PUNE INSTITUTE OF COMPUTER TECHNOLOGY

(Society For Computer Technology And Research)

Database Management System Lab

MINI Project report on

College Management System

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ABSTARCT

In a present era of internet, it is really uneasy to store the information related to students and college faculties on the paper.

As there is too many information when someone tries to access any of stored information. It becomes a difficult and time-consuming task.

While these days faculty have more work than just take care of students and it is difficult for both teachers and related staffs to monitor the them.

Whereas the storing and retrieving an information is a difficult task, it requires much amount of unnecessary worker to do the task.

The college management system will manage all the work in any college or institute in particular order so that the time requirement and complexity of the system will be reduced, at first it will focus on student related information. As a student gets the admission in the school system will start managing the details regarding the students. It will manage the fee details..college Management System allow to enter the marks of students.it will display the results of the students. While the teachers can use it to monitor their student's details, also they can see contact details of student's marks.

The College management system is a web-based system which will use as a platform for interaction between student, teachers. While the main objective of this project is to computerize the paperwork in the system and automate the work. The computerization is done so that the storage of all the details regarding students and teachers will be stored in the system which makes system centralized and the chance of duplication of any data is minimized. While by doing automation to the system will reduce the time for storing any data in the system.

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Chap 1. <u>INTRODUCTION</u>

1.1 INTRODUCTION:

The objective of college Information Management system is to allow administrator of ant organization to edit and find out the personal details of student and allows the student to keep up to date his profile.

College management system is an integrated web application that handles various academic activities of a College/Academic Institute. The system can access by every faculties and administrator of the institution through internet connected computers with the aid of his/her user name and password. Web services will interact to the financial and administrative modules to fetch necessary information to display in the public portal. Although a standard password policy will be followed in the designing of the system to prevent the possibilities of malicious activities of itching users.

Some of the features of the proposed system are

1. New Student Admission details

2. Student Fee management

3. Student Attendance Management

4. Staff Attendance Management

5. Staff Payroll Management

6. Result Management

7. User Management

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Chap 2. <u>SCOPE</u>

The College Management system permit impact gathering information about student from admission cell and give it to the staff.

Another very important impact is taking classes, conducting and generating exam results, maintaining fee details, examination details and also taking attendance of both student and staffs.

This module consists of the following sub modules

1. Student Registration Form

2. Student Fee Form

3. Student Marks Form

4. View Student details

5. Staff Detail Form

6. Staff Attendance Form

7. Student Attendance Form

8. View Teacher details

The system COLLEGE MANAGEMENT SYSTEM can be used to manage the data of all type of educational institutes. It will support both stand alone and also networking environment.

Chap 3. <u>SYSTEM REQUIREMENT</u>

3.1 Hardware Requirement

1. Operating System (ex. Windows , Linux , MacOS)

2. 8 GB RAM (Min) , 100 GB Storage

3.2 Software Requirement

1. Eclipse IDE For Java Developers – Eclipse (2020 – 09)

2. MySQL Workbench 8.0 CE – Database

3. JDK 15 - Java

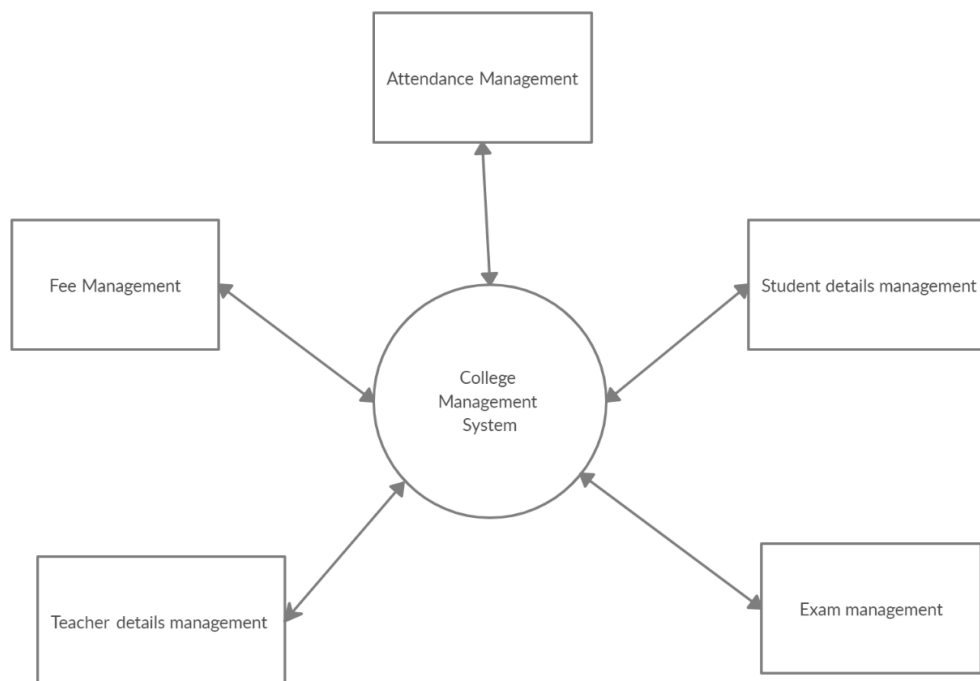# Chap 4. <u>Data Modeling features</u>
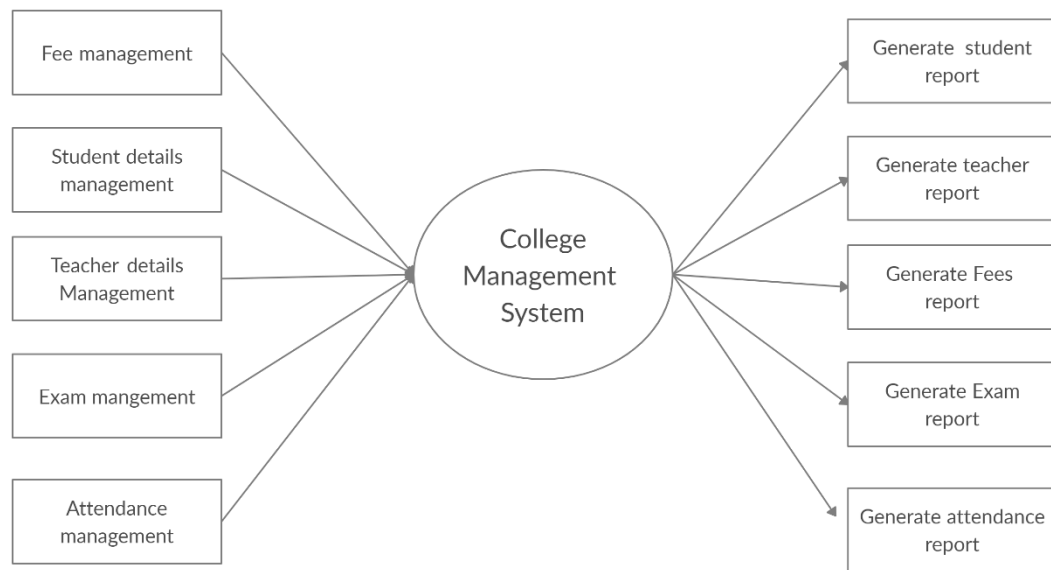
4.1 Data flow diagram:
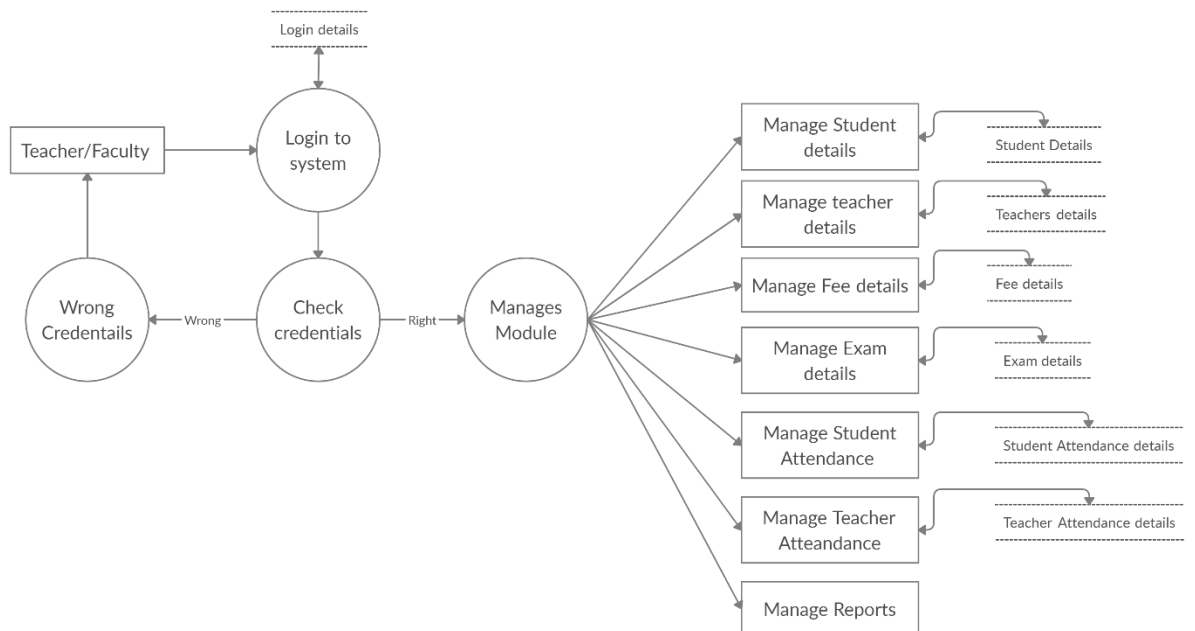

Fig. 4.1 DFD Level 0
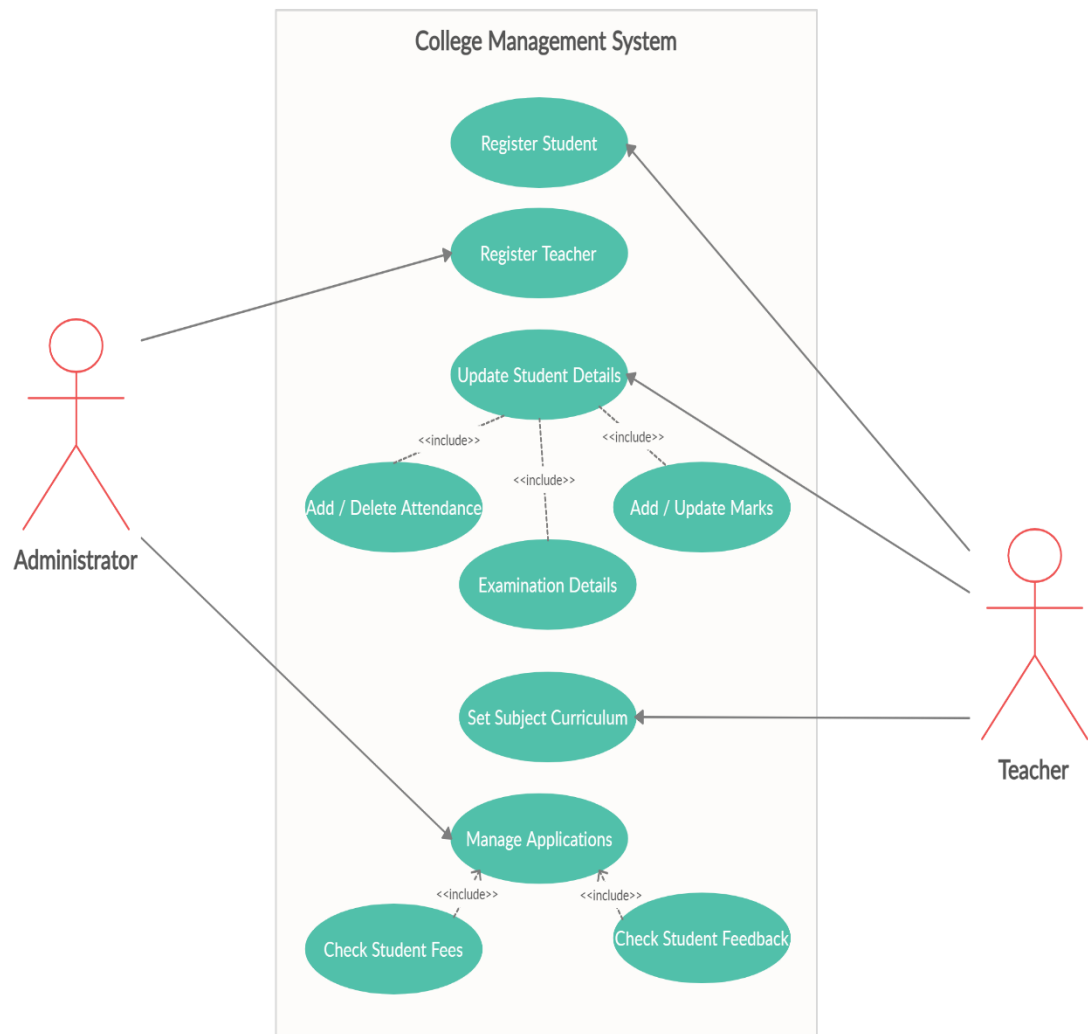
Fig.4.2 DFD Level 1

Fig.4.3 DFD level 2

4.2 Use case:

Fig 4.4 Use Case diagram

4.3 Class diagram:
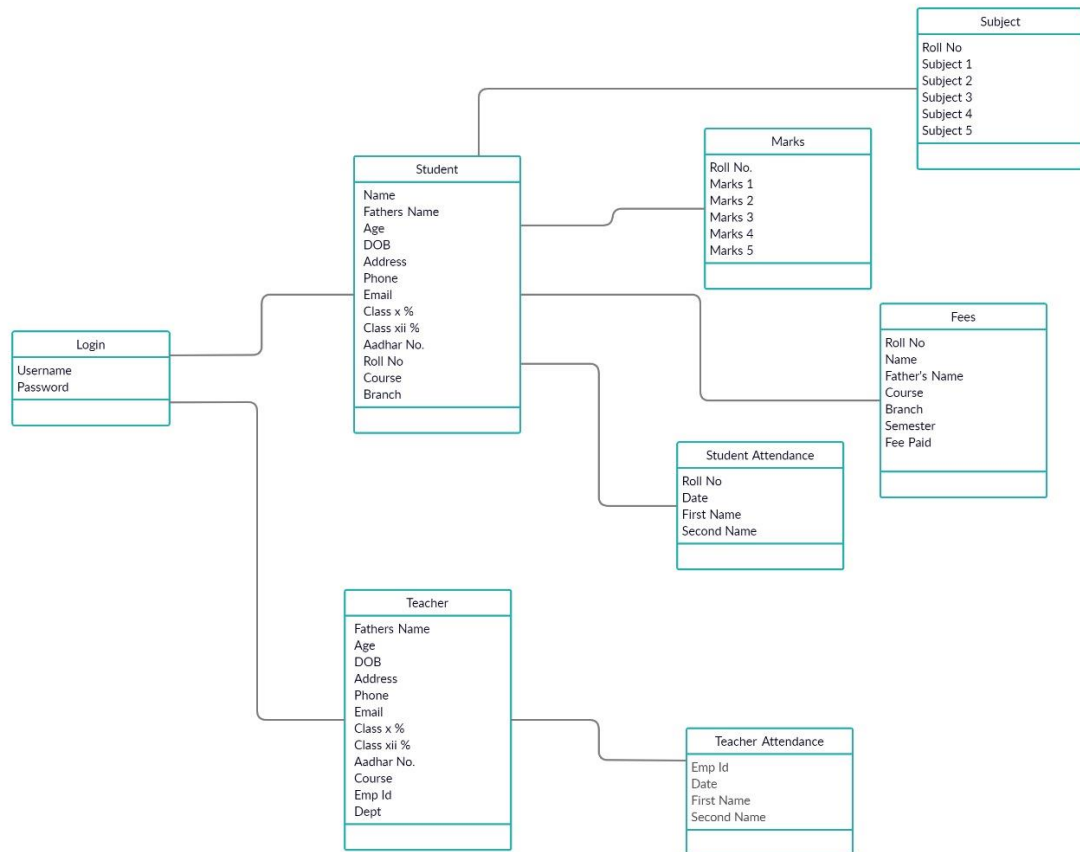
Fig 4.5 Class Diagram

Chap 5. <u>Data Dictionary</u>

5.1 Data dictionary:

Student table: -

Field	Type	Null	Key	Default	Extra
name	varchar(20)	YES		NULL	
fathers_name	varchar(20)	YES		NULL	
age	varchar(5)	YES		NULL	
dob	varchar(20)	YES		NULL	
address	varchar(30)	YES		NULL	
phone	varchar(15)	YES		NULL	
email	varchar(25)	YES		NULL	
class_x	varchar(10)	YES		NULL	
class_xii	varchar(10)	YES		NULL	
aadhar	varchar(15)	YES		NULL	
rollno	varchar(15)	NO	PRI	NULL	
course	varchar(10)	YES		NULL	
branch	varchar(20)	YES		NULL	

Teacher table: -

Field	Type	Null	Key	Default	Extra
name	varchar(20)	YES		NULL	
fathers_name	varchar(20)	YES		NULL	
age	varchar(5)	YES		NULL	
dob	varchar(20)	YES		NULL	
address	varchar(30)	YES		NULL	
phone	varchar(15)	YES		NULL	
email	varchar(25)	YES		NULL	
class_x	varchar(10)	YES		NULL	
class_xii	varchar(10)	YES		NULL	
aadhar	varchar(15)	YES		NULL	
course	varchar(10)	YES		NULL	
emp_id	varchar(15)	NO	PRI	NULL	
dept	varchar(20)	YES		NULL	

Fee table: -

	Field	Type	Null	Key	Default	Extra
▶	rollno	varchar(20)	YES	MUL	NULL	
	name	varchar(25)	YES		NULL	
	fathers_name	varchar(25)	YES		NULL	
	course	varchar(10)	YES		NULL	
	branch	varchar(20)	YES		NULL	
	semester	varchar(10)	YES		NULL	
	fee_paid	varchar(15)	YES		NULL	

Marks table: -

	Field	Type	Null	Key	Default	Extra
▶	rollno	varchar(15)	YES	MUL	NULL	
	marks1	varchar(20)	YES		NULL	
	marks2	varchar(20)	YES		NULL	
	marks3	varchar(20)	YES		NULL	
	marks4	varchar(20)	YES		NULL	
	marks5	varchar(20)	YES		NULL	

Subject table: -

	Field	Type	Null	Key	Default	Extra
▶	rollno	varchar(15)	YES	MUL	NULL	
	subject1	varchar(20)	YES		NULL	
	subject2	varchar(20)	YES		NULL	
	subject3	varchar(20)	YES		NULL	
	subject4	varchar(20)	YES		NULL	
	subject5	varchar(20)	YES		NULL	

Student Attendance table: -

	Field	Type	Null	Key	Default	Extra
▶	rollno	varchar(20)	YES	MUL	NULL	
	Date	varchar(30)	YES		NULL	
	first	varchar(10)	YES		NULL	
	second	varchar(10)	YES		NULL	

Teacher Attendance table: -

Field	Type	Null	Key	Default	Extra
emp_id	varchar(20)	YES	MUL	NULL	
Date	varchar(30)	YES		NULL	
first	varchar(10)	YES		NULL	
second	varchar(10)	YES		NULL	

Chap 6. Relational database design

6.1 Entity-Relationship diagram:
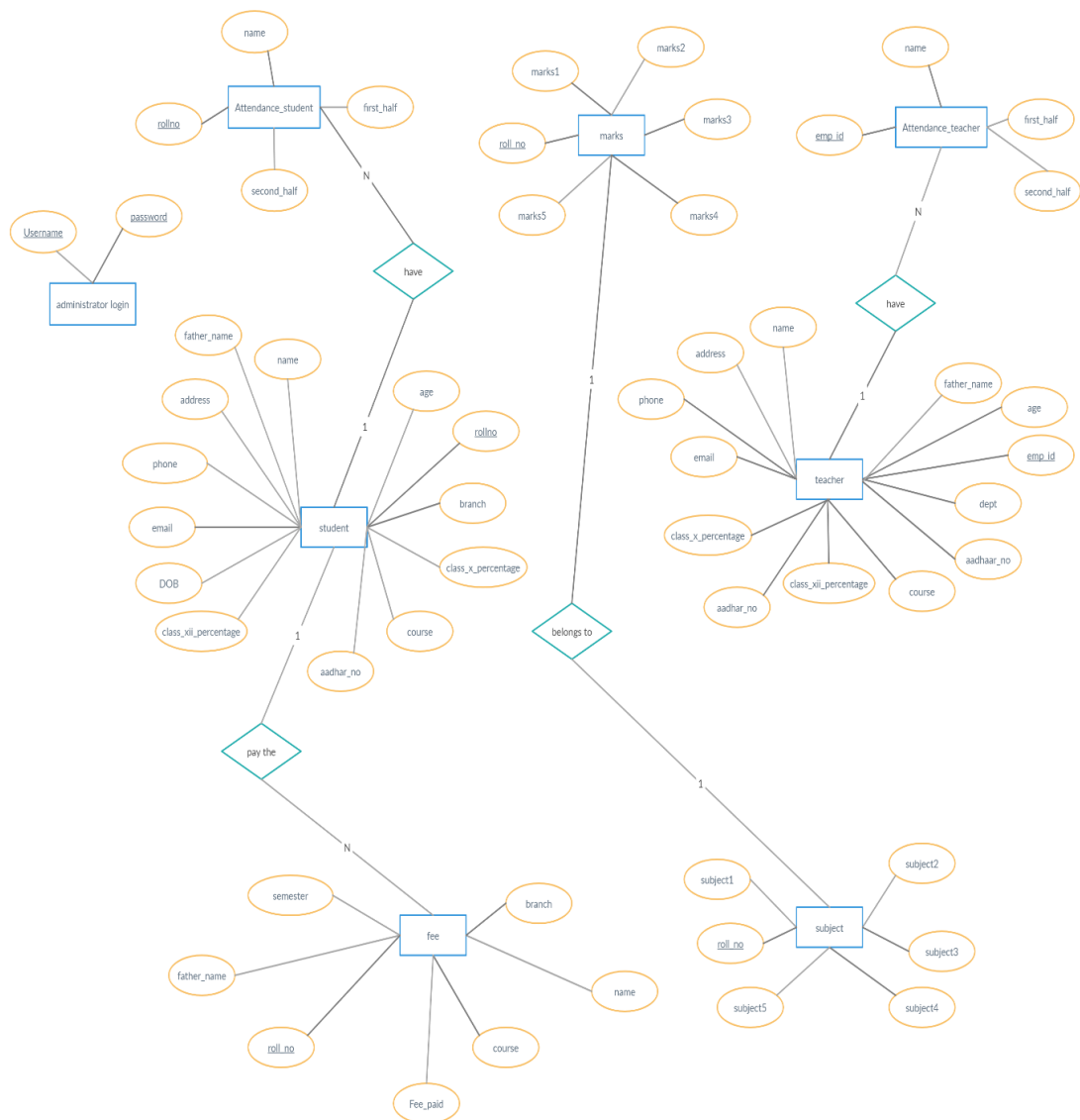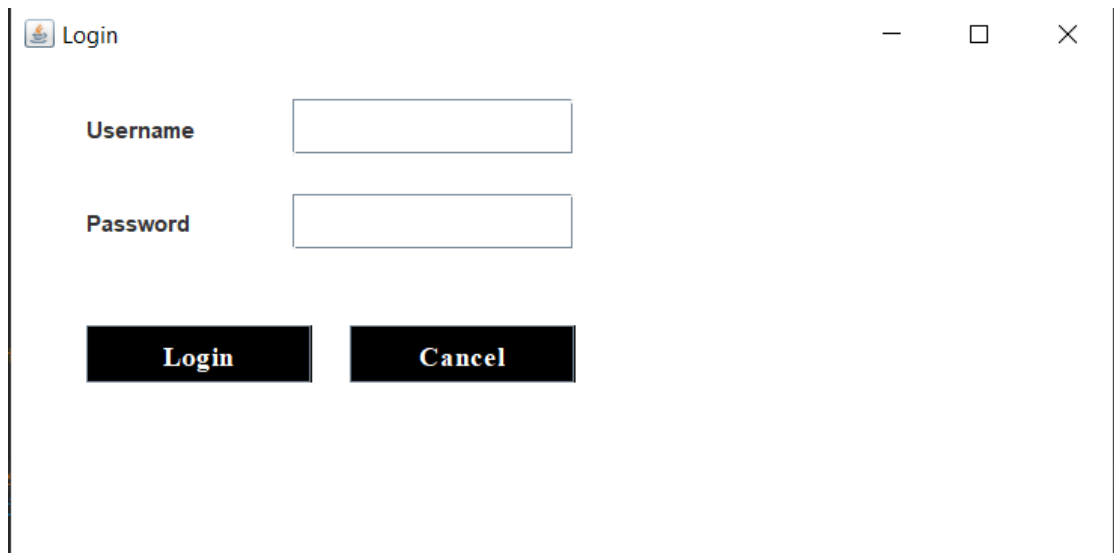
Fig. Entity relationship diagram

Chap 7 Graphical user interface

Fig.7.1 Login page

Fig7.2 Home Page

Fig7.3 Add Student's details

Fig 7.4 Add teacher's details

Fig 7.5 Update teacher's details

Fig.7.6 Update student's details

Fig.7.7 Examination details
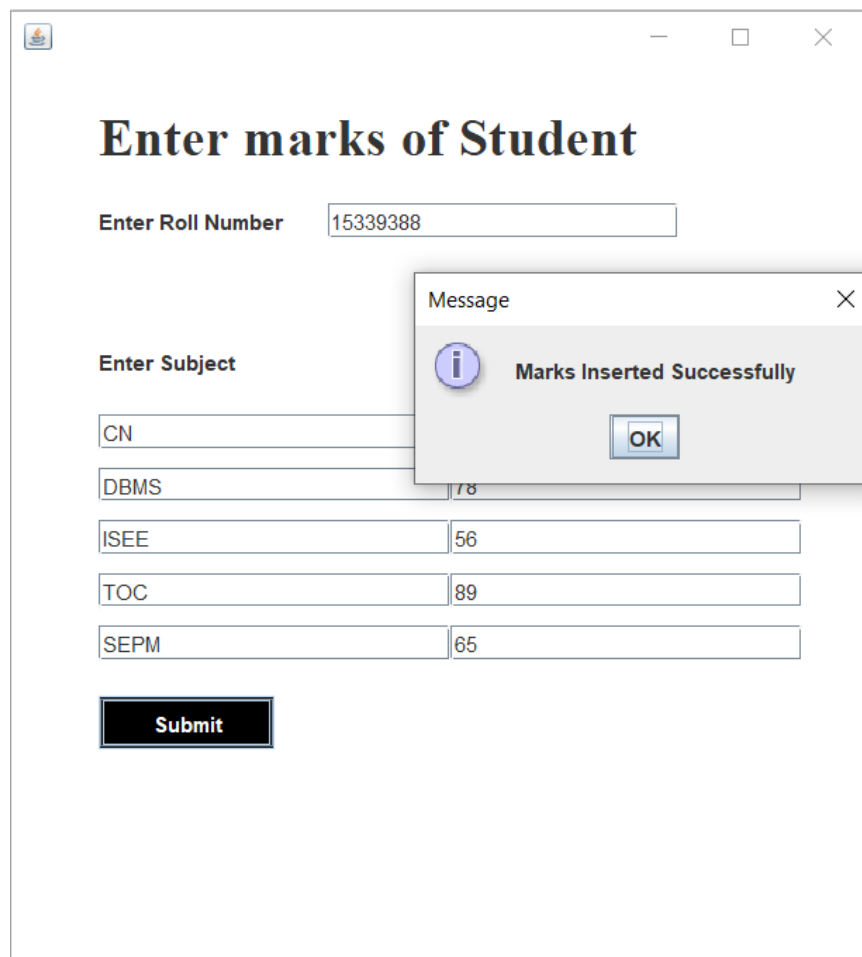
Fig 7.8 Show results
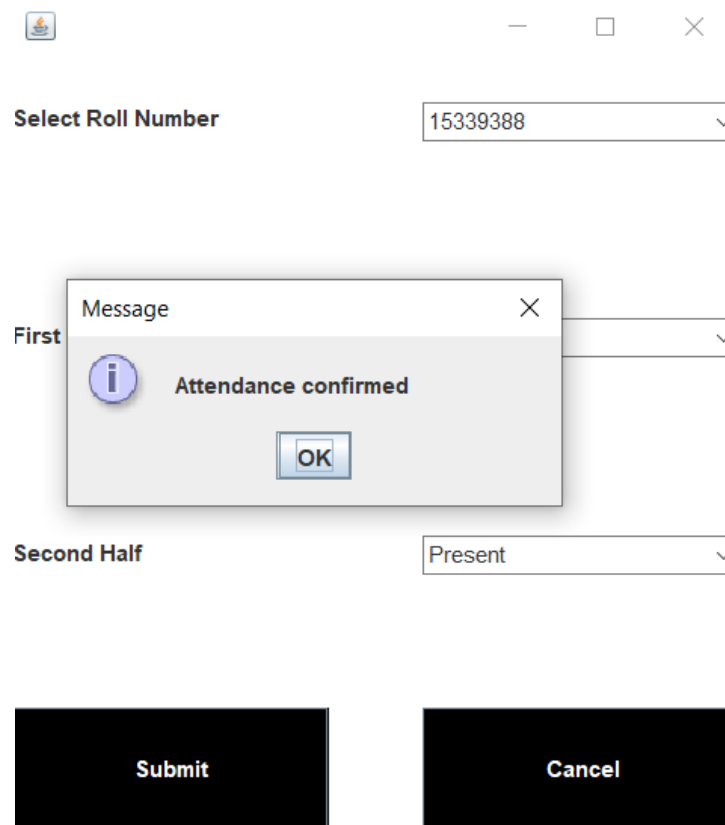
Fig 7.9 Student's marks

Fig 7.10 Student's Attendance

Fig 7.11 Student' attendance confirmation

Fig 7.12 Show student's details

Fig 7.13 Show teacher's details

Fig 7.14 About us page

Chap 9 Testing document

Test Case ID	Test Case Description	Input Data	Expected O/P	Actual O/P	Status
TC_01	To verify the student has created account	Username : 7rishi Password : password	open the Home page	open the Home Page	Pass
TC_02	To verify the Teachers have created account	Username : teacher@ Password : password	open the Home Page	opened the Home Page	Pass
TC_03	To add student admission detail	Name : rishi Age : 20 Email Id : name@gmail.com Branch : cs	student information stored in Sheet	information has sored in sheet	Pass
	To add Teacher detail	Name : Shreyas Age : 30 Email Id : name@gmail.com Department : CS	teacher information stored in sheet	information has sored in excel sheet	Pass
TC_04	To verify information on student	Roll no : 31380	Displaying correct student information	Displayed correct student information	Pass
		Delete	Student data should be deleted	Sucessfully deleted data	Pass
		Add	Adding new Student information	Sucessfully added data	Pass
	To verify information on Teacher	Employee Id : CS121	Displaying correct Teacher information	Displayed correct Teacher information	Pass
		Delete	Teacher data should be deleted	Sucessfully deleted data	Pass
		Add	Adding new Teacher information	Sucessfully added data	Pass
TC_05	To register student Attendence	First Half : P Secong Half : A	Adding Attendence to Sheet	Sucessfully added	Pass

TC_06	To check result of student	Roll No: 31380	To able to display result	result displayed	Pass
	To add marks of students	Sub : DBMS	Able to add marks to student information	Marks of student added	Pass
		Marks : 45			
TC_07	To Update the student Information	Roll No : 31380	Information should be updated	Information updated	Pass
	To Update the Teacher Information	Employee Id : CS121	Information should be updated	Information updated	Pass
TC_08	Students should able to pay their fees	Roll No : 31380	Amount should be paid	Amount paided	Pass
		Name : Rishi			
		Branch : CS			

CONCLUSION

The college management system manages all the work in any college or institute in particular order so that the time requirement and complexity of the system will be reduced, at first it will focus on student related information.

As a student gets the admission in the college system starts manages the details regarding the students.

It manages the fee details, and if the full payment has not done,

College Management System allow teachers to enter the marks it will display the results of the students.

While the teachers can use it to monitor their student's details, also they can see contact details of their marks.

The College Management system optimize the human effort of paper work.

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