



PROJECT REPORT ON

ATTENDANCE MANAGEMENT SYSTEM

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My thanks and appreciations also go to my colleague in developing the project and people who have willingly helped me out with their abilities.

ABSTRACT

Our project, “**Attendance Management System**” is a program which deals with the maintenance of student’s attendance details.

It allows teachers to mark their student’s attendance. It is maintaining a daily basis of attendance . In our program , Admin will be provided with the separate **Username** and **Password** to maintain student’s attendance . The Teacher(s) handling the particular subject(s) are responsible for taking attendance of each student present in that class . Students are marked present only if they are present on that particular date . The percentage (%) attendance of students will be calculated daily.

This project is modelled on the Attendance Management System of **Delhi Technological University** and we hope to replicate the same by being more efficient.

INTRODUCTION

Attendance management system is a program developed for daily student attendance in colleges , educational institutions , etc like DTU. It gives students access to view their attendance in a specific class as **percentage** or **number**.

The **Information of Students** (like Username,Password,etc.)will be managed by **Admins** which can be assigned by the teachers of a Particular class.

This system also helps in evaluating the **eligibility criteria** of students for giving Examinations (which is above 75% in DTU).

The main objective of developing this Project was to digitize the traditional way of taking attendance. Another purpose was to generate the attendance report whenever required.



PROBLEM STATEMENT

Even though we have tried our best effort in making the system error free, there may be some errors.

As this is our First project, we've tried our best to make it free from any constraints.

During our project development we have faced many problems in Coding, debugging, compiling and implementing some rules and regulation of C++.

We also encountered new ways and functions that can be used to handle Files .

OBJECTIVE

The main objective of our project **Attendance Management System** was to manage the Attendance details of the students. Our project is totally developed at the **administrative end** but the **administrator , professors and students** are also granted the access. The purpose of this project was to build a program to reduce/eliminate manual work done by teachers for managing attendance . It keeps a track of all of the details of student's attendance in the class .

In short, the main objectives of this Project are :-

- To increase efficiency of marking and viewing attendance.
- To provide fast access of data.
- To provide a **secure** and **smooth** program for marking attendance.
- To indicate the student's attendance on a daily as well as monthly basis.
- To help in evaluating the eligibility criteria of student(s) in the examination w.r.t minimum attendance percentage (%) which is 75% in DTU.

SOFTWARE USED

We used an Integrated Development Environment (IDE) namely **VS CODE** and **Code::Blocks** for making the Program.

Compiler used was **minGW-w64x C/C++ Compiler**.

OOPS CONCEPTS USED

- Class
- Object
- Polymorphism
- Inheritance
- Header Files
- File Handling

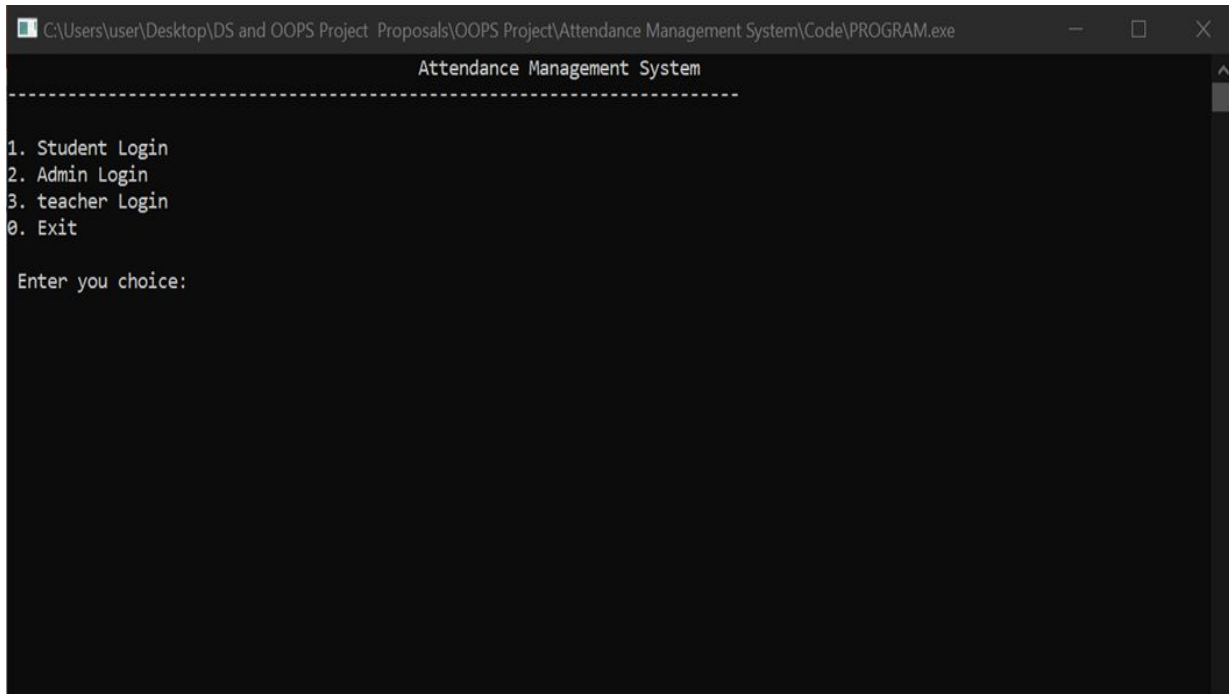
EXPLANATION ABOUT THE PROJECT

The Program maintains two main files:-

- • **db.dat**
- • **Application.dat**
- • Along with these file, a separate file named according to the username of the registered student is also maintained.
- • **Db.dat** is the database file i.e. it contains all the username (.dat) files addresses in it.
- • **Application.dat** is a file which contains the Leave application message and details that has been entered into the program by students.

SCREENSHOTS AND ALGORITHMS OF THE PROGRAM

MAIN MENU PAGE

A screenshot of a Windows application window titled "Attendance Management System". The window's title bar shows the file path "C:\Users\user\Desktop\DS and OOPS Project Proposals\OOPS Project\Attendance Management System\Code\PROGRAM.exe". The main content area has a black background with white text. It displays a menu with four options: "1. Student Login", "2. Admin Login", "3. teacher Login", and "0. Exit". Below the menu, it prompts the user with "Enter you choice:". A dashed line separates the title from the menu options.

```
C:\Users\user\Desktop\DS and OOPS Project Proposals\OOPS Project\Attendance Management System\Code\PROGRAM.exe
Attendance Management System
-----
1. Student Login
2. Admin Login
3. teacher Login
0. Exit

Enter you choice:
```

ALGORITHM FOR ADMIN LOGIN

1. ENTER OPTION 2 FROM THE MAIN MENU.

2. ENTER USERNAME AND PASSWORD FOR ADMIN LOGIN.

```
----- Admin Login -----  
Enter username : admin  
Enter password : admin_
```

3. NOW , FROM THE ADMIN MAIN PAGE , ENTER YOUR CHOICE FROM THE GIVEN OPTIONS.

```
1 Register a Student  
2 Delete All students name registered  
3 Check List of Student registered by username  
0. Go Back <-  
Enter you choice: _
```

ALGORITHM TO REGISTER A STUDENT

1. FROM THE ADMIN MAIN MENU , ENTER OPTION 1.

```
1 Register a Student
2 Delete All students name registered
3 Check List of Student registered by username
0. Go Back <-

Enter you choice: 1

----- Form to Register Student -----

Enter Name : HIMESH

Enter Username : himesh

Enter password : mahabi


Enter rollno : 7

Enter branch : SE

Enter initial number of presents :0

Student Registered Successfully !!
Please any key to continue..
```

2. THE STUDENT IS NOW REGISTERED SUCCESSFULLY . ENTER ANY KEY TO RETURN TO ADMIN MAIN MENU.



```
1 Register a Student
2 Delete All students name registered
3 Check List of Student registered by username
0. Go Back <-
```

```
Enter you choice: _
```

3. ENTER OTHER OPTION FROM THE ADMIN MAIN MENU.

ALGORITHM TO CHECK LIST OF STUDENTS REGISTERED BY USERNAME

1. FROM THE ADMIN MAIN MENU , ENTER OPTION 3.

```
1 Register a Student
2 Delete All students name registered
3 Check List of Student registered by username
0. Go Back <-
```

```
Enter you choice: 3_
```

2. THE LIST OF STUDENTS REGISTERED BY USERNAME WILL BE DISPLAYED ON THE SCREEN.

```
1 Register a Student
2 Delete All students name registered
3 Check List of Student registered by username
0. Go Back <-

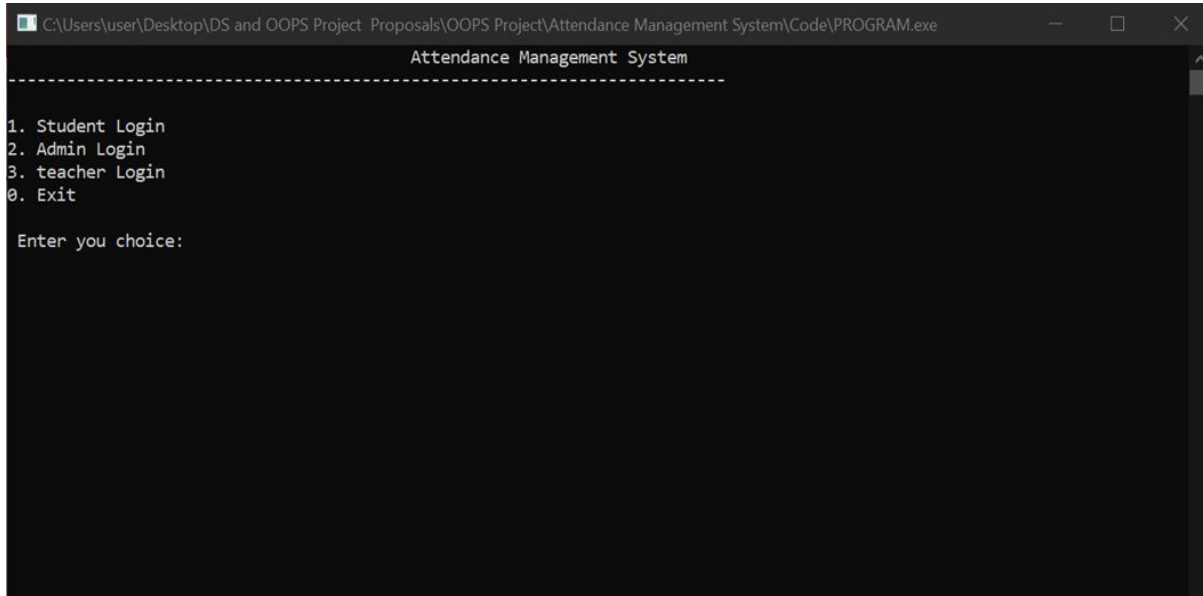
Enter you choice: 3

----- Check List of Student Registered by Username-----
himesh.dat-> 0

Please any key to continue..
```

ALGORITHM FOR TEACHER LOGIN


1. ENTER OPTION 3 FROM THE MAIN MENU .



```
C:\Users\user\Desktop\DS and OOPS Project Proposals\OOPS Project\Attendance Management System\Code\PROGRAM.exe
Attendance Management System
-----
1. Student Login
2. Admin Login
3. teacher Login
0. Exit

Enter you choice:
```

2. ENTER USERNAME AND PASSWORD FOR TEACHER LOGIN.



```
----- Teacher Login -----  
Enter username : teacher  
Enter password : teacher
```

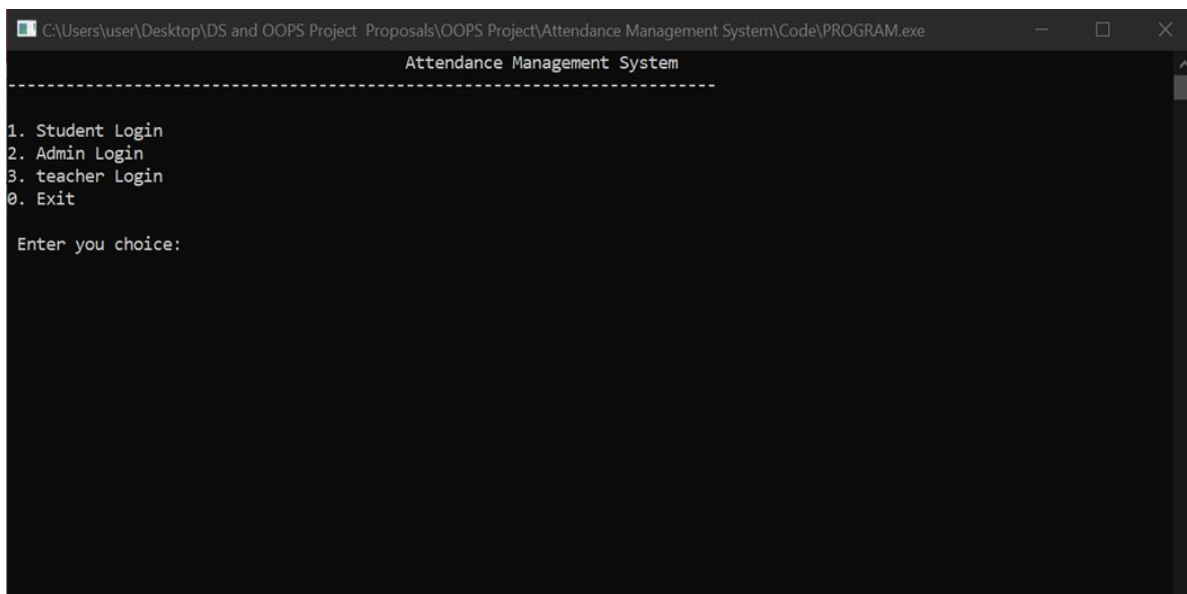
3. ENTER OPTION 1 TO MARK ATTENDANCE OF STUDENTS.

```
1 Mark Attendance  
0. Go Back <-  
  
Enter you choice: 1  
name:himesh.dat  
1: present:    0 : absent:  
enter choice:
```

4. SELECT '1' TO MARK THE STUDENT PRESENT ELSE SELECT '0' TO MARK THE STUDENT ABSENT.


ALGORITHM TO SEE ATTENDANCE IN STUDENT LOGIN

1. FROM THE MAIN MENU , ENTER OPTION 1.



```
C:\Users\user\Desktop\DS and OOPS Project Proposals\OOPS Project\Attendance Management System\Code\PROGRAM.exe
Attendance Management System
-----
1. Student Login
2. Admin Login
3. teacher Login
0. Exit
Enter you choice:
```

2. ENTER USERNAME AND PASSWORD WHICH WAS USED AT THE TIME OF REGISTRATION.



```
----- Student Login -----  
Enter username : himesh  
Enter password : mahabi_
```

3. SELECT OPTION 1 FROM THE STUDENT LOGIN TO COUNT THE ATTENDANCE.

```
1 Count my Attendance  
2 Send a leave application  
0. Go Back <-  
Enter you choice: 1_
```

4. THE ATTENDANCE OF THE REGISTERED STUDENT WILL BE DISPLAYED ON THE SCREEN IN THE STUDENT LOGIN.

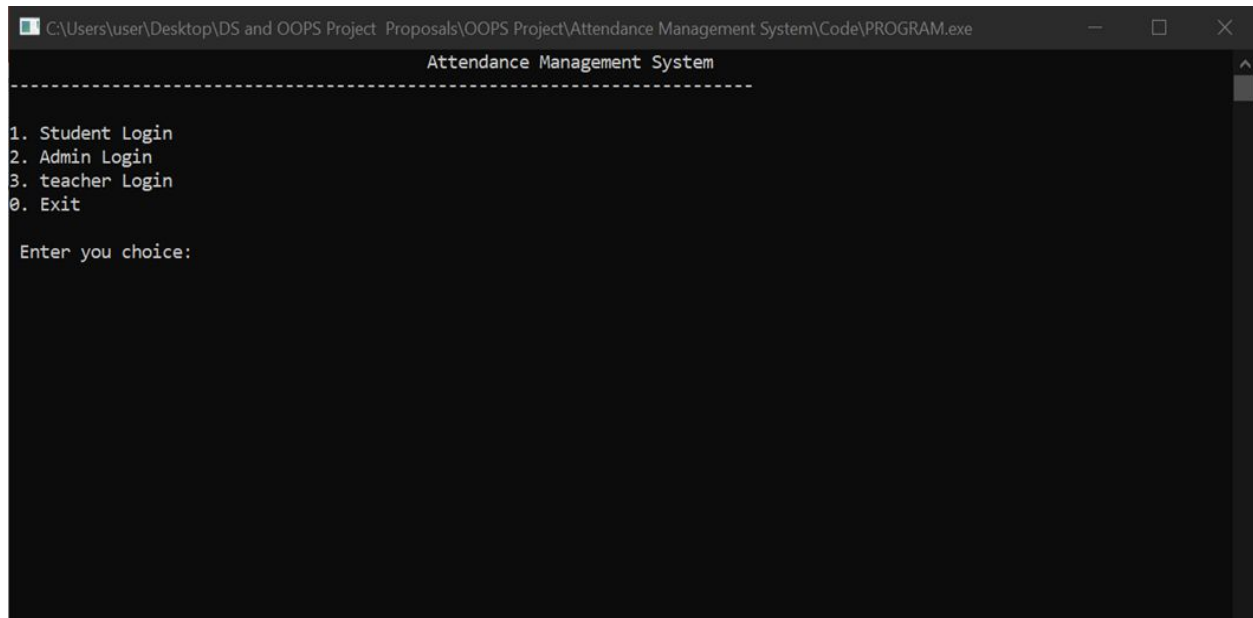
```
1 Count my Attendance
2 Send a leave application
0. Go Back <-

Enter you choice: 1

Total present: 1
Percentage of attendance :    10%
Please any key to continue..
```

ALGORITHM TO SEND A LEAVE APPLICATION FROM THE STUDENT LOGIN

1. FROM THE MAIN MENU , ENTER OPTION 1.



```
C:\Users\user\Desktop\DS and OOPS Project Proposals\OOPS Project\Attendance Management System\Code\PROGRAM.exe
Attendance Management System
-----
1. Student Login
2. Admin Login
3. teacher Login
0. Exit

Enter you choice:
```


2. ENTER USERNAME AND PASSWORD WHICH WAS USED AT THE TIME OF REGISTRATION.

```
----- Student Login -----  
Enter username : himesh  
Enter password : mahabi_
```

3. SELECT OPTION 2 FROM THE STUDENT LOGIN TO SEN LEAVE APPLICATION.

```
1 Count my Attendance  
2 Send a leave application  
0. Go Back <-  
Enter you choice: 2_
```

4. AS SOON AS THE CHOICE 2 IS ENTERED , THE “WRITE YOUR APPLICATION HERE” WILL BE DISPLAYED ON THE SCREEN.



```
1 Count my Attendance
2 Send a leave application
0. Go Back <-

Enter you choice: 2

Write your application here:
```

5. START WRITING THE LEAVE APPLICATION . ONCE IT IS DONE , PRESS ENTER . THE APPLICATION WILL BE SENT SUCCESSFULLY.

```
1 Count my Attendance
2 Send a leave application
0. Go Back <-

Enter you choice: 2

Write your application here: REGARDING LEAVE DUE TO PERSONAL STUFF.

Application successfully sent !!
Please any key to continue..
```

ALGORITHM TO EXIT THE PROGRAM

1. FROM THE MAIN MENU , ENTER OPTION '0' .

```
Attendance Management System
-----
1. Student Login
2. Admin Login
3. teacher Login
0. Exit

Enter you choice: 0 _
```

2. PRESS 'y' TO EXIT .

```
Are you sure, you want to exit? y | n
y_
```

3. PRESS ENTER AFTER ENTERING 'y' . THE PROGRAM WILL FINALLY EXIT.



CONCLUSION

This program **reduces/eliminates** the amount of **manual data entry** and provides **more efficiency** to the user . All the details about students, teachers and their other tasks can only be seen by the verified users (**admins**) . This program can be implemented in other academic institutes for getting better results regarding the conduction of attendance .

This program also saves time , reduces the amount of work the teachers and administration has to do.

Since **Login Ids** of **Teacher** and **Admins** are **Password Protected** , it is very safe and secure and also very convenient to use by administration , teachers and students.

