Database Management Systems Lab

Project Report

Department of Information Science and Engg.

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NMAM INSTITUTE OF TECHNOLOGY, NITTE

(An Autonomous Institution, Affiliated to Visvesvaraya Technological University, Belagavi)

Karkala – 574110, Karnataka, India

DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

DECLARATION

I hereby declare that the entire work embodied in this Mini Project thesis titled**, "Student Attendance Management System**" **submitted to the Visvesvaraya Technological University,** Belagavi has been carried out by me at the Department of ISE, NMAM Institute of Technology, Nitte under the supervision of **Ms. Vanajakshi**, Assistant Professor, Department of ISE, NMAM Institute of Technology, Nitte. This thesis has not been submitted in part or full for the award of any diploma or degree of this or any other University.

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CERTIFICATE FROM THE SUPERVISOR

This is to certify that Mr. Karthik Shetty**, bearing** USN: 4NM19IS075 **and** Mr. Gagan G, **bearing** USN: 4NM19IS054 **has worked under my supervision for his mini project thesis titled,** "Student Attendance Management System"**. I also certify that the work is original and has not been submitted to any other University wholly or in part for the award of any other degree**

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ABSTRACT

Attendance management system is very important to every single organisation; it can decide whether or not an organisation, such as educational institutions will be successful in the future. Organisations will have to keep track of people within the organisation such as students to maximize their performance in attending lectures. The manual way of keeping attendance record may cause some error in computing total attendance etc. For the stated reason, an efficient Web-based application for attendance management system is designed to track student's activity in the class.

This application takes attendance electronically and the records of the attendance are stored in a database. Used Technologies like **PHP**, **MySQL** used for Application Database, **XAMPP** is used as webserver here, **Html, CSS** used for the front-end and **JavaScript** is added to the application to improve the use of the system.

The System is designed in a way that can differentiate **Admin** and **Staff**,

Admin can insert/delete: Course, Subject, Class, Faculty, Student and can also check/take attendance of a particular class, view attendance of a particular day and can generate a monthly attendance report of a class.

Staff can take attendance of his/her class, view attendance of a particular day and can generate the monthly report of attendance of his/her class.

Insertions, deletions, and changes of data in the system can be done straightforward via the designed UI without interacting with the tables.

ACKNOWLEDGEMENT

The satisfaction that accompanies that the successful completion of any task would be incomplete without the mention of people whose ceaseless cooperation made it possible, whose constant guidance and encouragement crown all efforts with success.

We are grateful to Ms. Vanajakshi J for the guidance, inspiration and constructive suggestions that was helpful to us in the preparation of this project.

We also thank our fellow classmates who have helped us in the successful completion of the project.

Karthik Shetty   4NM19IS075

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Table of Contents

Instructions to Candidates

1. Please follow the format strictly. Do not Place your Fonts

2. Stick to the table of contents given. Any additional chapters, if necessary, can be added by taking prior consent from the Faculty.

3. The contents should not be plagiarized since it is a severe offense.

4. Any figures given must be explained in greater detail.

5. Any figures. Tables charts etc., must be captioned with times new roman 10 font size.

6. References must be given in APA format only. (Use Mendeley tool for easiness).

7. The report must be submitted for evaluating the Project.

8. There must be a minimum of 8 references given.
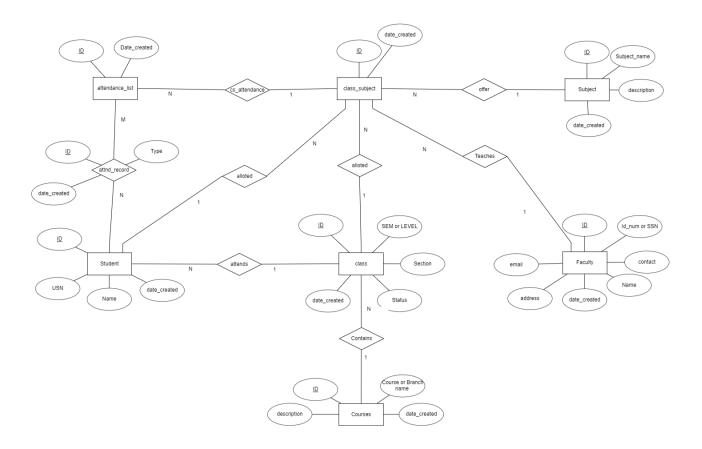
INTRODUCTION

Due to student's interest in classrooms, and whose is the largest union in the study environment of university or institution, so recording absence at a department having a large number of students in a classroom is a difficult task and time-consuming. Moreover, the process takes much time, and many efforts are spent by the staff of the department to complete the attendance rates for each student, so in many institutions and academic organizations, attendance is a very important criterion which is used for various purposes. The developed system considers as an alternative to the traditional one, it is easy, fast and reliable than the traditional one, especially after the development of information technology and its usage by educational institutions. Therefore, the design of student attendance system has a significant reality meaning.
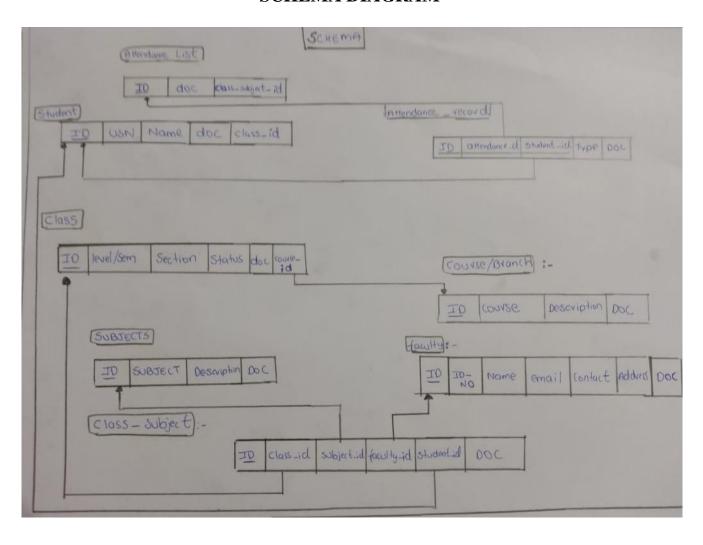
The system is a Web-based application developed for daily student attendance in departments within the university. It facilitates access to the attendance of a particular student in a particular class. This system will also help in generating monthly attendance reports and check/update the inserted attendance values of a particular day.

The system is not only improving the work efficiency, students' study and development, but also can save human and material resources.

ER DIAGRAM

SCHEMA DIAGRAM

FUNCTIONAL REQUIREMENTS

Two types of users: Admin and Faculty

i.   User/Faculty data should be fed into the system, either we can add a faculty and that faculty itself becomes user with his/her mail as username an SSN as the password for logging into the system, or we explicitly specify the user details in user table.

ii.   Admin can create, read, update or delete:

1. Course/Branch
2. Subject
3. Class, such that it belongs to which Branch
4. Faculty
5. Student
6. Class per subject, that is allot teachers to a particular class along with a subject.

iii.   Admin can also check/mark attendance of all classes, get the record of particular days attendance and can also generate a monthly attendance report.

iv.   Staff or Faculty can mark/check attendance of his/her class, get the record of particular days attendance of his/her class and can generate a monthly attendance report.

NON-FUNCTIONAL REQUIREMENTS

1. **Performance:**

Easy Tracking of records and updating can be done. The number of users may vary, as this software

Can be used by multiple people.

2. **Availability:**

The software will be available only to authorized users only like the faculty to mark the attendance of his/her class and the admin who sees the proper functioning of the system
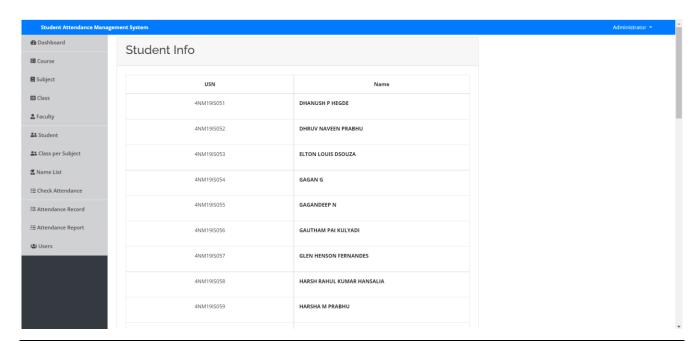
3. **Security:**

The security requirement deal with the primary security. The software should be handled only by the administrator and staff. Only the administrator has right assign permission like creating or updating new faculty and authorized users can login in to system with their username and password.
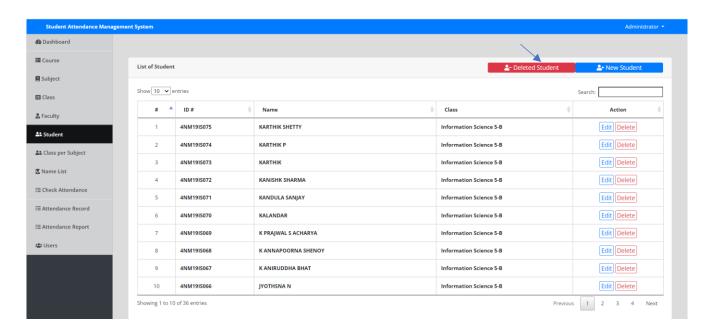
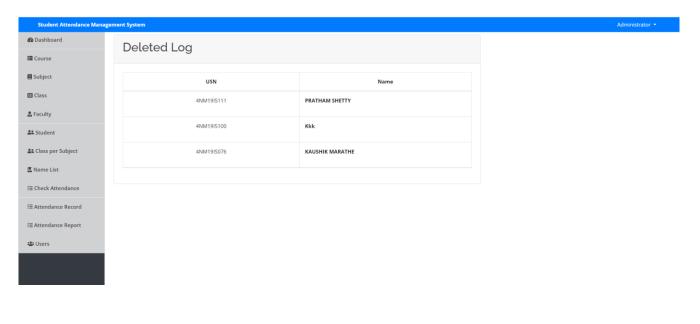# RESULT SNAPSHOTS

1. Admin dashboard:

1.1 Create a view named **Name List** that from student table gets USN and Name

1.3. If we delete any student, before deleting there will be **trigger** executed such that it stores that details in log table and then deletes it and we can see the result when we click on deleted student button.
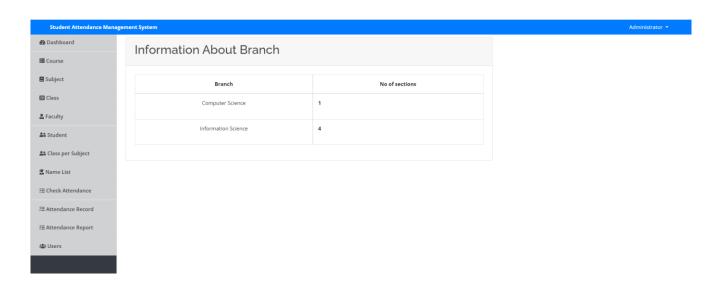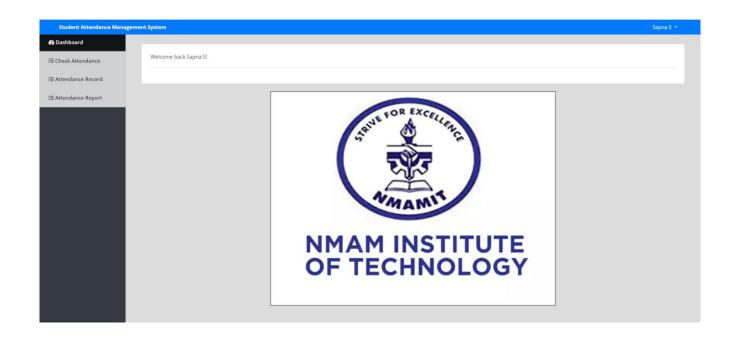

Result of trigger:

1.4. Created a **stored procedure** to calculate the number of sections in each branch and the result can be accessed by clicking on button **Branch_ info**
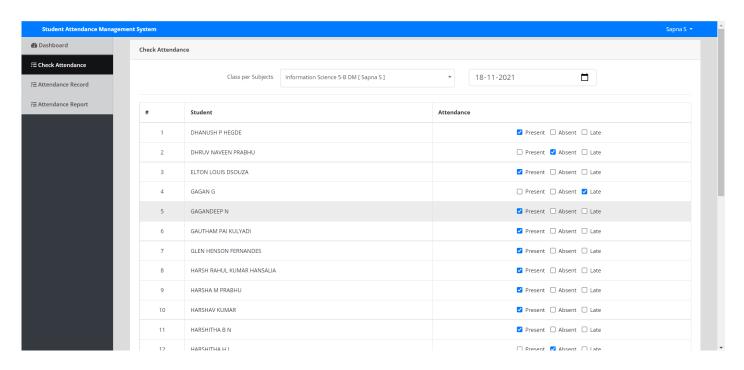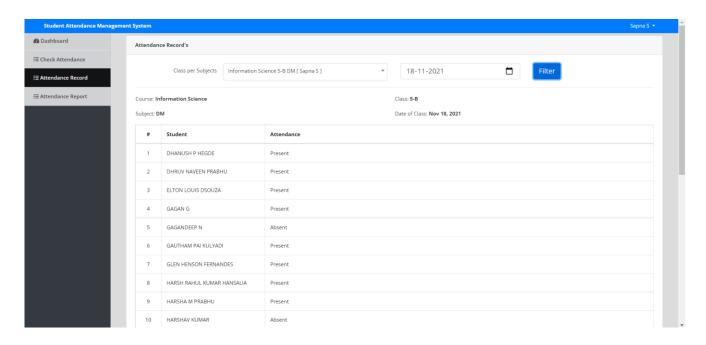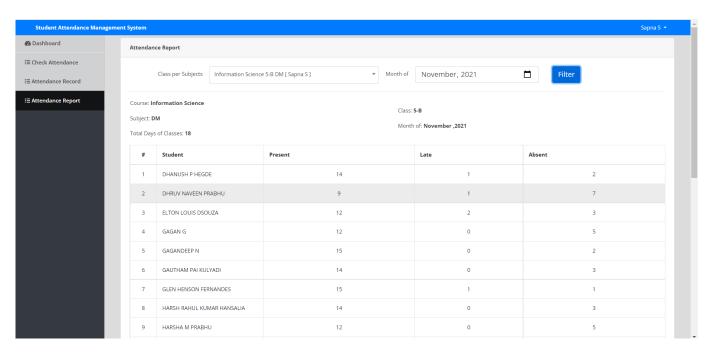
2. Staff dashboard

2.1. Mark attendance:

2.2 See the record of particular day and edit it.

Student Attendance Management System					Sapna S ▾

Attendance Record's

Class per Subjects — Information Science 5-B DM [Sapna S] — 18-11-2021 — **Filter**

Course: **Information Science** Class: **5-B**
Subject: **DM** Date of Class: **Nov 18, 2021**

#	Student	Attendance
1	DHANUSH P HEGDE	Present
2	DHRUV NAVEEN PRABHU	Present
3	ELTON LOUIS DSOUZA	Present
4	GAGAN G	Present
5	GAGANDEEP N	Absent
6	GAUTHAM PAI KULYADI	Present
7	GLEN HENSON FERNANDES	Present
8	HARSH RAHUL KUMAR HANSALIA	Present
9	HARSHA M PRABHU	Present
10	HARSHAV KUMAR	Absent

2.3. Generate a monthly attendance report:

Student Attendance Management System					Sapna S ▾

Attendance Report

Class per Subjects — Information Science 5-B DM [Sapna S] — Month of — November, 2021 — **Filter**

Course: **Information Science** Class: **5-B**
Subject: **DM** Month of: **November ,2021**
Total Days of Classes: **18**

#	Student	Present	Late	Absent
1	DHANUSH P HEGDE	14	1	2
2	DHRUV NAVEEN PRABHU	9	1	7
3	ELTON LOUIS DSOUZA	12	2	3
4	GAGAN G	12	0	5
5	GAGANDEEP N	15	0	2
6	GAUTHAM PAI KULYADI	14	0	3
7	GLEN HENSON FERNANDES	15	1	1
8	HARSH RAHUL KUMAR HANSALIA	14	0	3
9	HARSHA M PRABHU	12	0	5

TEST CASES USED:

1. While logging into the system if we enter wrong credentials then it shows error message and will not log into the system.
2. While entering Course, Subject, Class if we enter same details again it shows a message Data already present and will not enter it to the database.
3. While Marking attendance if the staff enters the attendance to the class in which he/she as already marked attendance, then system will show already marked attendance for that day.

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