



SARVAJANIK
UNIVERSITY

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Sarvajani Education Society
Sarvajani College of Engineering & Technology, Surat.
Master of Computer Applications
Academic Year: 2023– 24

A Project On
“Student Management System”

Presented By

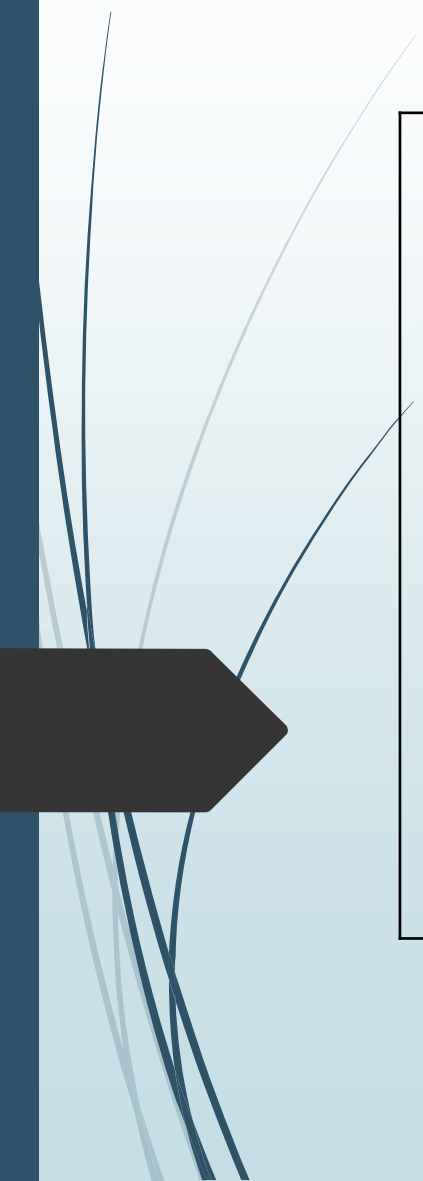
JHA SHUBHAMKUMAR (ET23MTCA020)
SHAH RUCHITKUMAR (ET23MTCA060)
SOLANKI KHUSHALKUMAR (ET23MTCA062)

M.C.A. I Sem. 1

Under the Guidance of

Prof. Preksha Parmar

Agenda

- 
- ❖ Project Abstract
 - ❖ Objective
 - ❖ System Description (Technology Used)
 - ❖ Diagram (Use Case Diagram, Activity Diagram)
 - ❖ Screen Shorts
 - ❖ Advantages & Limitations
 - ❖ References


Project Abstract

- ❖ Student Management System is application developed for managing student data in school, colleges and institutes.
- ❖ In this system admin is super user who can manage all operations like Manage course, manage Student, Generate login ID & Password ,fees Payment etc.
- ❖ The system provides a platform for teacher and student to view their information in the system.

Objective

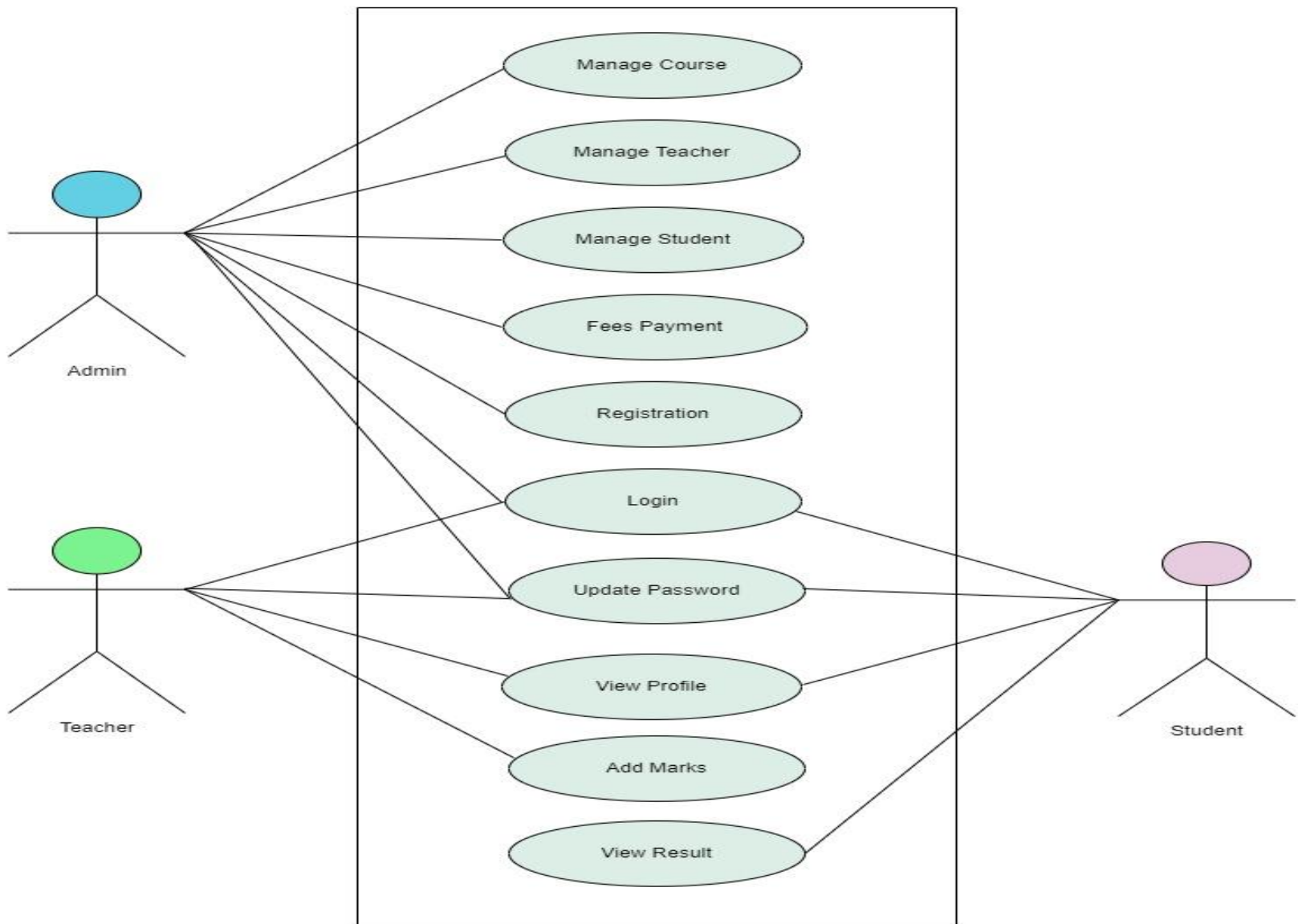
- ❖ Main Objective of the Student Management System is to go with computerized system, instead of old fashioned manual process.
- ❖ As compared to old process this system help to increase Sustainability.
- ❖ In this system admin is super user who can manage all operations related to teacher and students.

System Description

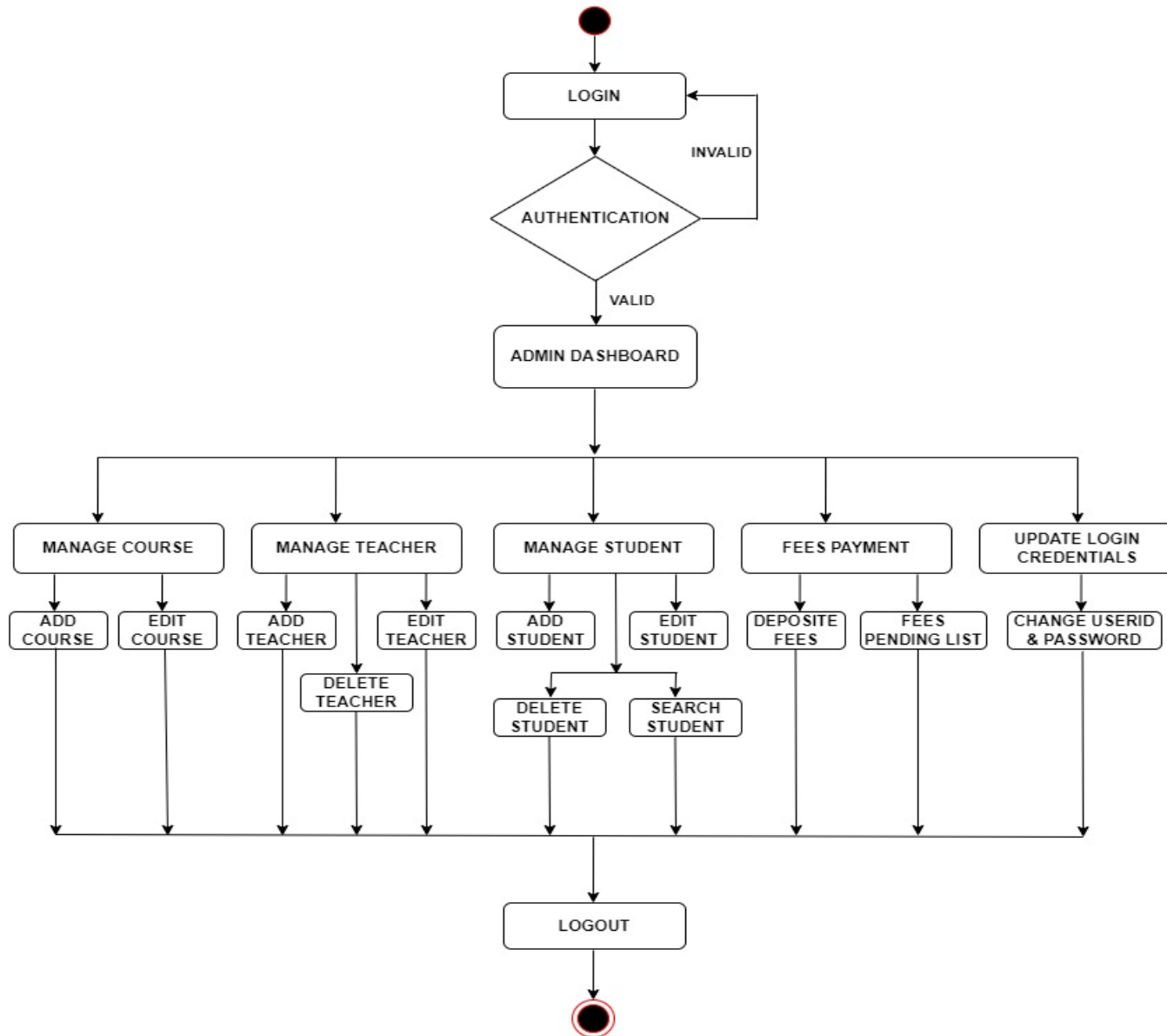


Software Requirement	Dev C++, Turbo C
Hardware requirements	Processor : Minimum 2 GHz Hard Drive : Minimum 64 GB or More Memory : 4 GB or Above
Operating System	Windows 7 or Above

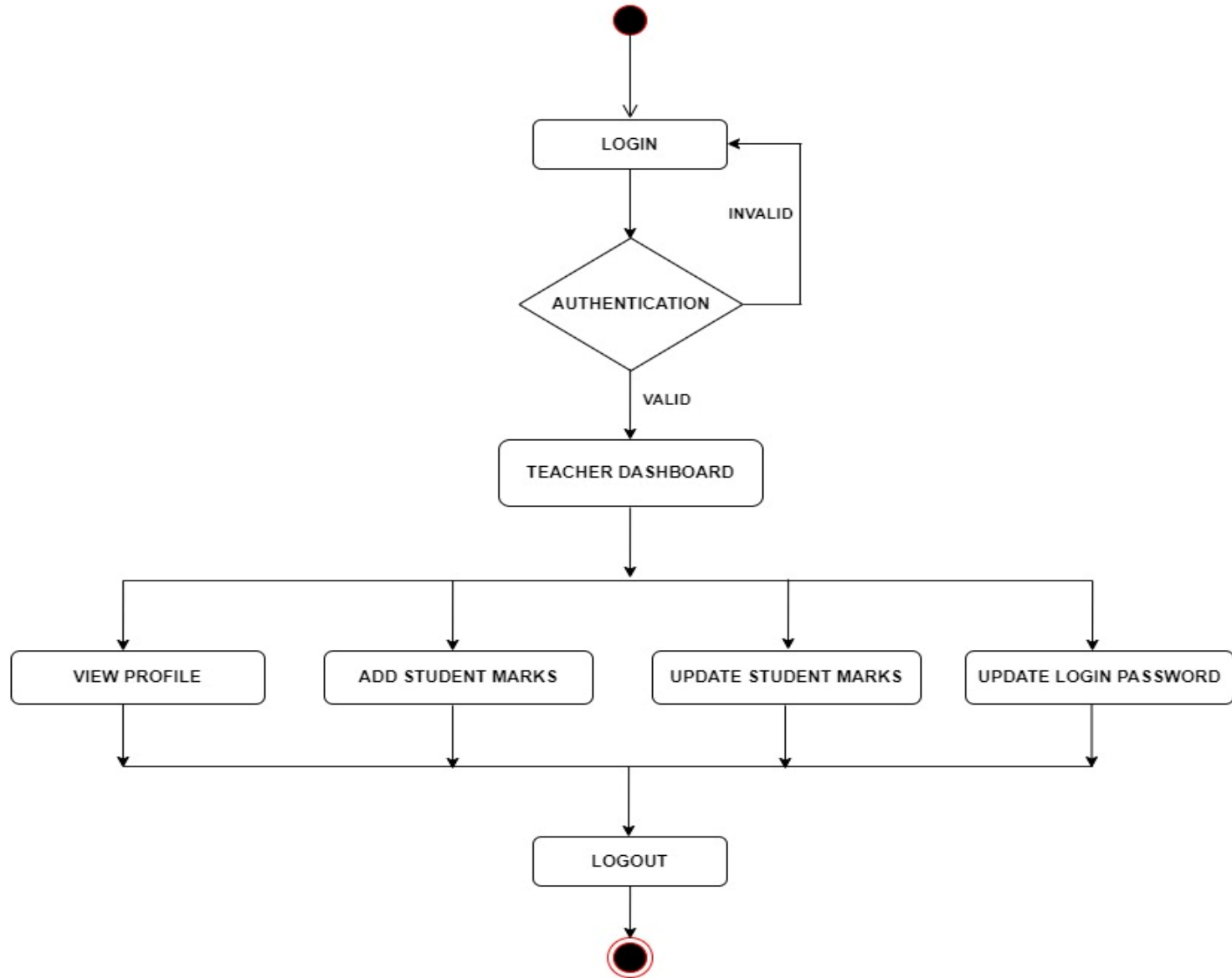
Use Case Diagram



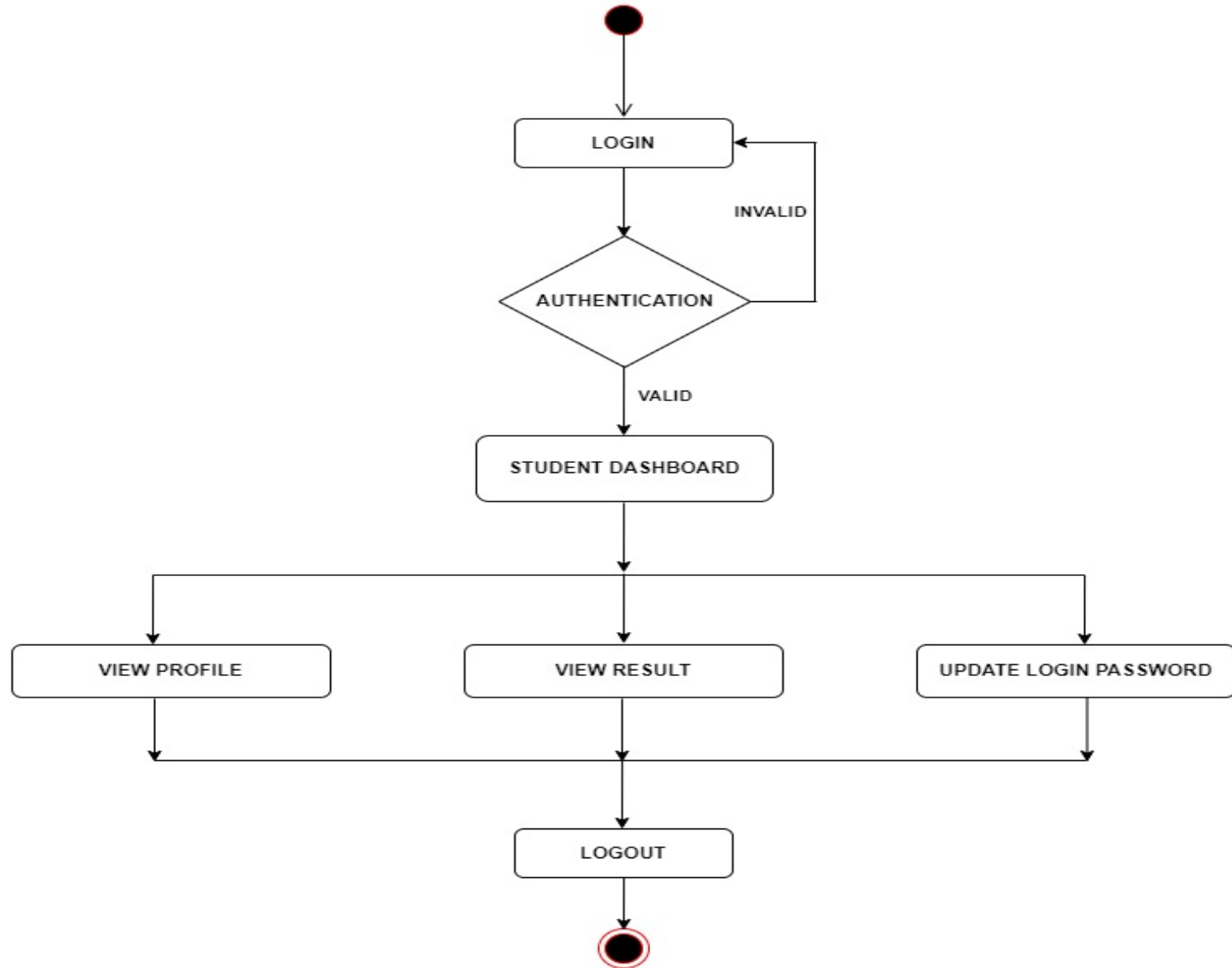
Activity Diagram (Admin)



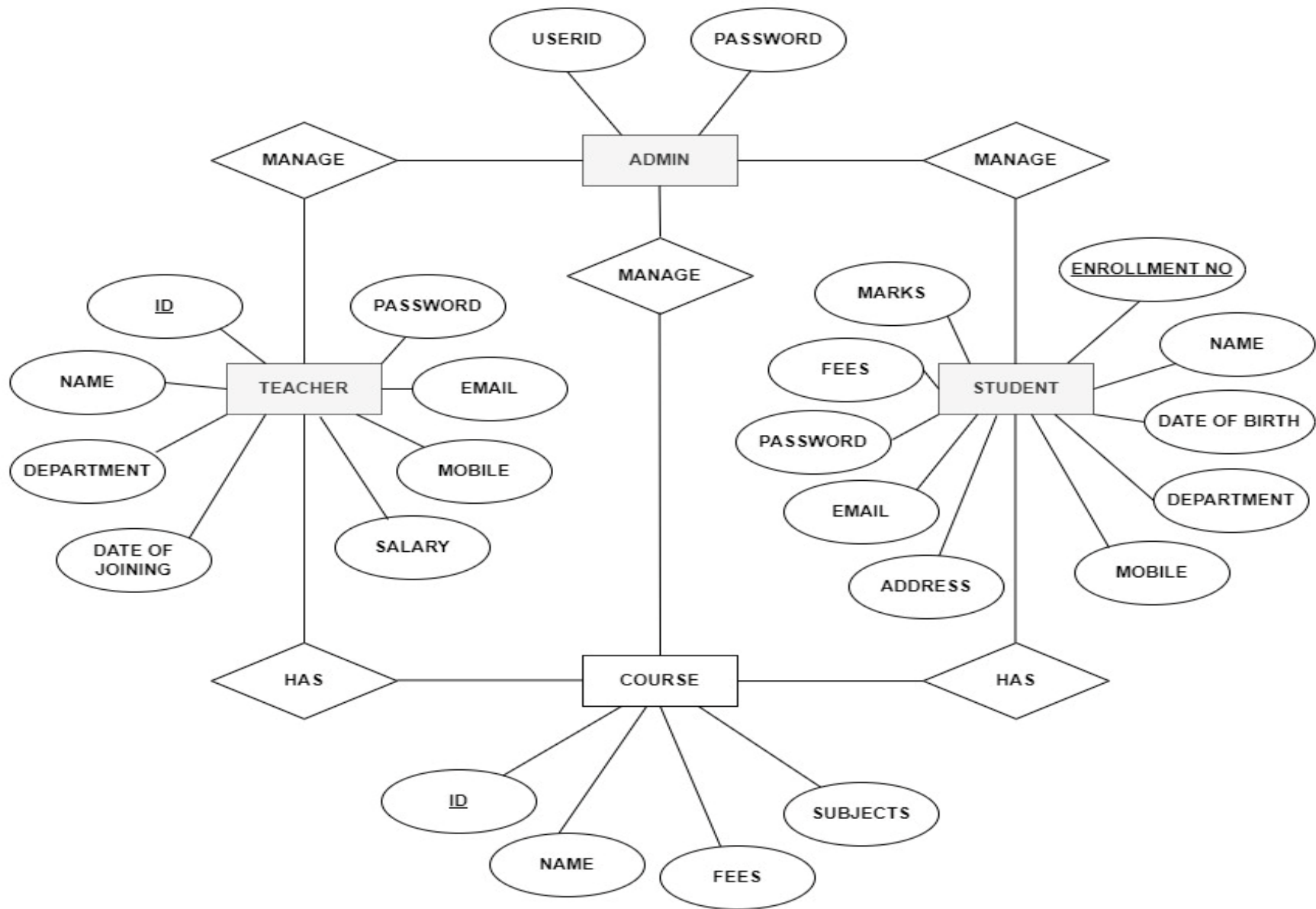
Activity Diagram (Teacher)



Activity Diagram (Student)



E-R Diagram



Screen Shorts

```
=====
===== STUDENT MANAGEMENT SYSTEM =====
=====

+-----+
|              MENU              |
+-----+
| Option      | Login As |
+-----+
|      1      |   Admin  |
|      2      |   Teacher|
|      3      |   Student|
|      4      |    Exit  |
+-----+

Please select your role from above : 1
```

Screen Shorts

```
=====
===== STUDENT MANAGEMENT SYSTEM =====
=====
```

```
+-----+
| ADMIN LOGIN |
+-----+
```

Enter Username : admin

Enter Password : ***|

Screen Shorts

```
=====
===== STUDENT MANAGEMENT SYSTEM =====
=====
```

ADMIN DASHBOARD	
No.	Options
1	Add New Course
2	Edit Course Details
3	List of Courses
4	Add New Teacher
5	Edit Teacher Details
6	List of Teachers
7	Delete Teacher Details
8	Add New Student
9	Edit Student Details
10	Search Student Details
11	List of Students
12	Delete Student Details
13	Fees Payment
14	Fees Pending List
15	Update Userid & Password
16	Exit

Enter your choice : 1|

Screen Shorts

```
=====
===== STUDENT MANAGEMENT SYSTEM =====
=====

+-----+
| Add New Course |
+-----+

Enter Course Name : MCA
Enter Fees(in Rs.) : 96000
Enter Name of 6 Subjects
Subject 1 : DATA STRUCTURE
Subject 2 : JAVA TECHNOLOGY
Subject 3 : PYTHON
Subject 4 : MATHEMATICS
Subject 5 : AGILE METHODOLOGY
Subject 6 : PROJECT

-----

Course ID      :      1
Course Name    :      MCA
Course Fees    :      96000

Subjects
-----
Subject 1      :      DATA STRUCTURE
Subject 2      :      JAVA TECHNOLOGY
Subject 3      :      PYTHON
Subject 4      :      MATHEMATICS
Subject 5      :      AGILE METHODOLOGY
Subject 6      :      PROJECT

-----

Course added successfully !!
```

Screen Shorts

Course List

Course ID	:	1
Course Name	:	MCA
Course Fees	:	96000
Subject 1	:	DATA STRUCTURE
Subject 2	:	JAVA TECHNOLOGY
Subject 3	:	PYTHON
Subject 4	:	MATHEMATICS
Subject 5	:	AGILE METHODOLOGY
Subject 6	:	PROJECT

Course ID	:	2
Course Name	:	BCA
Course Fees	:	35000
Subject 1	:	WEB DEVELOPMENT
Subject 2	:	C LANGUAGE
Subject 3	:	VB .NET
Subject 4	:	STATISTICS
Subject 5	:	DATA STRUCTURE
Subject 6	:	PROJECT

List of Courses As on : 22-12-2023 17:10

Screen Shorts

```
+-----+
|           Add New Teacher           |
+-----+

(1) MCA
(2) BCA

Select Course From Above List : 1

Selected Course   : MCA
Teacher's Name    : MAYANK JAIN
Email             : mayank@gmail.com
Mobile            : 9487545454
Salary            : 55000

-----

Teacher added successfully !!

Teacher Login ID   : mayank@gmail.com
Default Password   : teacher

-----
```


Screen Shorts

Teacher's List		
Teacher ID	:	101
Name	:	MAYANK JAIN
Department	:	MCA
Date of Joining	:	22-12-2023
Mobile No.	:	9487545454
Email-id	:	mayank@gmail.com
Password	:	teacher
Salary	:	55000

Teacher ID	:	102
Name	:	PREKSHA PARMAR
Department	:	MCA
Date of Joining	:	22-12-2023
Mobile No.	:	7845451200
Email-id	:	preksha@gmail.com
Password	:	teacher
Salary	:	50000

Teacher ID	:	103
Name	:	SHUBHAM JHA
Department	:	BCA
Date of Joining	:	22-12-2023
Mobile No.	:	7383988791
Email-id	:	shubham@gmail.com
Password	:	teacher
Salary	:	45000

List of Teachers As on : 22-12-2023 17:16		

Screen Shorts

```
+-----+  
| Edit Teacher Details |  
+-----+
```

Enter Teacher's Id to Update : 103

```
-----  
Teacher ID      : 103  
Name            : SHUBHAM JHA  
  
Department      : BCA  
  
Date of Joining : 22-12-2023  
Mobile No.      : 7383988791  
Email-id        : shubham@gmail.com  
Salary          : 45000  
-----
```

Enter Teacher's New Name : SHUBHAMKUMAR JHA

Enter New Salary(in Rs.) : 47000

Enter New Mobile No. : 7383988791

Enter New Email ID : shubham@gmail.com

Teacher Details Updated Successfully !!

Screen Shorts

```
+-----+  
| Delete Teacher Details |  
+-----+
```

Enter Teacher's ID to Delete : 104

Teacher ID	:	104
Name	:	TEST
Department	:	BCA
Date of Joining	:	22-12-2023
Mobile No.	:	4545456512
Email-id	:	test@gmail.com
Salary	:	12000

Do you want to delete this teacher ? (Y/N): y

Teacher details deleted for Teacher Id 104 .

Screen Shorts

```
+-----+
|           Add New Student           |
+-----+

(1) MCA
(2) BCA

Select Course From Above List : 1

Selected Course      : MCA
Student Name         : KHUSHAL SOLANKI
Email                : khushal@gmail.com
Mobile              : 7894512000
Address              : UTRAN SURAT
Date of Birth(dd-mm-yyyy) : 01-01-2003

-----

Student added successfully !!

Student Login ID   : khushal@gmail.com
Default Password   : student

-----
```

Screen Shorts

Student List

- (1) MCA
- (2) BCA

Select Course From Above List : 1

Student List

Enrollment No. : 230000001
Name : SHUBHAM JHA

Date of Birth : 07-10-2003
Department : MCA
Mobile No. : 7383988791
Email-id : shubham@gmail.com
Fees Status : Unpaid
Address : DINDOLI SURAT

Enrollment No. : 230000002
Name : KHUSHAL SOLANKI

Date of Birth : 01-01-2003
Department : MCA
Mobile No. : 7894512000
Email-id : khushal@gmail.com
Fees Status : Unpaid
Address : UTRAN SURAT

Enrollment No. : 230000003
Name : RUCHIT SHAH

Date of Birth : 10-12-2004
Department : MCA
Mobile No. : 8745125478
Email-id : ruchit@gmail.com
Fees Status : Unpaid
Address : VARACHHA SURAT

Total Student : 3

List of Students As on : 22-12-2023 17:34

Student List

- (1) MCA
- (2) BCA

Select Course From Above List : 2

Student List

Enrollment No. : 230000004
Name : RAHUL SINGH

Date of Birth : 01-01-2002
Department : BCA

Mobile No. : 4875454845
Email-id : rahul@gmail.com
Fees Status : Unpaid
Address : GODADARA SURAT

Enrollment No. : 230000005
Name : YOGESH PATIL

Date of Birth : 01-10-2005
Department : BCA

Mobile No. : 9874545454
Email-id : yogesh@gmail.com
Fees Status : Unpaid
Address : UDHNA SURAT

Enrollment No. : 230000006
Name : YASH JAIN

Date of Birth : 01-01-2001
Department : BCA

Mobile No. : 7845154578
Email-id : yash@gmail.com
Fees Status : Unpaid
Address : VESU SURAT

Total Student : 3

List of Students As on : 22-12-2023 17:38

Screen Shorts

```
+-----+
| Edit Student Detail |
+-----+

Enter Enrollment No. : 230000001

Enrollment No. : 230000001
Name : SHUBHAM JHA

Date of Birth : 07-10-2003
Department : MCA
Mobile No. : 7383988791
Email-id : shubham@gmail.com
Fees Status : Unpaid
Address : DINDOLI SURAT

-----
Enter Student's Updated Name : SHUBHAM KUMAR

Enter New Mobile No. : 7383988791
Enter New Email ID : shubham@gmail.com
New Address : DINDOLI SURAT GJ

Student Details Updated Successfully !!

Press any key for return to main menu... |
```

```
+-----+
| Edit Student Detail |
+-----+

Enter Enrollment No. : 230000006

+-----+
| Sorry ! No Student details found for above Enrollment No |
+-----+

Press any key for return to main menu... |
```

Screen Shorts

```
+-----+
| Search Student Details |
+-----+

(1) Search By Enrollment No.
(2) Search By Student Name

Select Option From Above : 1

Enter Enrollment No : 2300000001

Enrollment No. : 2300000001
Name           : SHUBHAM KUMAR

Date of Birth   : 07-10-2003
Department      : MCA
Mobile No.      : 7383988791
Email-id        : shubham@gmail.com
Password        : student
Fees Status     : Unpaid
Address         : DINDOLI SURAT GJ

-----

Press any key for return to main menu... |
```

```
+-----+
| Search Student Details |
+-----+

(1) Search By Enrollment No.
(2) Search By Student Name

Select Option From Above : 2

Enter Student Name : SHUBHAM KUMAR

Enrollment No. : 2300000001
Name           : SHUBHAM KUMAR

Date of Birth   : 07-10-2003
Department      : MCA
Mobile No.      : 7383988791
Email-id        : shubham@gmail.com
Password        : student
Fees Status     : Unpaid
Address         : DINDOLI SURAT GJ

-----

Press any key for return to main menu... |
```

Screen Shorts

```
+-----+
| Delete Student Details |
+-----+
```

Enter Enrollment No. : 2300000006

Enrollment No.	:	2300000006
Name	:	YASH JAIN
Date of Birth	:	01-01-2001
Department	:	BCA
Mobile No.	:	7845154578
Email-id	:	yash@gmail.com
Fees Status	:	Unpaid
Address	:	VESU SURAT

Do you want to delete this Student ? (Y/N): y

Student details deleted with Enrollment No. 2300000006 .

Press any key for return to main menu... |

Screen Shorts

```
+-----+
|           Fees Payment           |
+-----+

Enter Enrollment No. : 230000001

-----
Enrollment No.      : 230000001
Name                 : SHUBHAM KUMAR

Department          : MCA
Fees Status          : Unpaid

-----
Do You Want to Deposit Fees for Above Student ? (Y/N): Y

Fees Deposited Successfully !!

Press any key for return to main menu... |
```

```
+-----+
|           Fees Payment           |
+-----+

Enter Enrollment No. : 230000001

-----
Enrollment No.      : 230000001
Name                 : SHUBHAM KUMAR

Department          : MCA
Fees Status          : Paid

-----
Fees Already Paid

Press any key for return to main menu... |
```

Screen Shorts

```
+-----+
|      Fees Pending List      |
+-----+

(1) MCA
(2) BCA

Select Course From Above List : 1

-----
Enrollment No      Name
-----

2300000002          KHUSHAL SOLANKI

2300000003          RUCHIT SHAH

2300000007          NARENDRA MODI

-----

Total Students : 3

Press any key for return to main menu...
```

Screen Shorts

```
=====
===== STUDENT MANAGEMENT SYSTEM =====
=====
```

```
+-----+
| UPDATE ADMIN CREDENTIALS |
+-----+
```

Enter new username: admin

Enter new password: *****

Admin account updated successfully! Press any key to continue...|

Screen Shorts

```
=====
===== STUDENT MANAGEMENT SYSTEM =====
=====

+-----+
| TEACHER LOGIN |
+-----+

Enter Email-id : mayank@gmail.com

Enter Password : *****|
```

```
=====
===== STUDENT MANAGEMENT SYSTEM =====
=====

Welcome, MAYANK JAIN

+-----+
| TEACHER DASHBOARD |
+-----+
| No. | Options |
+-----+
| 1 | View Profile |
| 2 | Add Student Marks |
| 3 | Change Password |
| 4 | Exit |
+-----+

Please enter your choice : 1
```

Screen Shorts

```
=====
===== STUDENT MANAGEMENT SYSTEM =====
=====

+-----+
|  PROFILE  |
+-----+

Welcome, MAYANK JAIN

ID          : 101
Name        : MAYANK JAIN

Department  : MCA
Date of Joining : 22-12-2023

Mobile No.   : 9487545454

Email-id     : mayank@gmail.com

Salary      : 55000

-----

Press any key for return to main menu...
```

Screen Shorts

```
+-----+
|  ADD STUDENT MARKS  |
+-----+

Enter Enrollment No : 2300000003

-----
Enrollment No. : 2300000003
Name           : RUCHIT SHAH
Department     : MCA
-----

                MARKS -----
DATA STRUCTURE : N/A
JAVA TECHNOLOGY : N/A
PYTHON         : N/A
MATHEMATICS    : N/A
AGILE METHODOLOGY : N/A
PROJECT        : N/A
-----

Do you want to proceed ? (Y/N): y

Enter Marks for below subjects(out of 100)

DATA STRUCTURE : 65
JAVA TECHNOLOGY : 62
PYTHON         : 72
MATHEMATICS    : 45
AGILE METHODOLOGY : 81
PROJECT        : 91

Marks updated successfully

Press any key for return to main menu... |
```

Screen Shorts

```
+-----+  
|  ADD STUDENT MARKS  |  
+-----+
```

Enter Enrollment No : 230000003

```
-----  
Enrollment No. : 230000003  
Name           : RUCHIT SHAH  
Department     : MCA
```

```
----- MARKS -----  
DATA STRUCTURE      : 65  
JAVA TECHNOLOGY     : 62  
PYTHON              : 72  
MATHEMATICS         : 45  
AGILE METHODOLOGY   : 81  
PROJECT             : 91  
-----
```

Do you want to proceed ? (Y/N): n

Student marks not updated....

Press any key for return to main menu... |

Screen Shorts

```
=====
===== STUDENT MANAGEMENT SYSTEM =====
=====

+-----+
| ADD STUDENT MARKS |
+-----+

Enter Enrollment No : 2300000004

+-----+
| Sorry ! Above Enrollment No. doesn't exist in your Department |
+-----+

Press any key for return to main menu... |
```

```
=====
===== STUDENT MANAGEMENT SYSTEM =====
=====

+-----+
| CHANGE PASSWORD |
+-----+

Welcome, MAYANK JAIN

Enter new password: *****

Password Updated Successfully !!

Press any key for return to main menu... |
```


Screen Shorts

```
=====
===== STUDENT MANAGEMENT SYSTEM =====
=====

+-----+
| STUDENT LOGIN |
+-----+

Enter Email-id : shubham@gmail.com
Enter Password : *****|
```

```
=====
===== STUDENT MANAGEMENT SYSTEM =====
=====

Welcome, SHUBHAM KUMAR

+-----+
| STUDENT DASHBOARD |
+-----+
| No. | Options |
+-----+
| 1 | View Profile |
| 2 | View Result |
| 3 | Change Password |
| 4 | Exit |
+-----+

Please enter your choice : 1|
```

Screen Shorts

```
=====
===== STUDENT MANAGEMENT SYSTEM =====
=====

+-----+
| PROFILE |
+-----+

Welcome, SHUBHAM KUMAR

Enrollment No. : 2300000001

Name : SHUBHAM KUMAR

Department : MCA

Date of Birth : 07-10-2003

Mobile No. : 7383988791

Email-id : shubham@gmail.com

Address : DINDOLI SURAT GJ

-----

Press any key for return to main menu... |
```

Screen Shorts

```
=====
===== STUDENT MANAGEMENT SYSTEM =====
=====

+-----+
|  RESULT  |
+-----+

-----
ENROLLMENT No. : 230000001      COURSE : MCA
NAME           : SHUBHAM KUMAR
DOB            : 07-10-2003
-----

SUBJECTS                TOTAL MARKS                OBTAINED MARKS
-----
DATA STRUCTURE          100                          75
JAVA TECHNOLOGY         100                          82
PYTHON                  100                          71
MATHEMATICS             100                          94
AGILE METHODOLOGY       100                          65
PROJECT                 100                          92
-----
TOTAL                   600                          479
-----
PERCENTAGE              79.83 %
-----

Press any key for return to main menu... |
```

Screen Shorts

```
=====
===== STUDENT MANAGEMENT SYSTEM =====
=====

+-----+
|  RESULT  |
+-----+

-----
ENROLLMENT No. : 230000002      COURSE : MCA
NAME           : KHUSHAL SOLANKI
DOB            : 01-01-2003

-----

SUBJECTS          TOTAL MARKS          OBTAINED MARKS
-----
DATA STRUCTURE      100                N/A
JAVA TECHNOLOGY     100                N/A
PYTHON              100                N/A
MATHEMATICS         100                N/A
AGILE METHODOLOGY   100                N/A
PROJECT             100                N/A
-----
TOTAL              600                N/A
-----

PERCENTAGE                      RESULT NOT DECLARED
-----

Press any key for return to main menu... |
```

Screen Shorts

```
=====
===== STUDENT MANAGEMENT SYSTEM =====
=====
```

```
+-----+
|  RESULT  |
+-----+
```

```
-----
ENROLLMENT No. : 230000004          COURSE : BCA
```

```
NAME      : RAHUL SINGH
DOB       : 01-01-2002
```

```
-----
SUBJECTS          TOTAL MARKS          OBTAINED MARKS
-----
WEB DEVELOPMENT          100              12
C LANGUAGE               100              21
VB .NET                  100              35
STATISTICS               100              25
DATA STRUCTURE           100              38
PROJECT                  100              29
-----
TOTAL                  600              160
-----
PERCENTAGE                                26.67 % [FAIL]
-----
```

```
Press any key for return to main menu...
```

Screen Shorts

```
=====
===== STUDENT MANAGEMENT SYSTEM =====
=====

+-----+
| CHANGE PASSWORD |
+-----+

Welcome,  SHUBHAM KUMAR

Enter new password: *****

Password Updated Successfully !!

Press any key for return to main menu...
```

Advantages

- ❖ **Time and Cost Savings:** : Reduces the time and costs associated with manual record-keeping and administrative tasks, allowing institutions to allocate resources more efficiently.
- ❖ **Efficient Grade Management :** In this system student can easily view their marks by login and password which is updated by teachers or faculties.
- ❖ **Improved Accessibility:** Provides easy access to information for all admin, allowing faculties and students to track any changes like profile, marks etc.

Limitations

- ❖ **User-Interface** : Complex-user interface may lead to increased difficulty in acceptance of the student management application among the institute staff.
- ❖ **User Authentication and Authorization** : Implementing robust user authentication and authorization mechanisms is essential. If not properly implemented, there is a risk of unauthorized access to sensitive information.
- ❖ **Scalability Issues**: As the student management system grows and the amount of data increases, managing scalability can be challenging, especially without automatic memory management.

References

- ❖ <https://www.cprogramming.com/>
- ❖ <https://www.w3schools.com/c/index.php>
- ❖ <https://www.geeksforgeeks.org/c-programming-language/>



Thank You