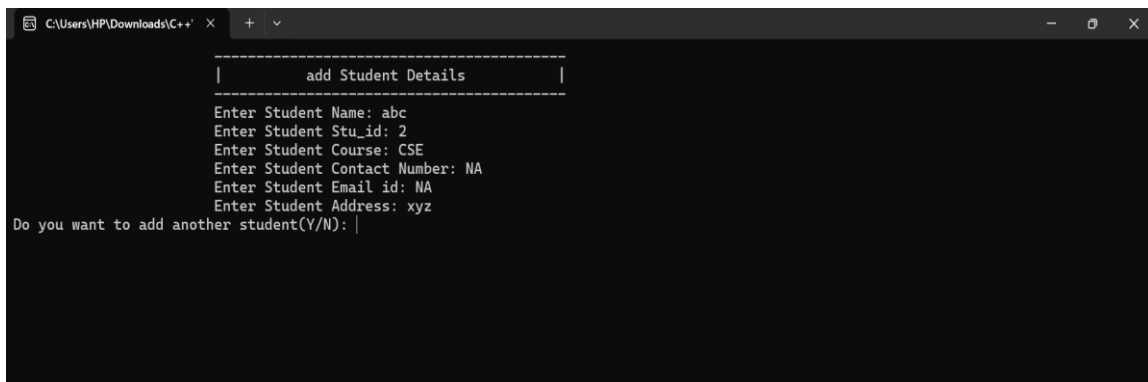
## CHAPTER – 5 CONTENT IN PROJECT

The student report card system has been designed with a focus on utilizing file handling techniques to ensure efficient and effective implementation of its key features. With the use of file handling, the system can store and retrieve student data, grades, and other relevant information in a secure and organized manner. This allows for easy access to student records and the ability to generate comprehensive reports with accurate and up-to-date information. By leveraging file-handling capabilities, the student report card system can provide a reliable and user-friendly experience to its users while maintaining the integrity and confidentiality of student data.

### 5.1 Functions

#### 5.1.1 Create student record:

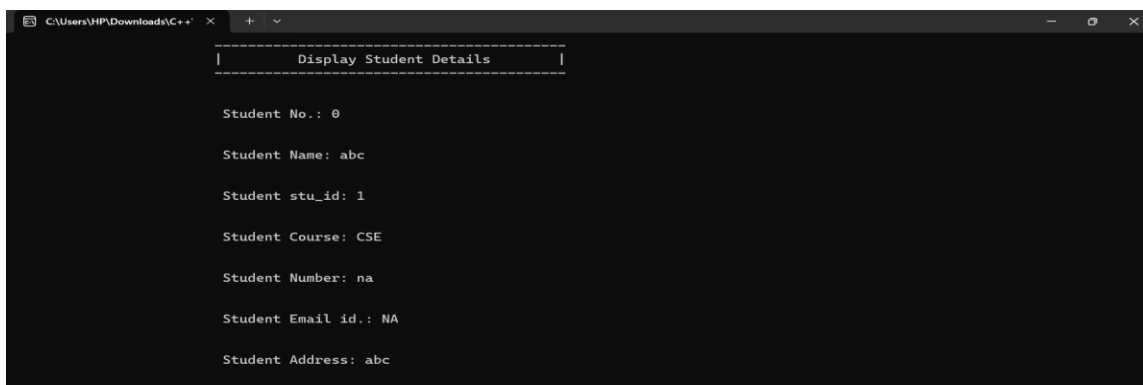
This feature is designed to assist in the creation of a comprehensive student record. To generate a new entry, you will need to provide the student's name, roll number, and marks obtained in five different subjects. The information provided will be used to create a detailed record that can be used to track the Student's academic progress and achievements. With this feature, you can easily create and maintain accurate records for all your students, saving you time and effort.



```
C:\Users\HP\Downloads\C++ x + v
-----
|           add Student Details           |
-----
Enter Student Name: abc
Enter Student Stu_id: 2
Enter Student Course: CSE
Enter Student Contact Number: NA
Enter Student Email id: NA
Enter Student Address: xyz
Do you want to add another student(Y/N): |
```

### 5.1.2 Display student records

"Display student record" is a functionality commonly used in academic settings to provide an overview of a student's academic history, including their enrollment status, courses taken, and other related information. This feature is particularly useful for instructors and academic advisors who need to have a comprehensive view of a student's academic details. By accessing a student's record, they can identify any potential details, and provide appropriate information



```
-----
|           Display Student Details           |
-----

Student No.: 0

Student Name: abc

Student stu_id: 1

Student Course: CSE

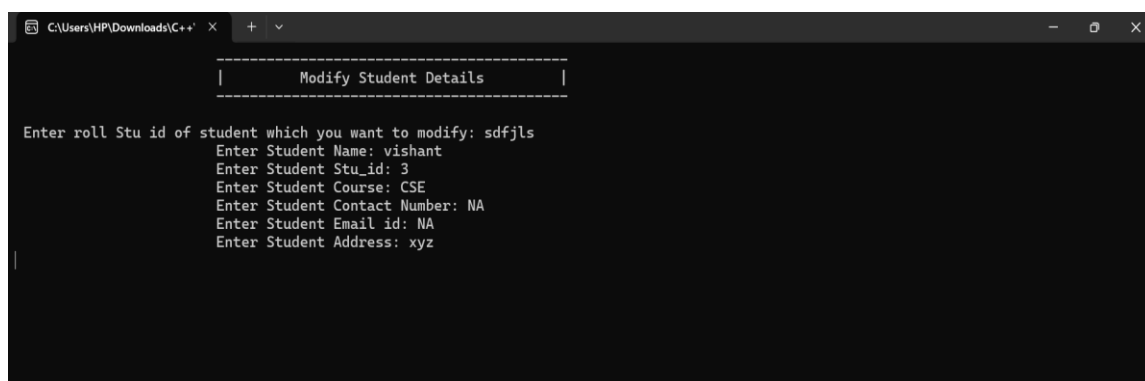
Student Number: na

Student Email id.: NA

Student Address: abc
```

### 5.1.3 Modify Record

The "Modify Record" feature is a tool that enables authorized users to make changes to a student's information in a database. This feature is typically used when a student's details, such as their name, address, or phone number, have changed, or when there is a need to correct incorrect information. It is important to ensure that the changes made using this tool are

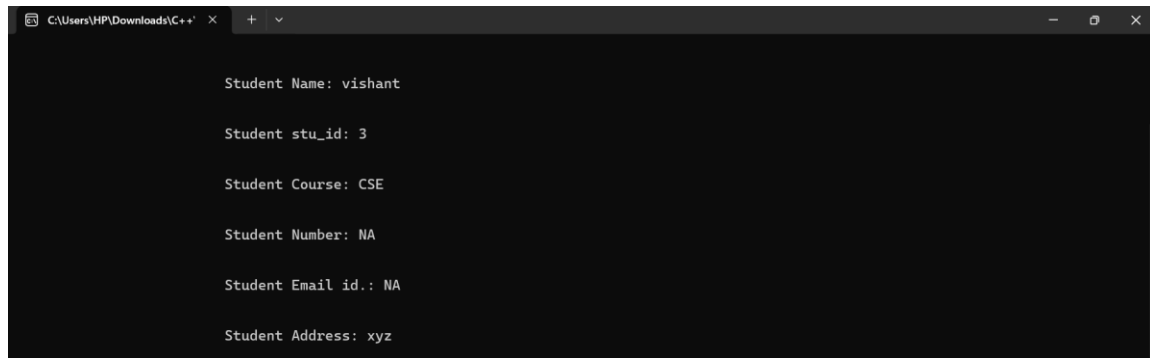


```
-----
|           Modify Student Details           |
-----

Enter roll Stu id of student which you want to modify: sdfjls
Enter Student Name: vishant
Enter Student Stu_id: 3
Enter Student Course: CSE
Enter Student Contact Number: NA
Enter Student Email id: NA
Enter Student Address: xyz
```

accurate and up-to-date to avoid any discrepancies in the student's records. Additionally, only

authorized personnel should have access to this feature to maintain the integrity of the database.

A screenshot of a C++ application window titled 'C:\Users\HP\Downloads\C++'. The window displays the following text:

```
Student Name: vishant
Student stu_id: 3
Student Course: CSE
Student Number: NA
Student Email id.: NA
Student Address: xyz
```

### 5.1.4 Search Record

When we use the term "search", it refers to the process of looking for information or records related to a particular student. This process can involve using various search tools and techniques to locate the desired information, such as searching for a student's name or ID number in a database. Once the record has been located, it can be used to access important information about the student, such as their academic performance, attendance, and personal details.

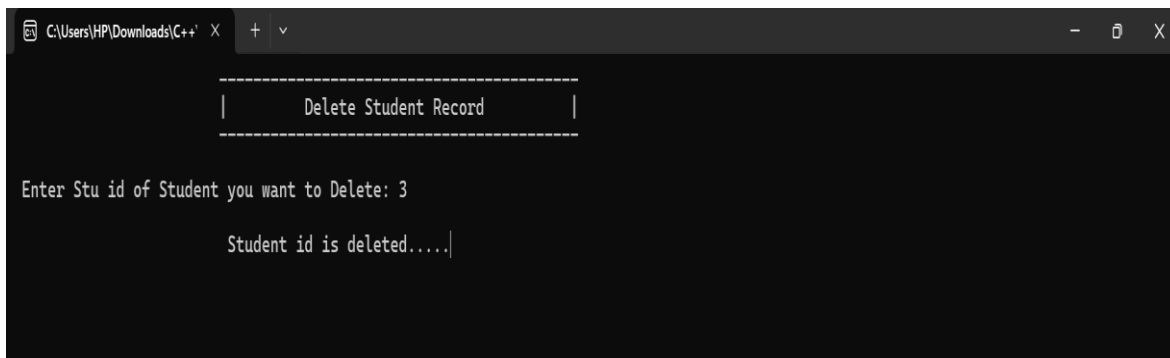
A screenshot of a C++ application window titled 'C:\Users\HP\Downloads\C++'. The window displays a search interface with the following text:

```
-----
| Search Student Details |
-----

Enter Stu id of Student you want to search: 3
Enter Student Name: vishant
Enter Student Stu_id: 3
Enter Student Course: CSE
Enter Student Contact Number: NA
Enter Student Email id: NA
Enter Student Address: xyz
```

### 5.1.6 Delete

The "delete" function is a commonly used feature in many software applications, including those used in educational settings. This function is typically employed to remove any records related to a student that were mistakenly filled. This can include erroneous data that was entered into a student's profile, such as incorrect contact information, or grades that were incorrectly assigned. When using the "delete" function, it is important to exercise caution and make sure that the correct record is being removed. It is always a good idea to double-check the information before initiating the deletion process to ensure that the right data is being removed, and that no important information is lost.



### 5.1.7 Exit

The term "exit" refers to a functionality that allows a user to terminate a process, close a window or tab, or quit an application or program. It is a crucial command that is used in various computer software and applications to close an active session and save the changes made during the session. When the "exit" command is executed, the program or process is stopped, and any unsaved changes are either saved or discarded based on the application's settings or prompts. It is a simple yet powerful command that is widely used in the computing world for a variety of purposes.

## CHAPTER – 6 RESULTS AND PERFORMANCE ANALYSIS

The **Results and Performance Analysis** of a student management system is a critical aspect that helps educational institutions understand and improve student academic performance. It involves collecting, recording, analysing, and disseminating data related to students' grades, attendance, and other academic metrics.

Here's a brief overview of what such an analysis typically includes:

- **Individual Student Performance:** Detailed reports on each student's scores across different subjects or assessments, enabling educators to track progress and identify those needing extra support.
- **Group Performance Analysis:** Comparative data showing how different groups (like classes or demographic groups) are performing, which aids in evaluating teaching methods and curriculum effectiveness.
- **Trend Analysis:** Insights into performance trends over time to spot improvements or declines in academic achievements.

A robust student management system can streamline these processes, allowing educators to focus more on interpreting the data meaningfully rather than on administrative tasks. Such systems often integrate various modules for efficient handling of assessments and tracking of student progress.

## **CHAPTER – 7 CONCLUSION AND FUTURE ENHANCEMENT**

The college can handle full-scale computer and computer-related resources. The College Administration System deals with all the activities done by computer such as the registration process, all these processes are handled by the computer management system.

### **7.1 FUTURE ENHANCEMENT:**

The future enhancements of student management systems (SMS) are poised to revolutionize the educational landscape by leveraging cutting-edge technologies and data-driven processes. Here are some key aspects that are expected to shape the future of SMS:

**Data Analytics and AI Integration:** The use of data analytics and artificial intelligence will become more prevalent, providing insights into student performance and predicting academic outcomes.

**Automation and Process Streamlining:** Automation will play a significant role in reducing administrative workload, allowing educators to focus on teaching and student engagement.

**Cloud-based Solutions and Mobile Integration:** Cloud services will ensure that student data is accessible from anywhere, and mobile applications will enable stakeholders to interact with the system on the go.

**Personalized Learning Experiences:** Adaptive learning algorithms will tailor educational content to meet individual student needs, enhancing the learning experience.

**Enhanced Student Engagement:** Technologies like virtual reality (VR) and augmented reality (AR) will be integrated to provide immersive learning experiences.

**Seamless Administrative Processes:** Routine tasks such as enrolment, attendance, and grading will be automated, streamlining administrative processes.

**Robust Security and Privacy:** Advanced security measures, including blockchain technology, will be employed to protect sensitive student information.

## **7.2 This project can be implemented in more than two languages.**

Other possible modules can be implemented on the requirement

Academic

Attendance Management

Lab Management

## **7.3 references**

- 1.) <https://www.youtube.com/watch?v=GjzyCUqDMoA&t=189s> by Sagar Developer
- 2.) <https://youtube/LV5BUQgZcWI?list=PLEnQiPTJVOBmaESj-WHnX3GOiZnu2iieb> by Sagar Developer
- 3.) <https://youtube/BA0gxiHge-k?list=PLEnQiPTJVOBmaESj-WHnX3GOiZnu2iieb> by Sagar Developer
- 4.) <https://youtube/mWC3a2FYlfQ?list=PLEnQiPTJVOBmaESj-WHnX3GOiZnu2iieb> by Sagar Developer
- 5.) <https://youtube/5prS1vw7w?list=PLEnQiPTJVOBmaESj-WHnX3GOiZnu2iieb> by Sagar Developer