DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

MINI PROJECT

On the Course:

DATABASE MANAGEMENT SYSTEM

Project title:

ATTENDANCE MANAGEMENT SYSTEM

DECLARATION

I hereby declare that the entire work embodied in this Mini Project thesis titled, "Attendance Management System" submitted to the Visvesvaraya Technological University, Belagavi has been carried out by me at the Department of CSE, NMAM Institute of Technology, Nitte under the supervision of Anusha Anchan, Assistant Professor, Department of CSE, 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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ABSTRACT

Attendance management system *deals with the maintenance of the student's attendance details. It generates the attendance of the student on the basis of presence in class. It is maintained on the daily basis of their attendance. The students and staff will be provided with the separate username & password to login. The staff handling the particular subjects are responsible to make the attendance for all students. Only if the student presents on that particular period, the attendance will be calculated. and according to the calculated attendance, the eligibility of the student to attend the exams will be calculated.*

ACKNOWLEDGEMENT

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We thank one and all for helping us during our project .
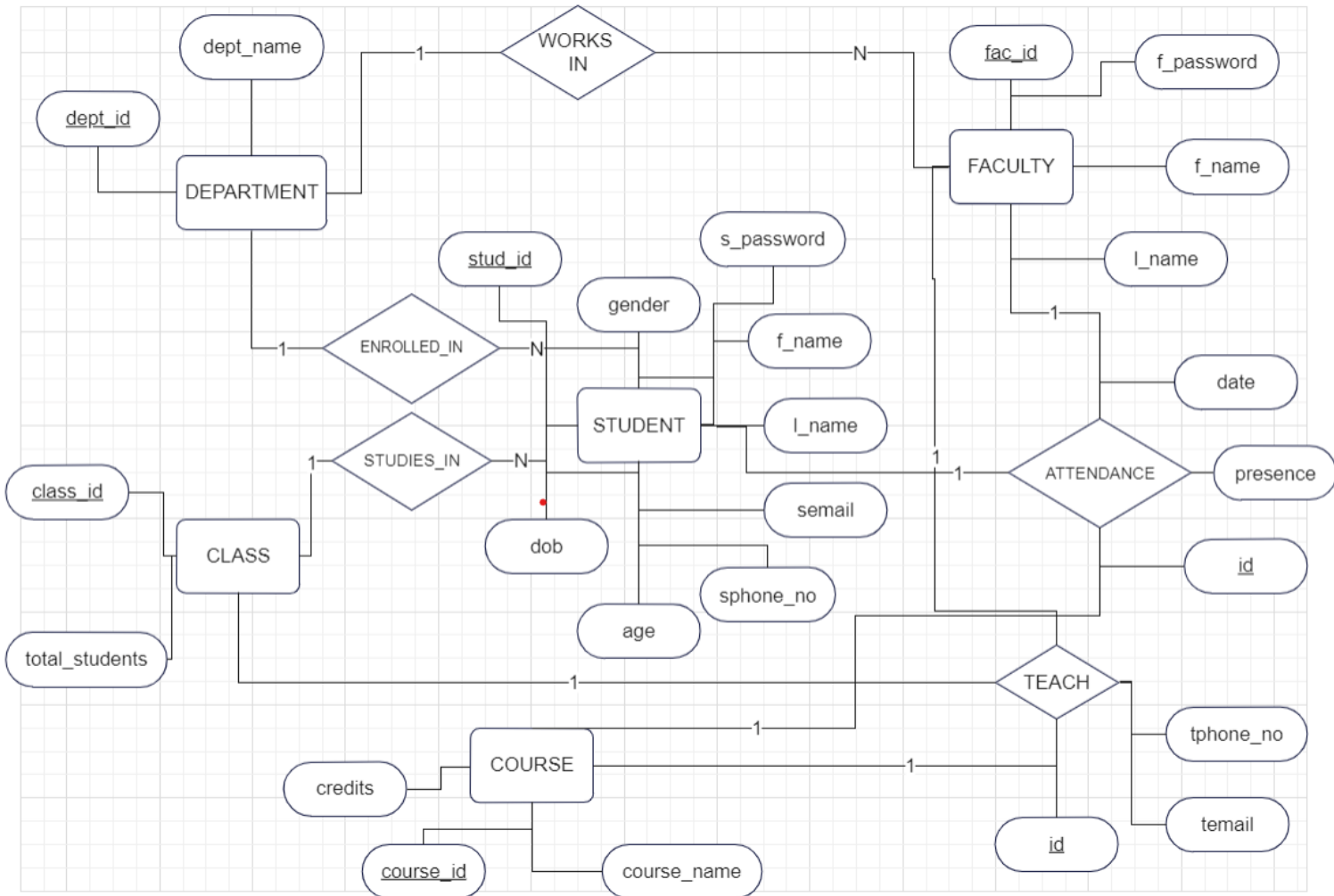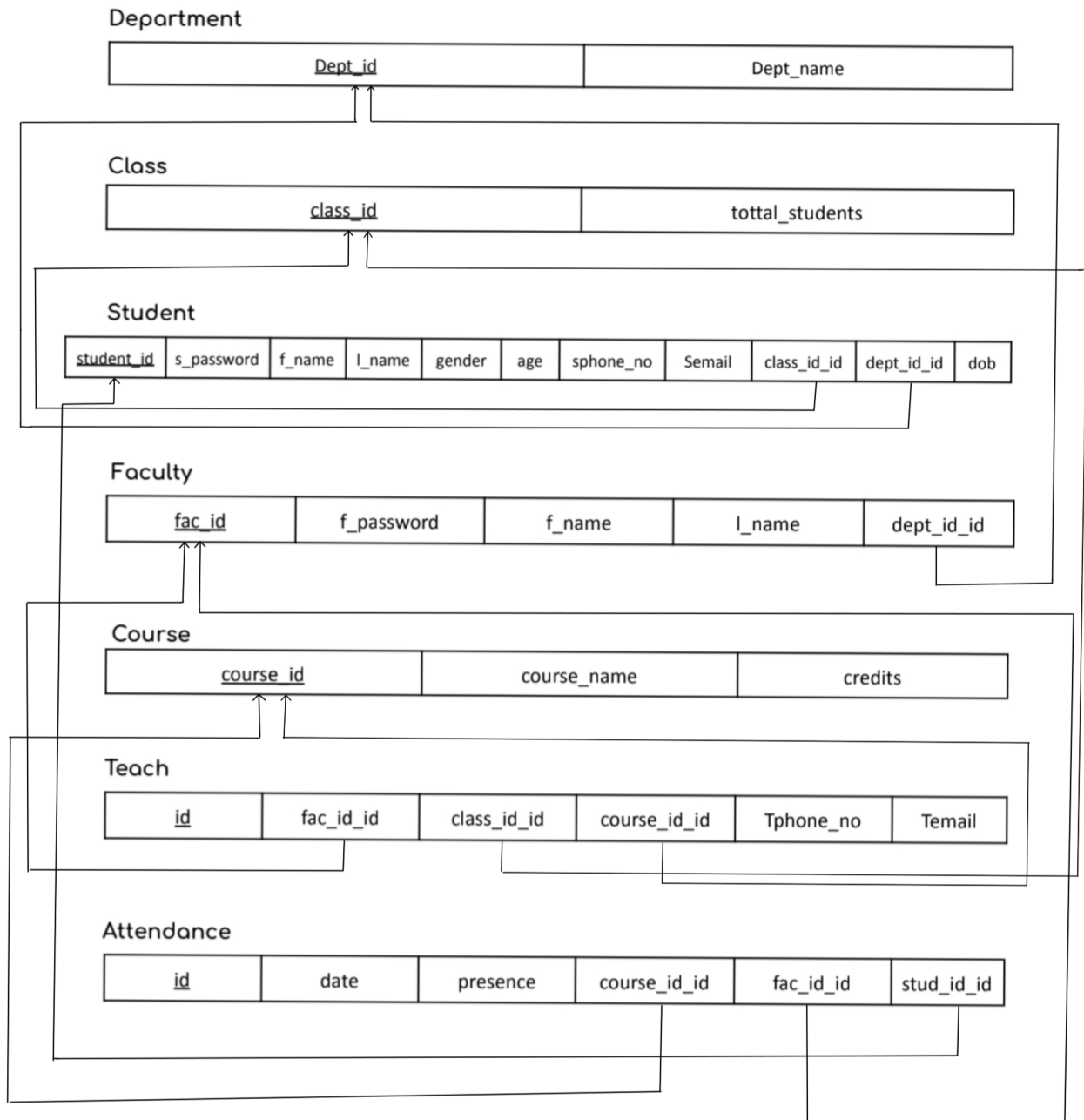
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1. INTRODUCTION

Attendance Management System is the software which helps in storing the information about the attendance of the students in an institution. Instead of performing the work using pen and paper as in olden days, we prefer to do it in the computerized way using this software. This makes the system easy to handle and get the information required at any point of time. It is very efficient since we can do this work in a very short period of time whereas the older version of the registration that is using pen and paper takes a long period of time and will not be able to be preserved for a long period of time. It includes the process of marking the attendance of students attending the respective courses that they are registered to and creating a report on which student is eligible to attend the exams on the basis of attendance. It is easy to handle and user friendly so that it can be used by anybody. As the number of students increases in the institute, manually managing the strength becomes a hectic job for the administrator. This computerized system stores all the data in the database which makes it easy to fetch and update whenever needed.

As the older system is outdated now which uses paper, pen and files which will require the human work to maintain them. This system reduces the cost of the workforce required for this job. As the system is online the information will be globally available to everyone.

2.ER DIAGRAM

3. SCHEMA DIAGRAM

Department

Dept_id	Dept_name

Class

class_id	tottal_students

Student

student_id	s_password	f_name	l_name	gender	age	sphone_no	Semail	class_id_id	dept_id_id	dob

Faculty

fac_id	f_password	f_name	l_name	dept_id_id

Course

course_id	course_name	credits

Teach

id	fac_id_id	class_id_id	course_id_id	Tphone_no	Temail

Attendance

id	date	presence	course_id_id	fac_id_id	stud_id_id

4.FUNCTIONAL REQUIREMENTS

This Attendance Management System project has the functionality where through the backend, A new student or a lecturer can be registered to a particular course and department. The superadmin is able to fill in the personal details of the student and a lecturer like their phone number, email, etc.A teacher is able to handle more than 1 course and a student is able to register for more than 1 course. The students of a particular department have been divided into sections and according to their sections, the lecturers have been assigned to teach the course as offered by their department.

From the frontend, The languages used are HTML, CSS, JS and Bootstrap this system has a student and lecture view. The login page has been secured with a unique username and password for the student and faculty. If the login credentials are incorrect it will interrupt the user saying invalid password or username. If the user does not put any details the system shows the message to fill in the details.

In the students' view the students are able to get the details of the courses which have less that 75% attendance on the dashboard. and in My Attendance is pressed which is present on the navbar, it shows the number of classes attended out of how many were conducted and hence their attendance percentage will be calculated, they are also able to view if their percentage of attendance is eligible for them to attend the exams of the respective course or not.

In the lecturer/staff view the teacher is able to mark attendance of the course for which they were assigned to for that particular section. The lecturer is also able to edit the attendance of the student on any date which they had previously taken classes, if not the page reloads.

Finally after the user is done viewing/editing they are able to logout from their account. At any point of time the student or the lecturer is able to view the attendance of the student, as the whole system is online.

5.   NON-FUNCTIONAL REQUIREMENTS :

The non-functional requirements of the system play an important role. The non-functional requirements include performance, reliability, maintainability and user friendly. The performance has its specific role in the system. If the person is trying to enter the values into the database the system should fail in taking the values, it should run softly and clearly. The safety of the system is very important. The system should not fail when it is functioning. It must know how to overcome the failure when it's failing to work as per the inputs given.

The system must be reliable to the user. The system developer must test for each and every input and then it should be given to the user for further use. If the system fails to work the developer must be able to work on it and correct it in the given interval of time. The security of the system is used to tell about the security provided. The person cannot login if he has the credentials, that is the security of the system. If the other user attempts to login into the system he will not be able to login without the proper credentials. The system developed must be easy to maintain. The maintainability charges should be less so that the users can buy the system which is developed. The system is user friendly.

5.1 Hardware Requirements:

Processor	Intel Pentium or above
RAM	128MB above
Hard disk	40GB and above

5.2 Software Requirements:

Operating System	Windows
Front-end	HTML, CSS, JAVA SCRIPT, BOOTSTRAP
Back-end	DJANGO
Database	SQLite
Editor	VSCODE

RESULT SNAPSHOTS:

Login Page:

Faculty dashboard :

Selection of the section:

Attendance list:

Add Attendance:

Edit Attendance:

Students dashboard: If all courses attendance is greater than 75%

Students dashboard: If there are courses with attendance is less than or equal to 75%

In courses whose attendence is less than or equal to 75%

Low Attendance

Course Id	Course Name	Classes Attended	Number Of Classes	Attendance %
15CSE301	Linear Algebra	3	4	75

Attendance report:

Attendance Report

Course Id	Course Name	Classes Attended	Number Of Classes	Attendance %	Eligiblity
15CSE204	Cryptography	4	5	80	Eligible
15CSE202	Database Management System	9	11	81	Eligible

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TEST CASES:

Login form:

SL.NO	TEST CASE	EXPECTED RESULT	TEST RESULT
1.	Enter valid username and password & click on sign-in button	Software should display dashboard window of the user	Successful
2.	Enter invalid	Software should not display dashboard window	Successful

Lectures dashboard:

SL.NO	TEST CASE	EXPECTED RESULT	TEST RESULT
1.	Click on drop-down box and Press GO button	Redirects the user to attendance page of the selected class	Successful
2.	On the click of HOME button	The webpage gets redirected to home page	Successful
3.	On the click of LOGOUT button	The user is logged out from the system	Successful

Lectures Attendance view:

SL.NO	TEST CASE	EXPECTED RESULT	TEST RESULT
1.	Click on ADD button	The lecturer is able to mark the attendance of the students of that class.	Successful
2.	On the click of EDIT button	The lectures is able to update the attendance of the selected date	Successful
3.	On the click of HOME button	The webpage gets redirected to home page	Successful
4.	On the click of LOGOUT button	The user is logged out from the system	Successful

Student dashboard :

SL.NO	TEST CASE	EXPECTED RESULT	TEST RESULT
1.	Click on MY ATTENDANCE button	Shows the Attendance report of the student	Successful
2.	On the click of LOG OUT button	The user is logged out from the system	Successful

Student Attendance :

SL.NO	TEST CASE	EXPECTED RESULT	TEST RESULT
1.	On the click of HOME button	The user will be redirected to Student Dashboard	Successful
2.	On the click of LOG OUT button	The user is logged out from the system	Successful

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