A

#### MINI PROJECT REPORT

ON

"College Management System"

**SUBMITTED TO** 



# SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE FOR THE PARTIAL FULLFILLMENT OF THE DEGREE OF MASTER OF COMPUTER APPLICATION (MCA)

**SUBMITTES BY** 

Mr. Yash Bhagwan Khairnar



PIRENS INSTITUTE OF BUSINESS MANAGEMENT AND
ADMINISTRATION (IBMA)
LONI (BK), TAL- RAHATA, DIST.- AHMEDNAGAR.
SAVITRIBAI PHULE PUNE UNIVERSITY
2023-24.



## SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

# **CERTIFICATE**

This to certify that

#### YASH BHAGWAN KHAIRNAR

**Seat Number** -5577

Student of First Year of Master of Computer Application (MCA)

Was examined in Mini Project Report entitled

## "COLLEGE MANAGEMENT SYSTEM"

On- / /2023

At

# PIRENS INSTITUTE OF BUSINESS MANAGEMENT AND ADMINISTRATION, (IBMA)

LONI(BK), TAL-RAHATA, DIST-AHMEDNAGAR.

(Internal Examiner)

(External Examiner)

# **CERTIFICATE BY GUIDE**

This is to certify that YASH BHAGWAN KHAIRNAR has completed the Mini Project work under my guidance and supervision that I have verified the work for documentation, problem statement and result presented in the project work.

Place: Loni Prof. R. S. Tanpure

**Date:** / /2023

#### **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 our **Project Guide** - **Prof. R.S.Tanpure** or the Guidance, Inspiration and Constructive Suggestions that helpful us in the preparation of this project. We also thank our **Head of the Department- Prof. Dr. M. S. Langote** who have helped in successful completion and certification of the project.

We would also like to thanks to our friends who always had helping hand whenever needed and also for their co-operation moral support for doing this project.

## **INDEX**

Chapter		Details	Page No.
No			
1		Introduction	
	1.1	Abstract	
	1.2	Existing System & Need for System	
	1.3	Scope of System	
	1.4	Operating Environment-Hardware and Software	
	1.5	Brief Description of Technology used	
		Operating System used (Window/Unix)	
		RDBMS/No SQL used to build	
		database (MySQL/Oracle, Teradata, etc)	
2		Proposed System	
	2.1	Study of Similar Systems (if required research paper can be	
		included)	
	2.2	Feasibility Study	
	2.3	Objective of Proposed System	
	2.4	Users of System	
3		Analysis and Design	
	3.1	Systems requirements (Functional & non-functional	
		requirements)	
	3.2	Entity Relationship Diagram (ERD)	
	3.3	Table Structure	
	3.4	Use Case Diagram	
	3.5	Class Diagram	
	3.6	Activity Diagram	
	3.7	Deployment Diagram	
	3.8	Module Hierarchy Diagram	
	3.9	Sample Input & Output Screens (Screens must have valid data.	
		All reports must have at-least five valid records)	
4		Coding	
	4.1	Code Snippets	
5		Testing	
	5.1	Test Strategy	
	5.2	Unit Test Plan	
	5.3	Acceptance Test Plan	
	5.4	Test Case / Test Script	
6		Limitations of Proposed System	
7		Proposed Enhancement	

8	Conclusion	
9	Bibliography	
10	User Manual(All Screens with proper description/purpose details about validation related to data to be entered)	

#### INTRODUCTION

College management system project allows schools and universities to keep track of their enrolment, students, teachers, attendance, fees, scheduling, and other activities related to tertiary education tasks. It creates automatic reports for data-driven decision-making on all college management aspects.

College management is when a group of people and resources work together to plan, organize, strategize, and put in place structures to run an educational system. The college management system oversees all of the needed tasks to deliver productive education. These tasks are the enrolment, admissions, students, faculty, attendance, fees, scheduling, assignments, grades, and the institution as a whole.

This college management system generates automatic reports on all elements for data driven decision-making. The college information management system, in general, helps educational institutions by automating regular administrative tasks. It's called a "college administration system," and it has a lot of features, like apps, student achievement assessments, and more.

#### **Abstract**

College management is when a group of people and resources work together to plan, organize, strategize, and put in place structures to run an educational system. The college management system oversees enrolment, admissions, students, faculty, attendance, fees, scheduling, assignments, grades, and the institution as a whole.

The college management system is designed to automate all the processes included. It generates automatic reports on all elements for data-driven decision-making.

The college information management system, in general, helps educational institutions by automating regular administrative tasks. It's called a "college administration system," and it has a lot of features, like apps, student achievement assessments, and more.

## **Existing System**

Before the automation the system suffered from following DRAWBACKS: Existing system is highly manual and involves a lot of paper work and calculation and therefor may be erroneous. This led to inconsistency and inaccuracy.

The data may be lost, stolen or destroyed because it is stored on paper.

The existing system consumes a lot of time causing inconveniencing to students and the staff.

It's difficult to update, delete, or view the data due its manual nature.

Increasing number of passengers leads to difficulty in maintaining and retrieving details.

## Scope of the system

In this world of growing technologies everything has been computerized.

With large number of works opportunities, the Human workforce has increased. Thus, there is a need of a system which can handle the data.

College management system is an application stored in the user server. The purpose is auto resolving the problem.

The system enables to perform the following functions:

- 1)This system can be used to store the details of the student, update the details of the student based on the roll number
- 2)Easy to understand.
- 3)user friendly.
- 4)Help to work fast and maintain the data safe.

# **Software requirements**

Operating system:	Microsoft Windows XP professional
Language	Java
Database:	MySQL
System processor speed	1.70GHz to 2.40GHz

Processor : intel core i3

RAM : 8GB

Hard Disk : 4GB to 30GB

Keyboard : 104 keys

# **Proposed System**

The college management system is proposed with the following

- The computerization of the college mgt system will reduce a lot of paperwork and hence load on the hence the load on faculty and staff.
- The machine will perform all calculations. Hence chances of error are nearer to
- The students, teacher, attendance list can be easily retrieved and any required addition, deletion, updating can be performed easily and fast.
- Proper way of confirmation.

#### FEASIBILITY STUDY

Feasibility study is most important and it concerns great to the college, for which new system is to be developed. It includes the study of success and level of satisfaction that the college teacher and student and the user will get from the system. Feasibility means possibilities (to some extent), i.e., this study explores the possibility of implementation of new system as a substitute to old system removing all shortcomings and including all new requirements.

- ✓ ECONOMICAL FEASIBILITY: Since the existing system is manual, the organization possess the computer and doesn't require to set the environment. Cost involved in the software packages includes
- ✓ TECHNICAL FEASIBILITY: It is determined by the hardware and supporting software. Hardware requirement: stand-alone computer with enough main memory space & backup storage more than 2 GB to support RDBMS and huge database. Software requirement:
- ✓ **BEHAVIOURAL FEASIBILITY: It** includes training the user staff on the candidate system. The data entry design is similar to other forms being used by the user staff. Data entry forms are very user friendly and data entry job has been kept minimum. So training of 3-4 will be sufficient. Even for generating reports the user has to supply 2-3 parameters only.

## **User Requirement**

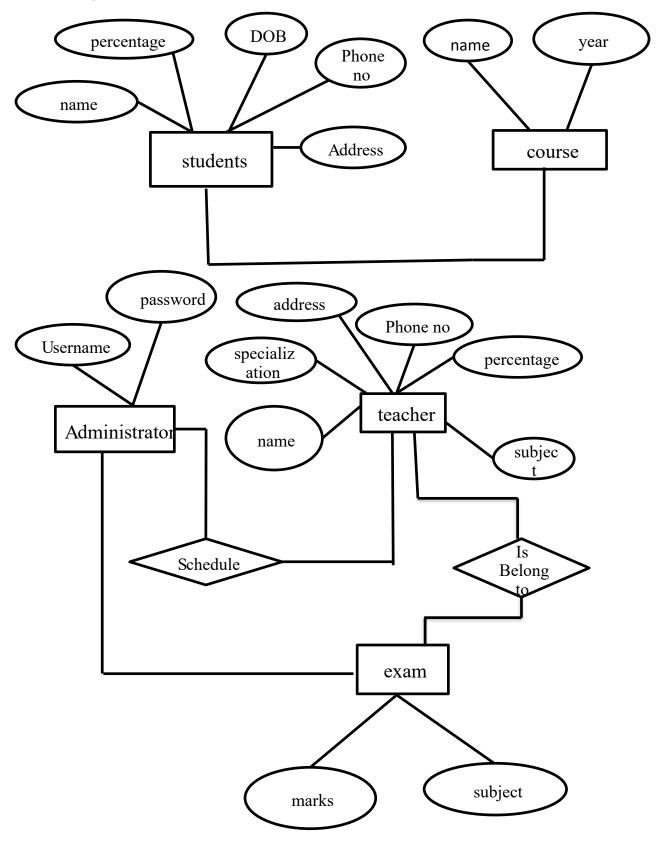
- 1) User properties like Name, Address, Age.
- 2) Associated with Teacher and student information
- 3) Student details, exam marks, student identity, teacher subject etc.
- 4) Course name, course fee, attendance

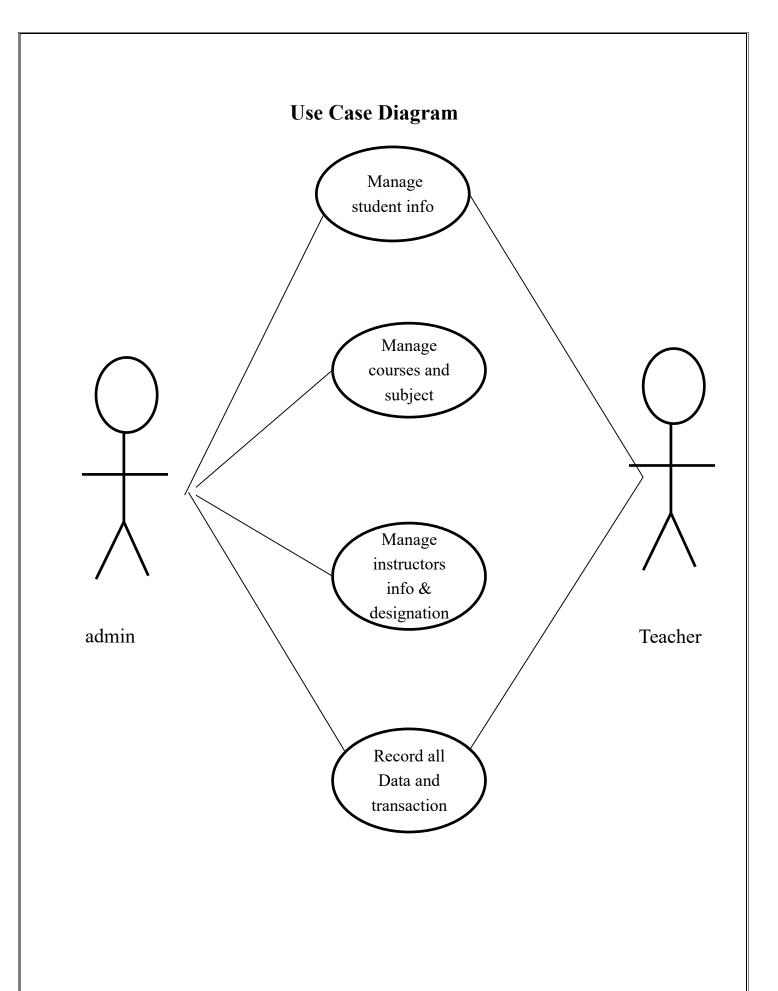
#### **OBJECTIVES OF PROPOSED SYSTEM-**

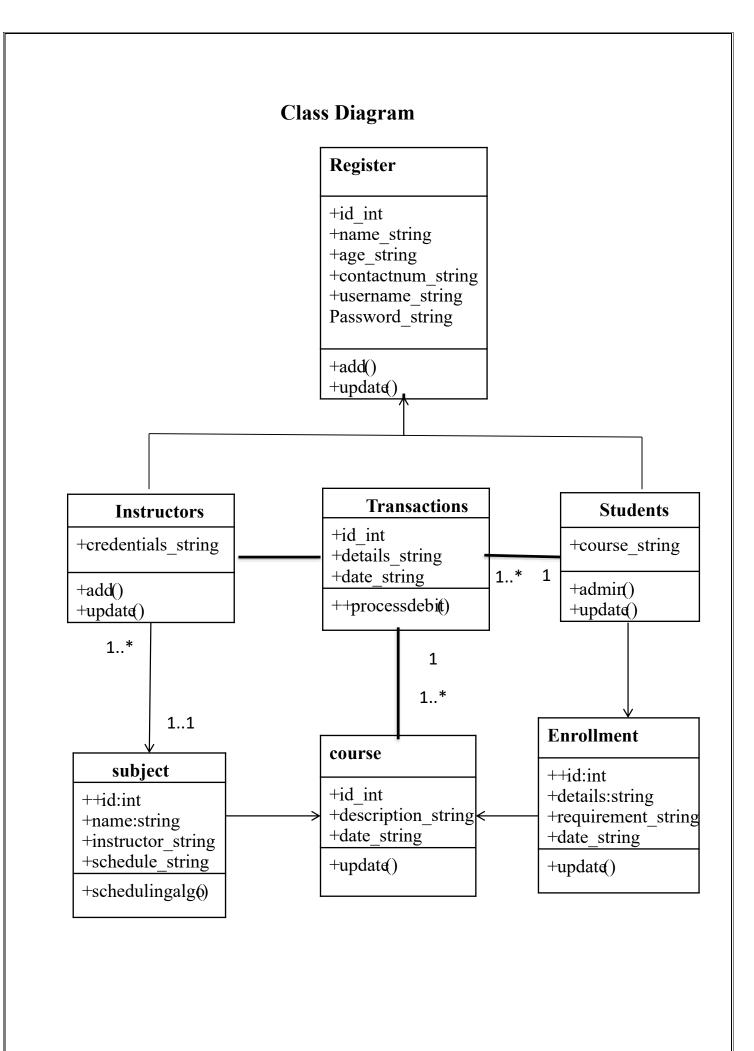
- ✓ Manual work has to be reduced
- ✓ Get accuracy
- ✓ Result to be received very quickly.It uses concept of user friendliness.
- ✓ It provides using of multiple applications at a time. Increase security, speed, storing and accuracy.
- ✓ Customer services can not only be satisfied but also enhanced to the extent that one can obtain or cancel a reservation from any branch forany route at any given time.
- ✓ To speed up the operation.
- ✓ Managing and maintaining data becomes easier.
- ✓ Provide convenience to travellers.
- ✓ It decreases manpower and high cost.

## Analysis and design

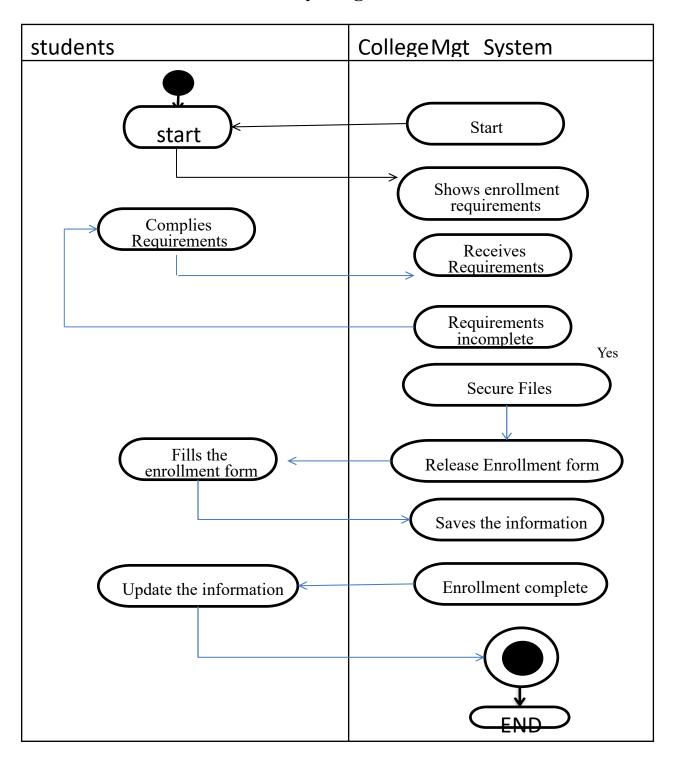
## E R Diagram:



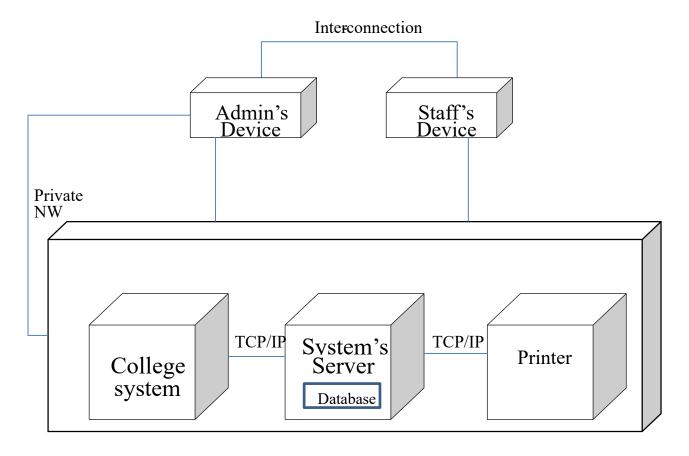


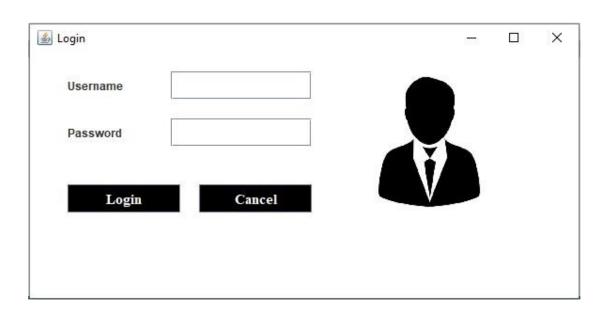


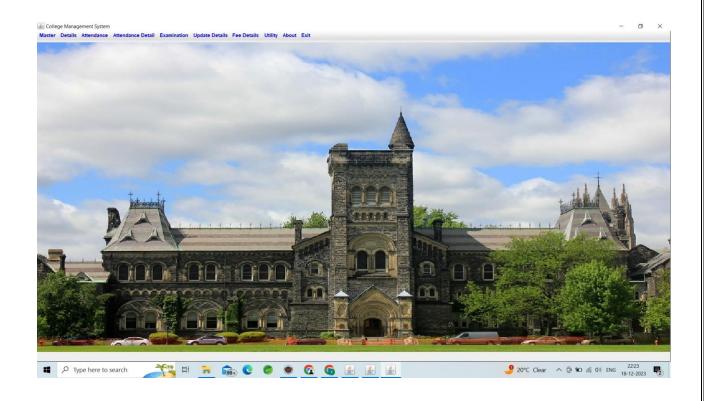
## **Activity Diagram**

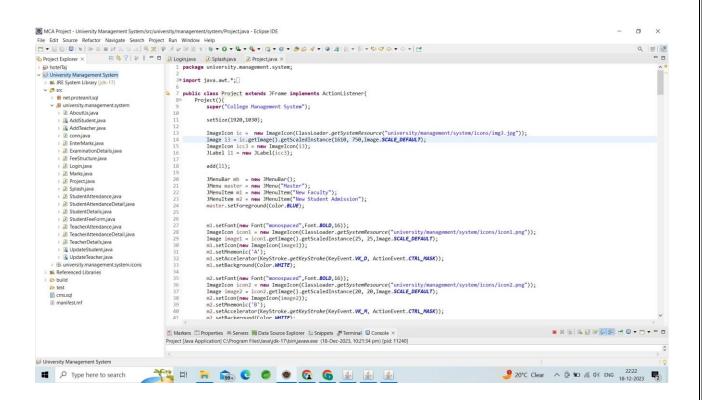


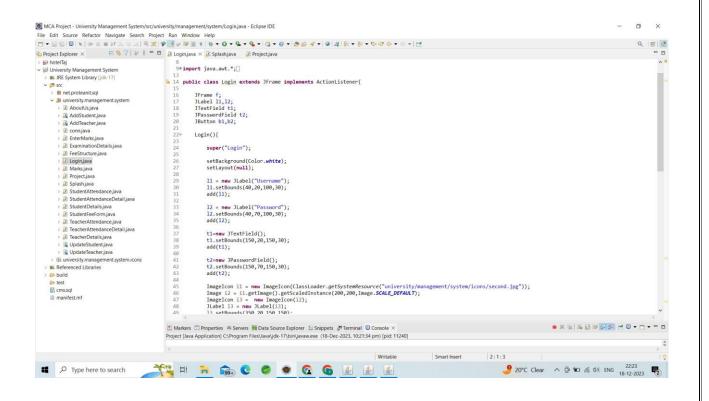
# **Deployment Diagram**

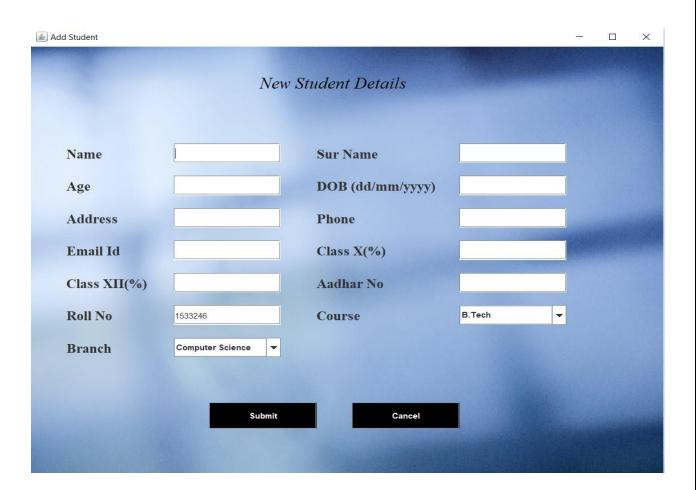


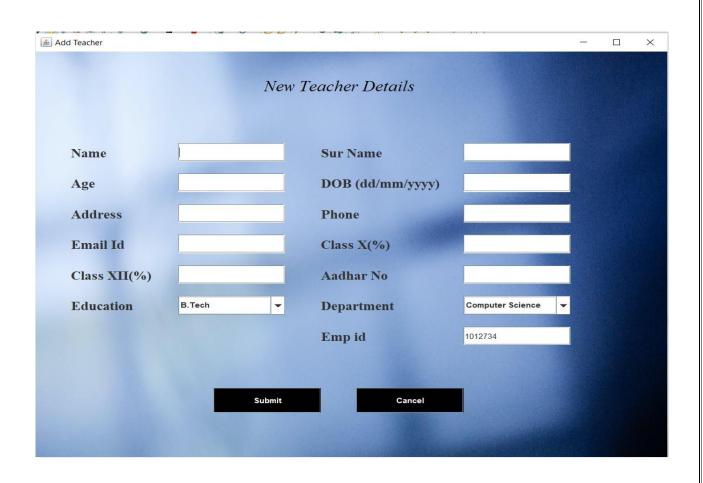


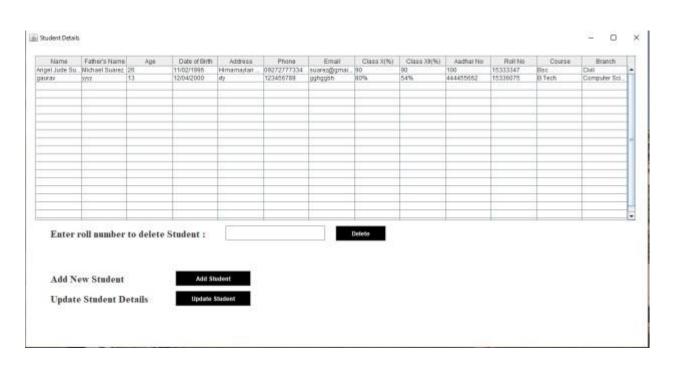


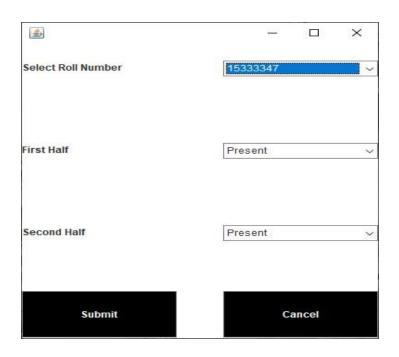


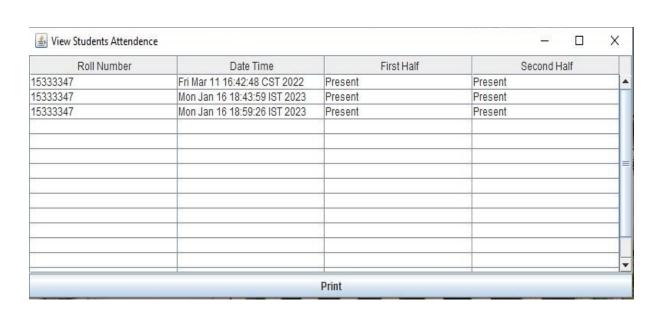


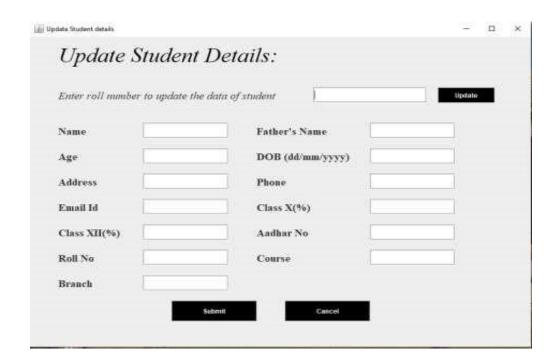




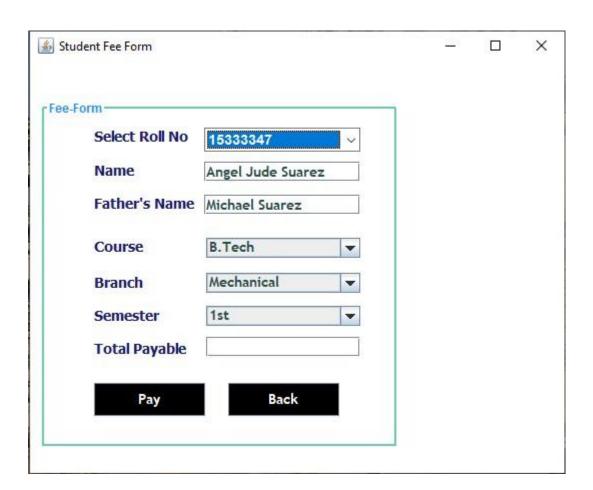












### **Conclusion**

The College Management System has been a way of minimizing the clerical work, which is almost a routine and consumes the most precious time.

This College Management System has been an attempt to help the user to minimize his workload along with minimizing the paper works and saving of time. The system has been developed in a way to make it very user friendly. It provides an on-line message and an error detection and error messages every time the user needs. Any person having a little bit of window based can run this system without any pain. Almost all the difficulties of manual reservation have been removed by this system. Ti wind up let me welcome all the suggestions and other improvements, which the system needs so that it covers all the needs if the user in the user way

#### **BIBLIOGRAPHY**

This refers to the books, which were gone through for completion of this project report.

- 1) System Analysis and Design- Senn
- 2) Software Engineering Pressman
- 3) System Analysis and Design Elias Award