BCA 0217

PERFORMAX

A PERFORMANCE ANALYSIS TOOL

PERFOMAX

A Performance Analysis Tool

A PROJECT REPORT SUBMITTED TO GOA UNIVERSITY

IN PARTIAL FULFILLMENT OF THE REQUIREMENT

FOR THE DEGREE OF BCA

BY

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Goa Multi - Faculty College

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ACKNOWLEDGEMENT

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We would like to thank **Mr. Pratik Korkankar** and **Mr. Sandesh Gaonkar** for providing us with support and motivation and consistently co-operated with us in the course of this project.

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INTRODUCTION

INTRODUCTION

The performance analysis tool is creating in such a way that it serves an authority to the administrator in managing all the activities on a single platform. Result management system project is to maintain the information about student result, this student performance analysis tool project is creating in php and MySQL. The main aim of this project is to store the result scores of student on their results in the form of report cards. This system is mainly used for educational institutes like colleges to evaluate the performances of result for students, and also generate performance reports etc. In student result management system project report is done for academic semester subject by calculating total marks for[class and performance of student in every subject can be processed. The main aim of this project is to store the result scores of students, process the scores in user-defined way and produce their results in the form of report cards. This project Intends different types of forms. It can help to store the result score and also generate performance reports such as progress reports. A well-conceived and implemented automated performance analysis tool can reduce the costs of handling the paperwork associated with record keeping. An effective automated result management system should provide the information required on request, easily, and without burdensome trial-and-error searching. performance analysis tool is extremely important which has many advantages to educational sector: Manage multiple subject departments from a single computer. Effective use of time saving, Cost effective, Charges are one time only.

EXISTING SYSTEM

Existing System

The organization needs a system, which is not only efficient, reliable and maintainable but also available to the every person. The system should not be machine dependent and the persons can access it from anywhere in the world through the Internet. It should also contain some utilities & facilities.

Our college is using tradition method of entering data manually, and prepare result on Microsoft excel.

It also use hardcopy to store each student data which is time consuming and require more space and faculty staff.

PROPOSED SYSTEM

PROPOSED SYSTEM

In our project we are giving the information globally. it is a powerful tool which allows the students and parents to know the results without coming to College. Another key feature of the software is that it provides information of the student along with internal marks, Percentage of every Semester result, and overall class semester result also the faculty of that particular subject can see overall class's subject result.

- Administration personally can access the system and make changes as per requirement in any time.
- User can use the system from any part of the world with quick access.
- User can get their results on single Click.

OPERATING ENVIRONMENT

Hardware and Software

Operating Environment –Hardware and Software

1) Hardware Requirement:

Server Side

1) Machines :Pentium Based Machines (P-3 or Later)

Windows NT/MS Server 2003 Installed.

2) Ram : 1 GB Ram

3) Hard Drive : At least 10 GB HDD space.

Client Side

1) Machines : Pentium based machines & Operates on Windows XP.

2) Ram : 512MB Ram

2) Software Requirement:

Server Side

Windows NT /Windows 2003 Server)

2) Depend on the requirement Software can be used .net, HTML.

3) Internet Explorer any browser can work eg. Google,firefox etc.

Client Side

1)Windows XP

2) Internet Explorer any browser can work eg. Google,firefox etc.

TOOLS USED IN DEVELOPMENT.

Tools used in development

Frontend software tools

- Word pad
- Hypertext markup language (HTML)

HTML is used to create and design a web page.

Backend software tools

- WAMP server

PHP needs a server to open. The use of WAMP server is to provide a logical server for checking the different codes used and the database connections made in the project.

- PHP hypertext preprocessor (server side scripting language)

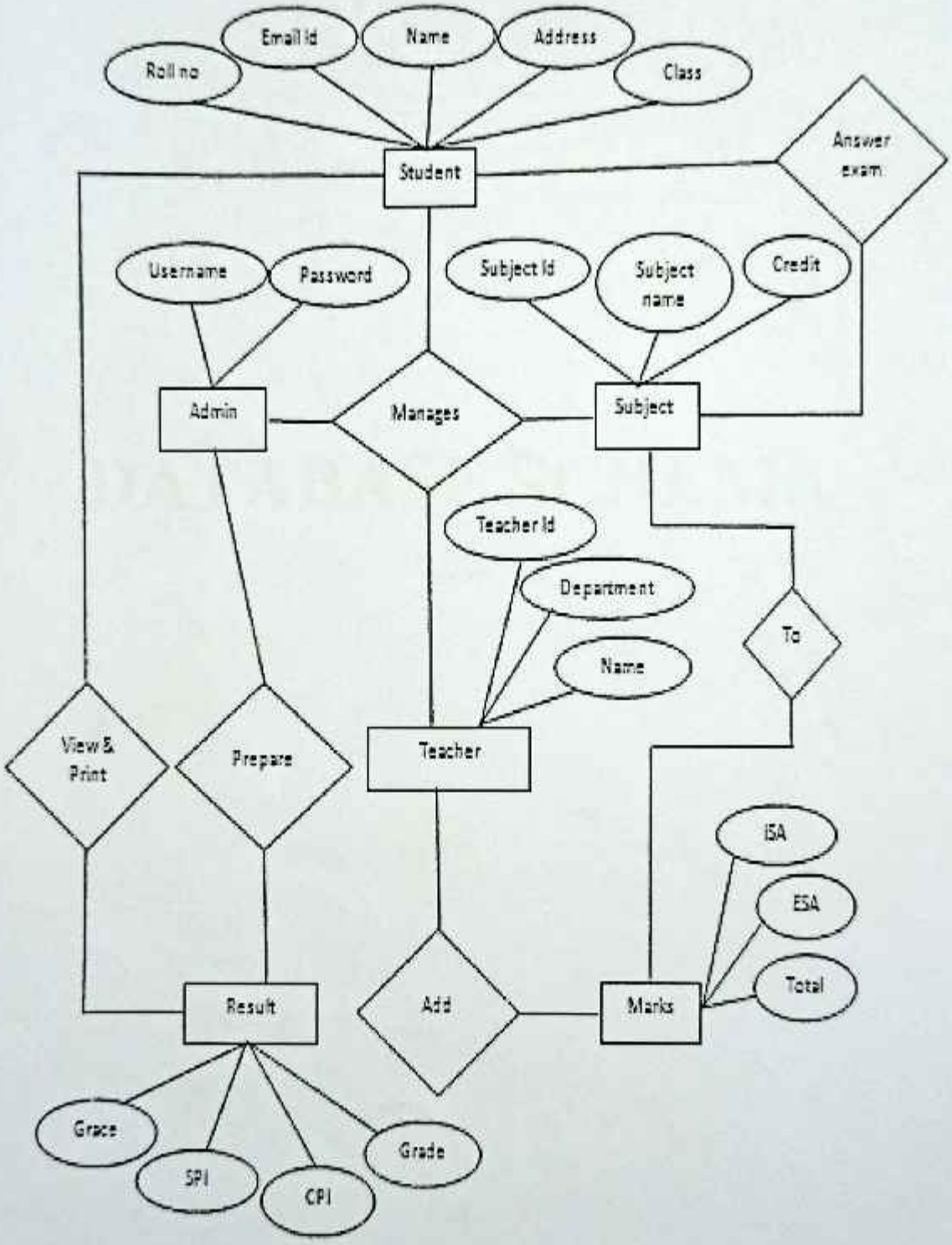
PHP is open source software. It is a mixture of various languages like java, c and Perl

- Microsoft office Access /excel

It can create and drop databases, create /drop/alter tables, delete /edit/add fields, and manages keys on fields.

ENTITY-RELATIONSHIP DIAGRAM

ENTITY-RELATIONSHIP DIAGRAM



DATABASE SCHEMA

* denote Primary Key

denote Foreign Key

ADMIN

Symbol	Attribute	Type	Description
*	A_name	Varchar	It stores name of admin
	A_password	Varchar	This store password

STUDENT

Symbol	Attribute	Type	Description
*	S_Rollno	Int	It stores student rollno. It is primary key of table customer
	S_name	Varchar	It stores name of Student
	S_Class	Int	It stores class of Student
	S_address	Varchar	It stores address of Student
	S_contact	Int	It stores contact of Student

SUBJECT

Symbol	Attribute	Type	Description
*	S_id	Int	It stores subject id from Subject table. Also a foreign key
	S_Name	Varchar	It Stores name of subject
	S_Credit	Int	It stores the Credit of subject

TEACHER

Symbol	Attribute	Type	Description
#	t_id	Int	This stores Teacher id in other tables
	t_name	Varchar	I it stores name of Teacher
	t_department	Varchar	It stores department of Teacher

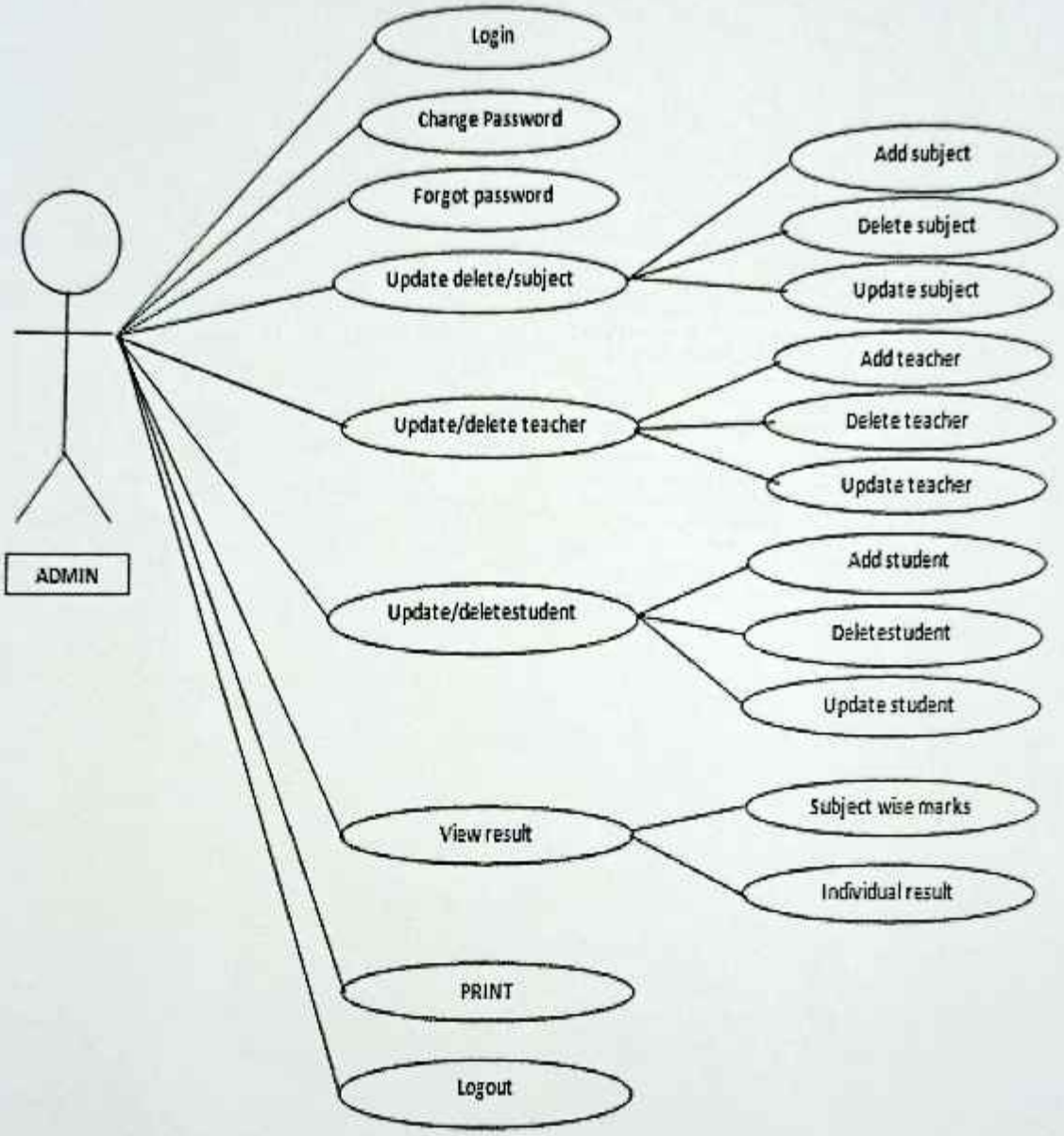
Marks

Symbol	Attribute	Type	Description
*	m_ISA	Int	It stores student ISA marks.
	m_ESA	Int	It stores student ESA marks.
	m_totalmarks	Int	It stores student total marks.

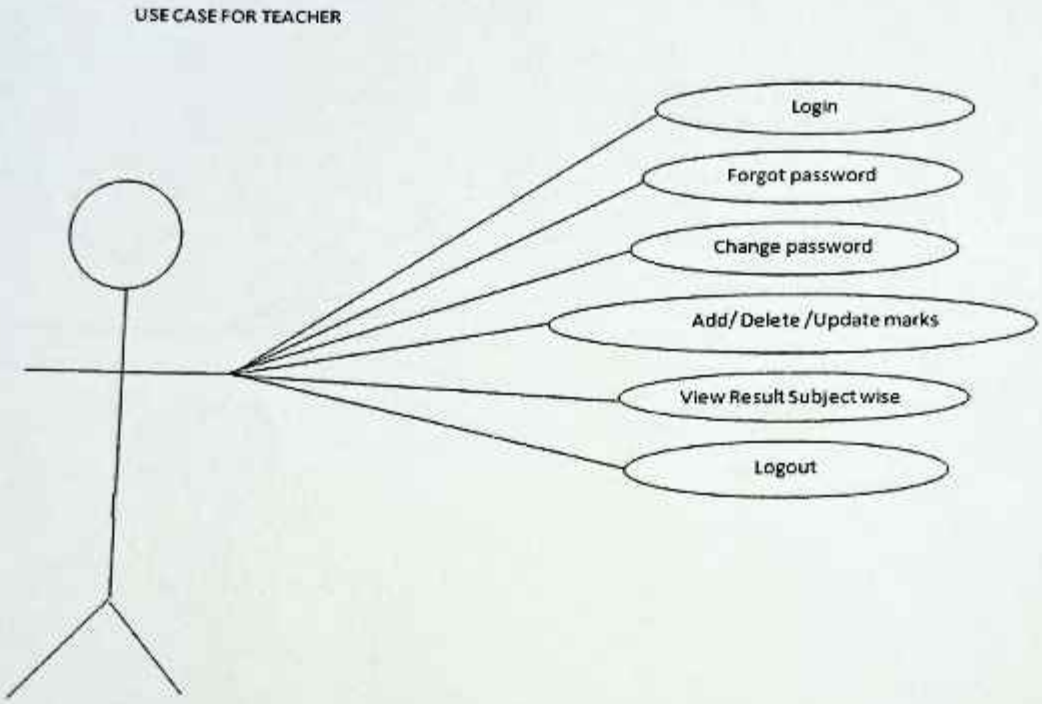
RESULT

Symbol	Attribute	Type	Description
#	r_SPI	Int	This stores Student SPI.
	r_CPI	int	It stores Student CPI.
	r_Grace	int	It stores Student grace marks.
	r_Grade	Varchar	It stores Student grades.

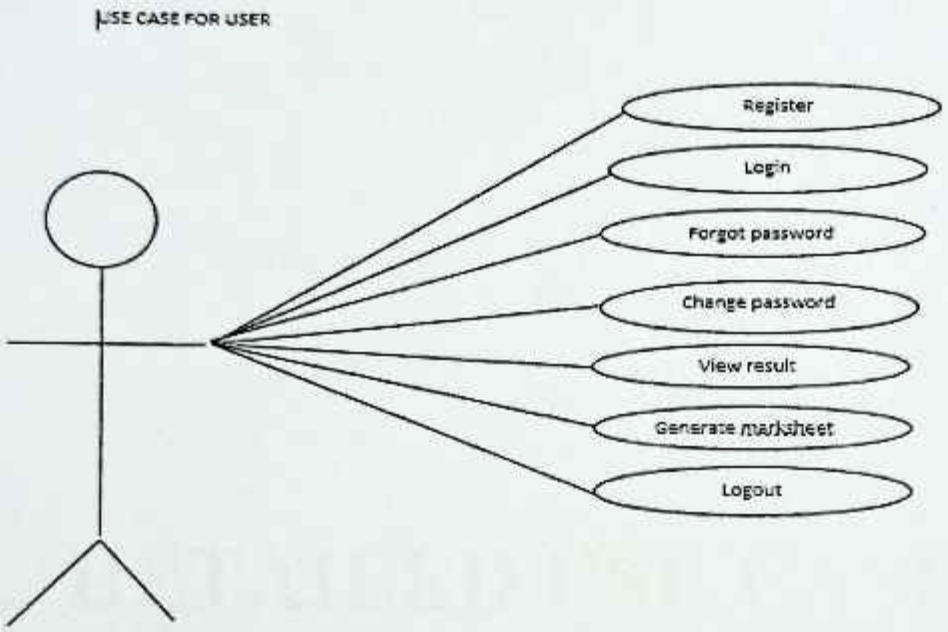
USE CASE FOR ADMIN



USE CASE FOR TEACHER



USE CASE FOR USER



DETAILED USE CASES

- Use case for process Login

Use case Name	:-Process login
Scope	:- PERFOMAX– Performance Analysis Tool
Level	:- User goal
Primary Actor	:-Administrator/Operator
Stakeholder & interest	:- Administrator wants to login successfully.
Pre-condition	:-Administrator must have valid Username &Password.
Post-condition	:- Administrator logs in successfully.

Main Screen Scenario (MSS):-

1. Administrator clicks on login button
2. System displays login page.
3. Administrator clicks on submit button.
4. System verifies username and password.
5. Administrator logs in successfully and displays next page

Extension:-

- Handle empty fields.
- Handles invalid login.

- Use case for Change Password

Use case Name	:- Change password
Scope	:- PERFOMAX– Performance Analysis Tool
Level	:- User goal
Primary Actor	:- Administrator/Operator
Stakeholder & interest	:- User wants to changes password.
Pre-condition	:- User should be registered.
Post-condition	:- User changes password.

Main Screen Scenario (MSS) :-

1. System displays change password form.
2. User enters the new and confirm password.
3. System verifies the user details.
4. User clicks on change password button.
5. System displays the Login page.

Extension:-

- Administrator /Operator not registered.
- Blank fields.

➢ Use case for Forgot Password

Use case Name	:- Forgot password
Scope	:- PERFOMAX– Performance Analysis Tool
Level	:- User goal
Primary Actor	:- Administrator/Operator
Stakeholder & interest	:- User forgot the password while logging in.
Pre-condition	:- User should be registered.
Post-condition	:- User changes the password.

Main Screen Scenario (MSS):-

1. User clicks on login button.
2. System display login form.
3. User clicks on forgot password.
4. System displays forgot password form.
5. User enters user details.
6. System verifies the details.
7. User clicks on submit button.
8. System displays the login form.

Extension:-

- User not registered.
- Blank fields.

➢ Use case for Add Teacher

Use case Name	:- Add Teacher
Scope	:- PERFOMAX -Performance Analysis Tool
Level	:- User goal
Primary Actor	:- Admin
Stakeholder & interest	:-Admin wants to add new teacher successfully.
Pre-condition	:- Admin should have valid teacher details.
Post-condition	:- Admin added new teacher successfully.

Main Screen Scenario (MSS):-

1. Admin logs in and then clicks on Add teacher button.
2. Systems display the Add teacher form.
3. Admin fills all the teacher details and then clicks on add teacher button.
4. System displays the message that the teacher is added successfully.

Extension : -

- Blank fields

➢ Use case for Delete Teacher

Use case Name : - Delete Teacher

Scope :- PERFOMAX– Performance Analysis Tool

Level :- User goal

Primary Actor :- Admin

Stakeholder & interest :- Admin deletes an existing teacher who has shifting subject or leaving the subject.

Pre-condition :- The teacher should exist .

Post-condition :- The teacher is deleted.

Main Screen Scenario (MSS):-

1. Admin logs in and then clicks on Delete teacher button.
2. Systems display the existing teacher page.
3. Admin selects the teacher to delete and then clicks on Delete teacher button.
4. System displays the message that the teacher is deleted successfully.

Extension :-

- The teacher does not exist.

➢ Use case for Update Teacher

Use case Name	:- Update teacher
Scope	:- PERFOMAX– Performance Analysis Tool
Level	:- User goal
Primary Actor	:- Admin
Stakeholder & interest	:- Admin updates an existing teacher.
Pre-condition	:- The teacher should exist .
Post-condition	:- The teacher is updated.

Main Screen Scenario (MSS):-

1. Admin logs in and then clicks on Update teacher button.
2. Systems display the Update teacher page.
3. Admin selects the teacher to update and then clicks on fetch details button.
4. System displays teacher details.
5. Admin edits the teacher details and then clicks on update button.
6. System displays the message that the teacher is updated successfully.

Extension :-

- The teacher does not exist

➢ Use case for Add student

Use case Name	:- Add student
Scope	:- PERFOMAX– Performance Analysis Tool
Level	:- User goal
Primary Actor	:- Admin
Stakeholder & interest	:-Admin wants to add new student successfully.
Pre-condition	:- Admin should have valid student details.
Post-condition	:- Admin added new student successfully.

Main Screen Scenario (MSS):-

1. Admin logs in and then clicks on Add student button.
2. Systems display the Add student form.
3. Admin fills all the student details and then clicks on add student button.
4. System displays the message that the student is added successfully.

Extension : -

- Blank fields

➢ Use case for Delete student

Use case Name : - Delete student

Scope :- PERFOMAX– Performance Analysis Tool

Level :- User goal

Primary Actor :- Admin

Stakeholder & interest :- Admin deletes an existing student who has completed a course

Pre-condition :- The student should exist.

Post-condition :- The student is deleted.

Main Screen Scenario (MSS):-

1. Admin logs in and then clicks on Delete student button.
2. Systems display the existing student page.
3. Admin selects the student to delete and then clicks on Delete student button.
4. System displays the message that the student is deleted successfully.

Extension:-

- The student does not exist.

➢ Use case for Update student

Use case Name	:-Update student
Scope	:-PERFOMAX– Performance Analysis Tool
Level	:-User goal
Primary Actor	:-Admin
Stakeholder & interest	:-Admin updates an existing student.
Pre-condition	:- The student should exist.
Post-condition	:- The student is updated.

Main Screen Scenario (MSS):-

1. Admin logs in and then clicks on Update student button.
2. Systems display the Update student page.
3. Admin selects the student to update and then clicks on fetch details button.
4. System displays student details.
5. Admin edits the student details and then clicks on update button.
6. System displays the message that the student is updated successfully.

Extension:-

- The student does not exist

➢ Use case for view individual result

Use case Name	: - view individual result
Scope	: -PERFOMAX– Performance Analysis Tool
Level	: - User goal
Primary Actor	:-Admin/user
Stakeholder & interest	: - Admin/user wants to view individual result .
Pre-condition	:- Result exists.
Post-condition	:- Individual Result are viewed successfully.

Main Screen Scenario (MSS):-

1. Admin/user logs in.
2. Admin/user clicks on view individual results.
3. Admin select the student whose result he want to view
4. System display an individual result.

Extension:-

- Invalid login.
- Result is not generated/exist

➢ Use case for view subject-wise marks

Use case Name	: - view subject-wise marks
Scope	: -PERFOMAX– Performance Analysis Tool
Level	: - User goal
Primary Actor	:- Admin/teacher
Stakeholder & interest	: - Admin/teacher wants to view subject-wise marks.
Pre-condition	:- subject marks exists.
Post-condition	:- subject-wise marks viewed successfully.

Main Screen Scenario (MSS):-

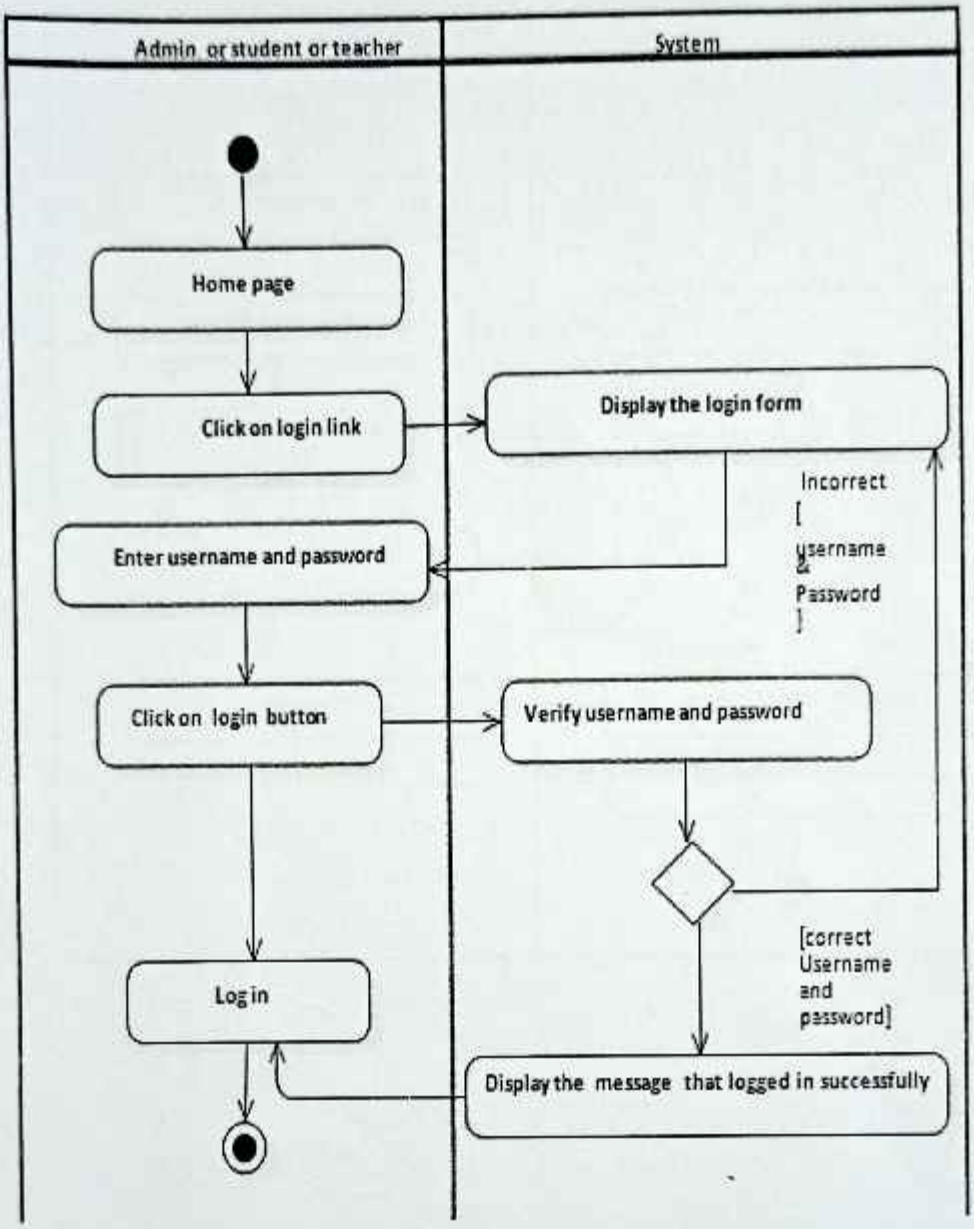
1. Admin/teacher logs in.
2. Admin select the desired class and semester which result he want to view
3. Admin/teacher clicks on view subject-wise marks
4. System display an subject-wise marks.

Extension:-

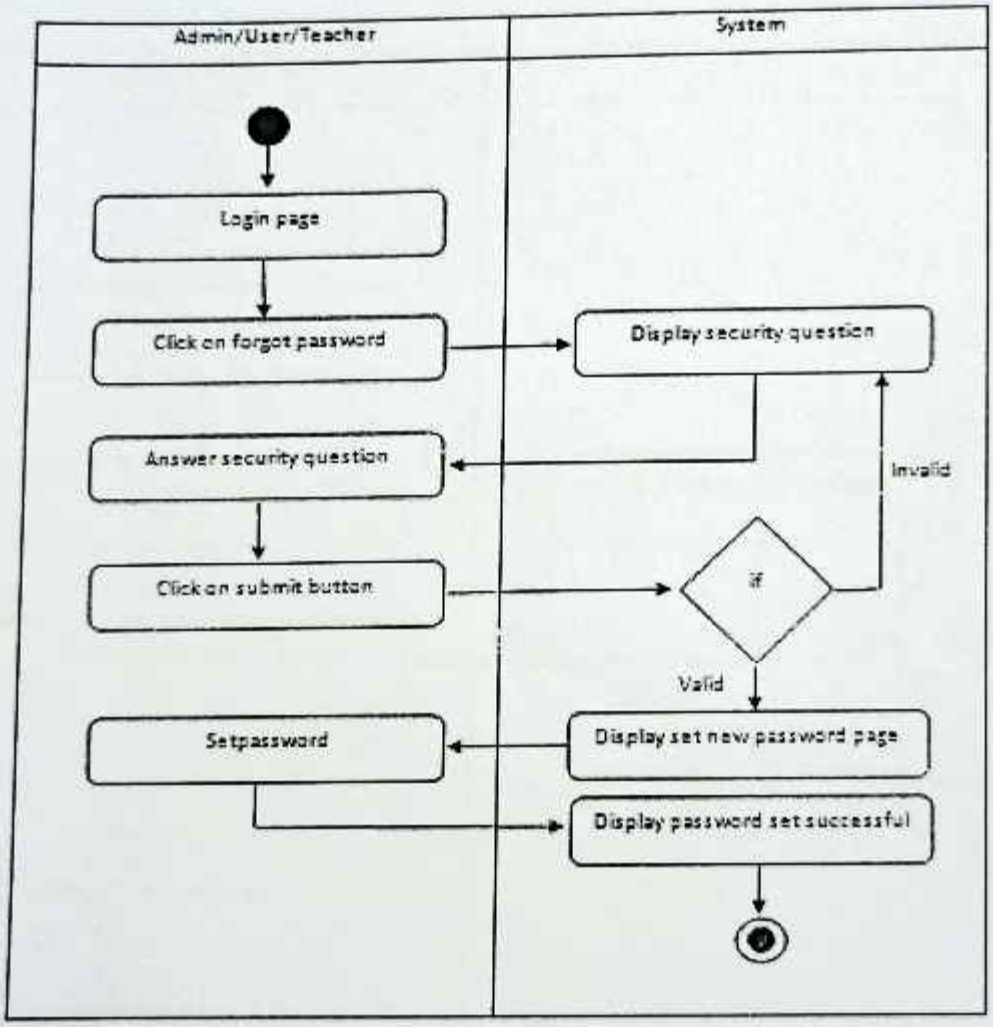
- Invalid login .
- Result is not generated/exist

ACTIVITY DIAGRAMS

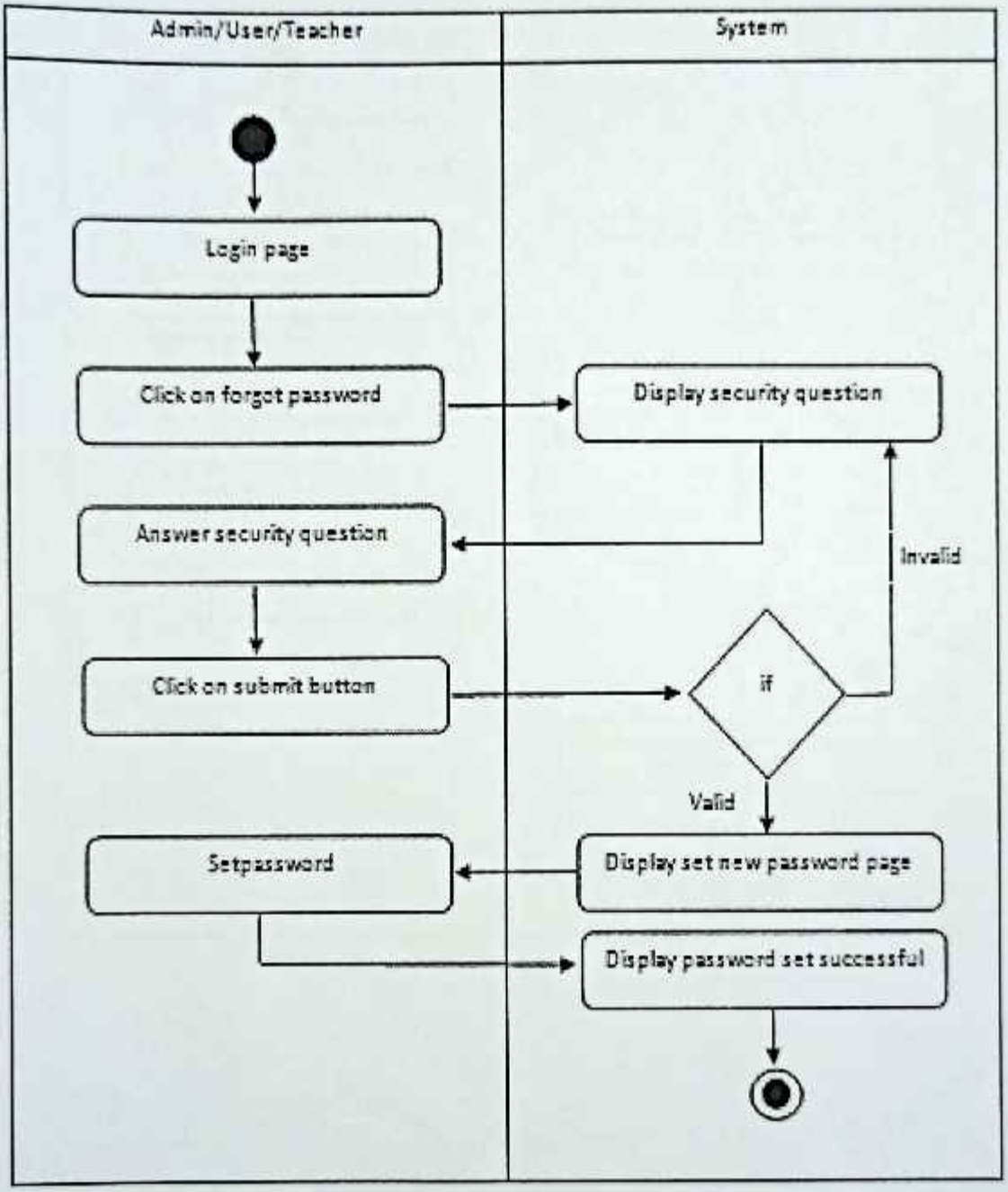
LOGIN


Admin or student or teacher
System
Home page
Click on login link
Display the login form
Incorrect
[
username
&
Password
]
Enter username and password
Click on login button
Verify username and password
[correct
Username
and
password]
Log in
Display the message that logged in successfully

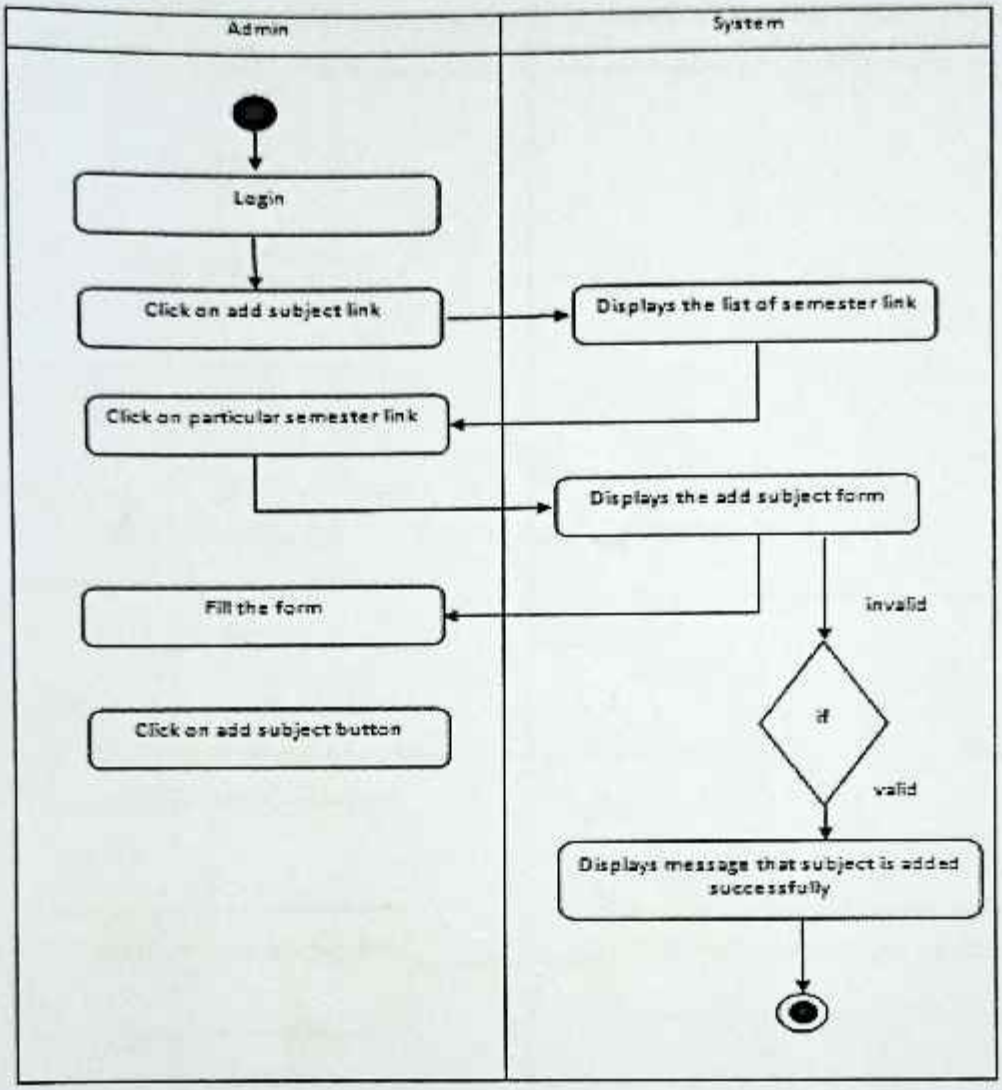
CHANGE PASSWORD



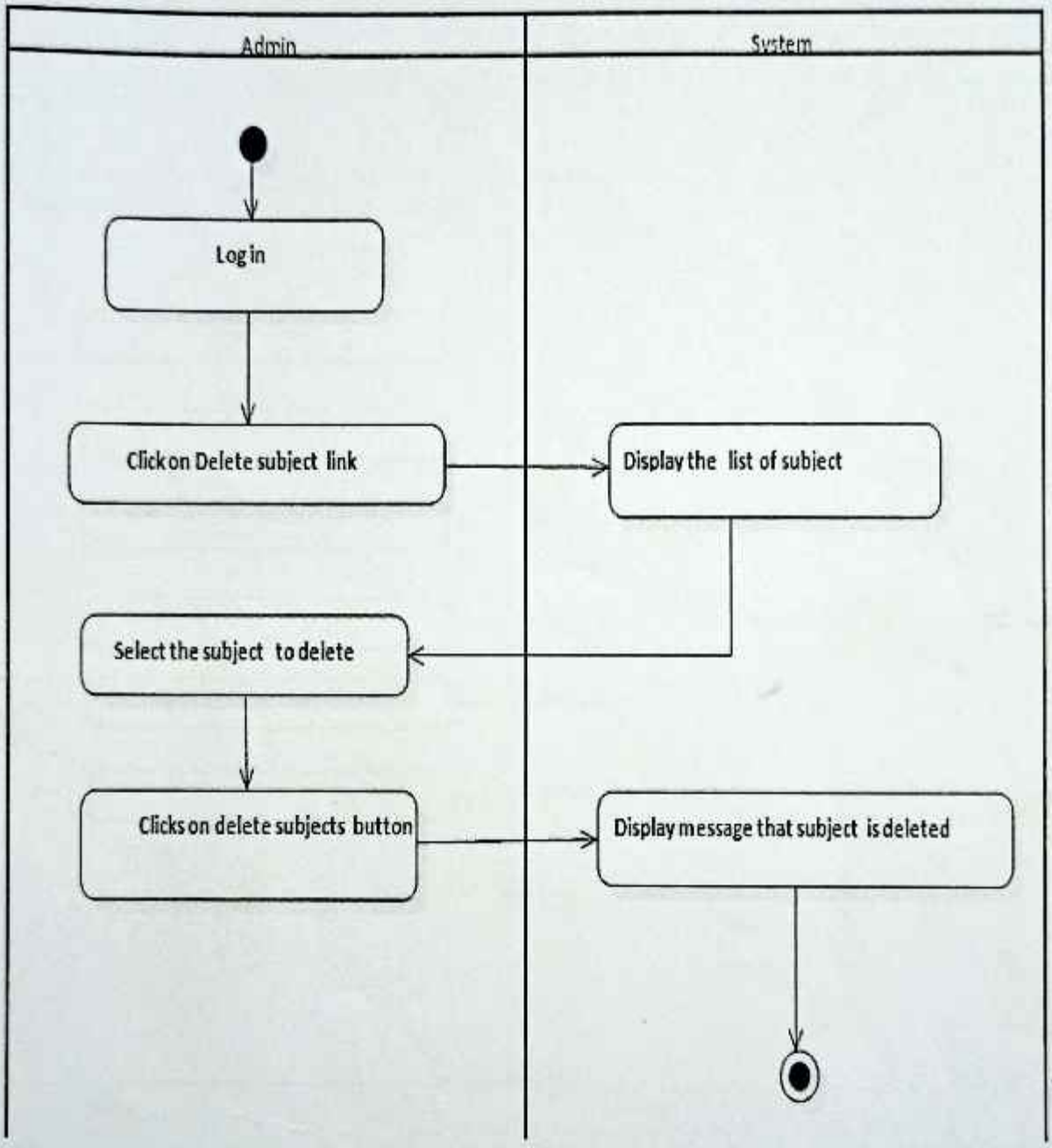
FORGOT PASSWORD



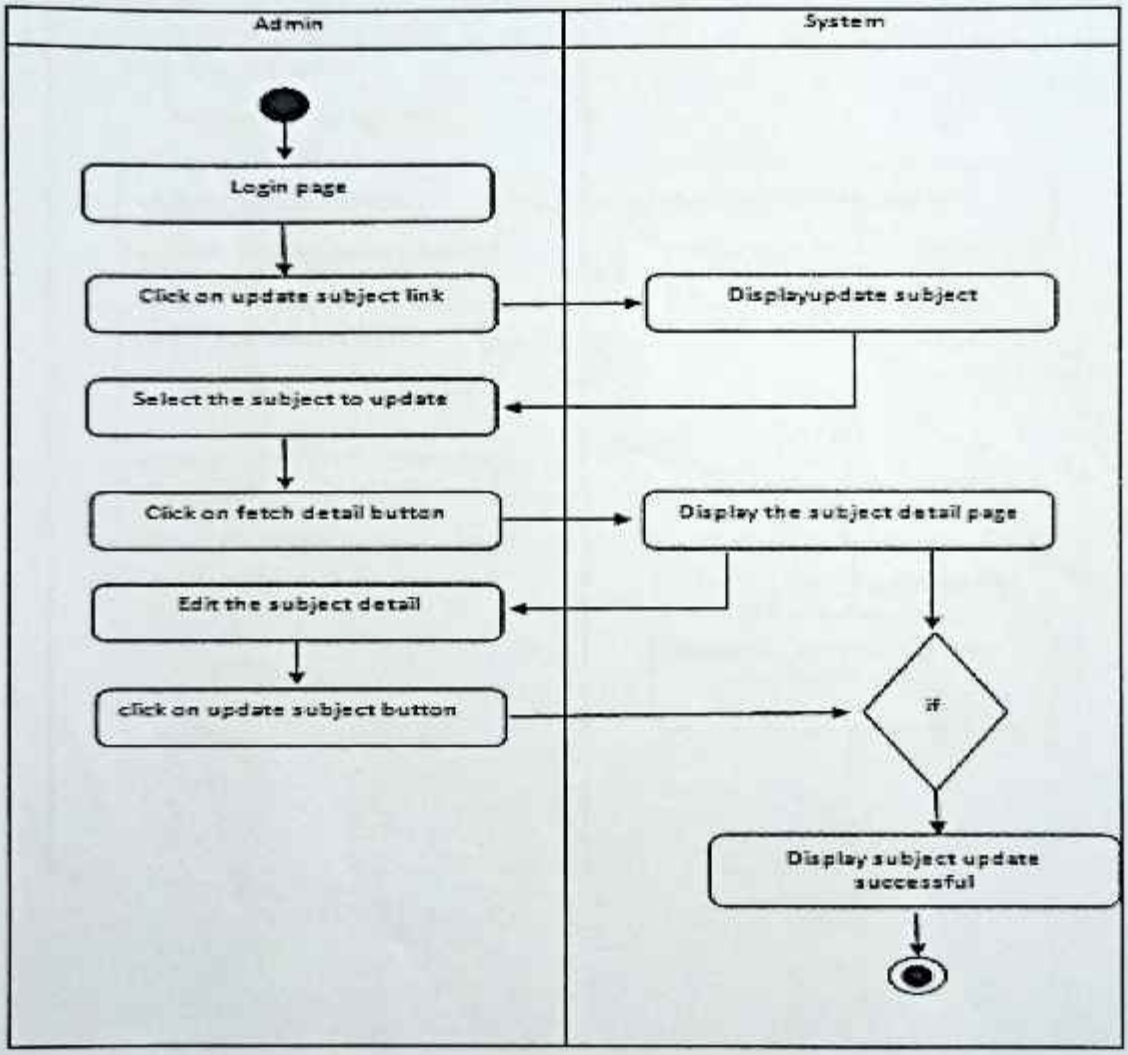
ADD SUBJECT


Admin
System
Login
Click on add subject link
Displays the list of semester link
Click on particular semester link
Displays the add subject form
Fill the form
invalid
Click on add subject button
if
valid
Displays message that subject is added successfully

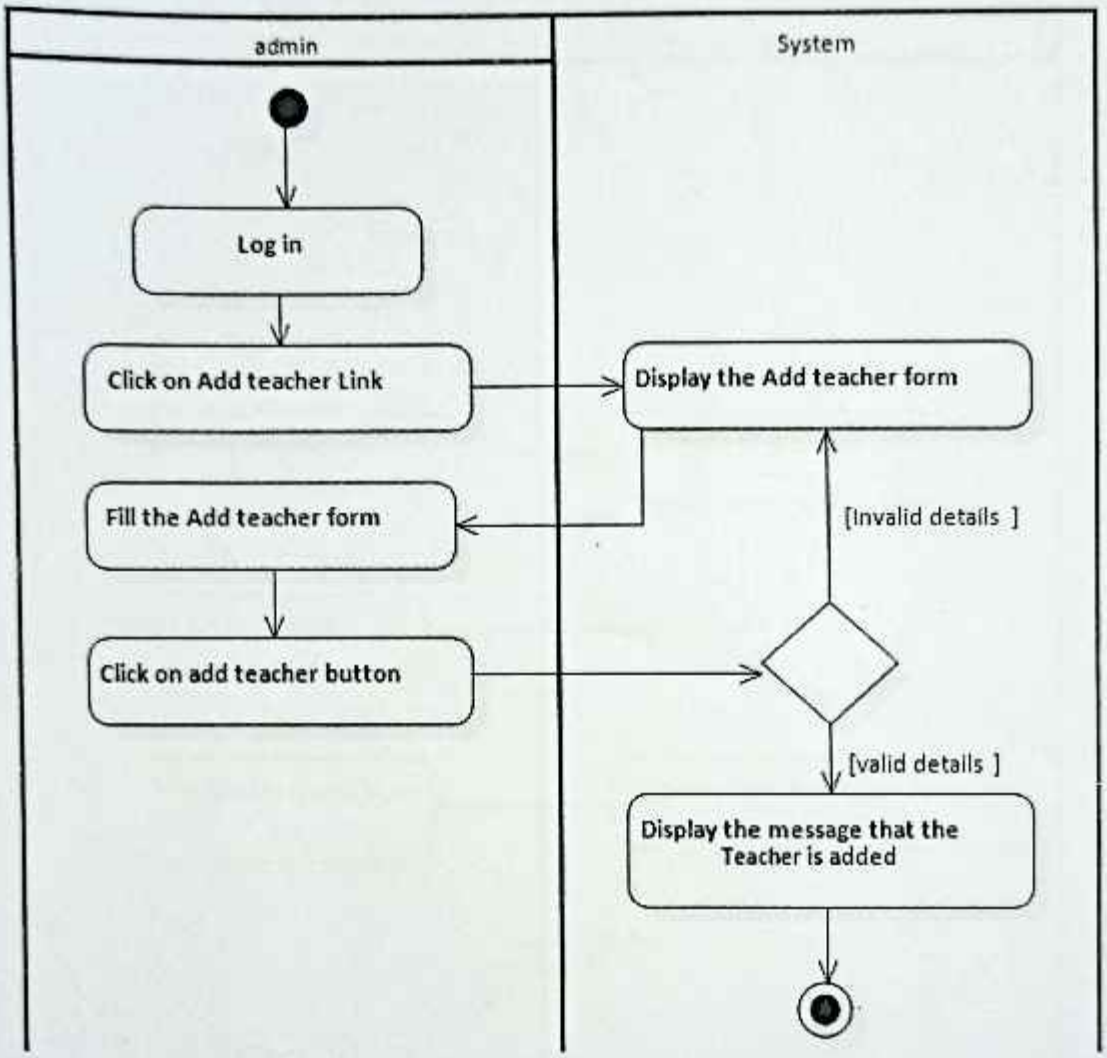
DELETE SUBJECT



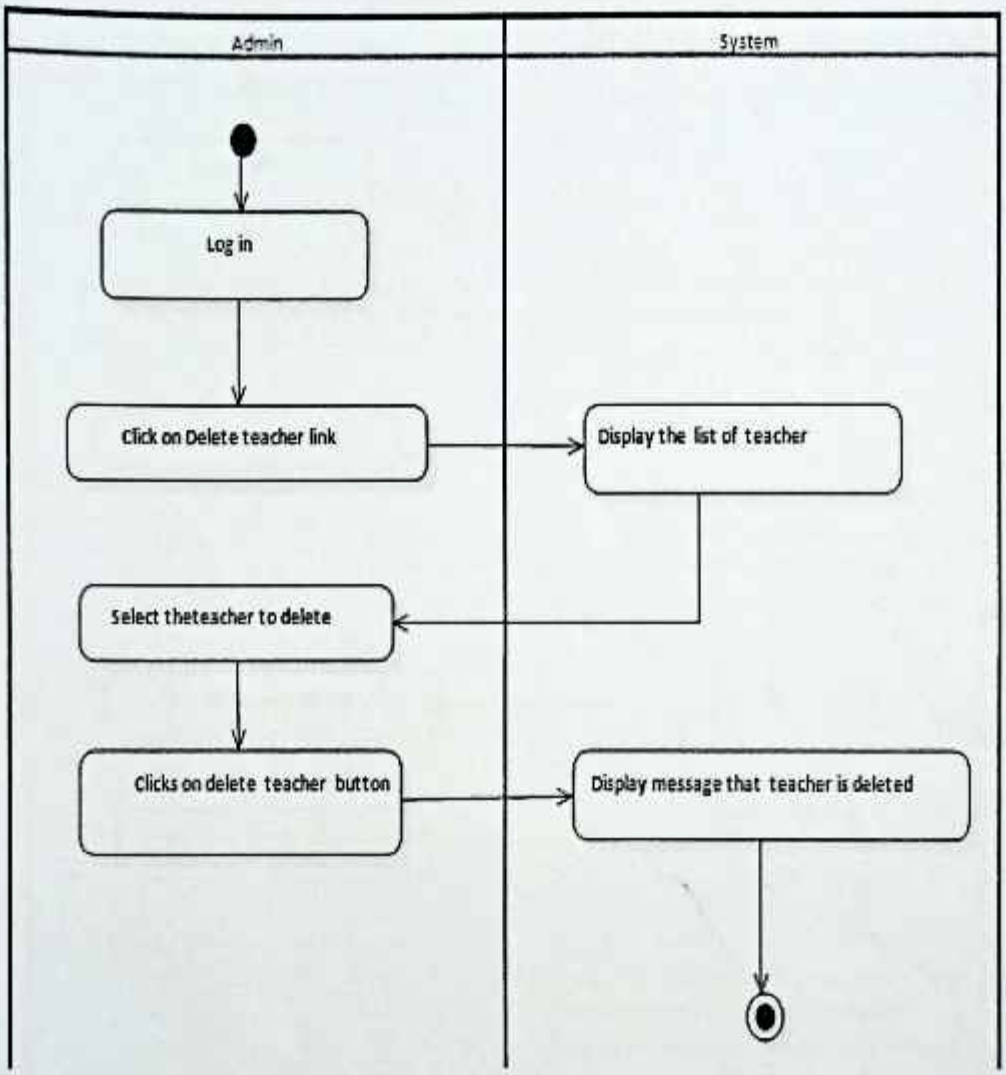
UPDATE SUBJECT



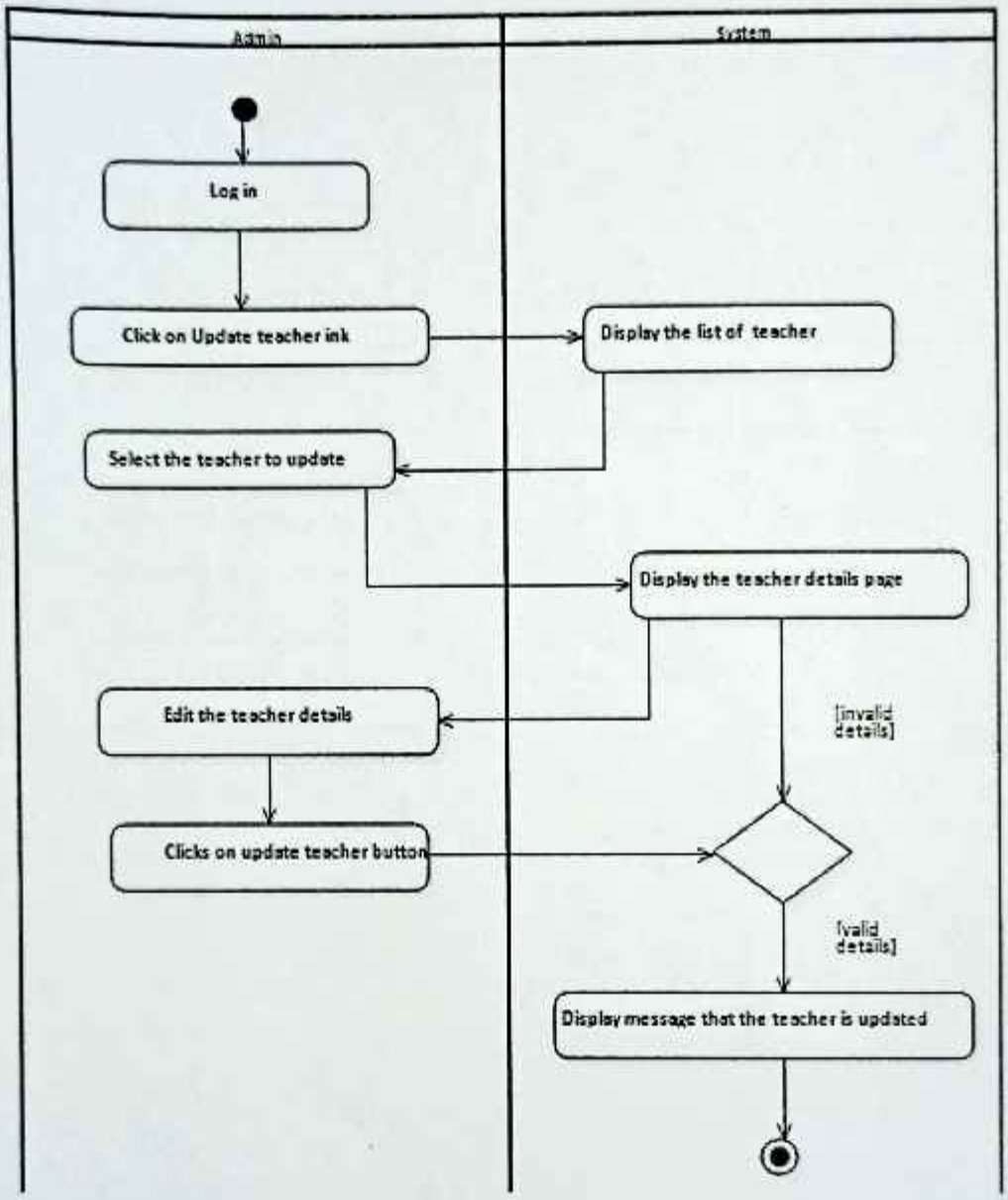
ADD TEACHER


admin
System
Log in
Click on Add teacher Link
Display the Add teacher form
Fill the Add teacher form
[Invalid details]
Click on add teacher button
[valid details]
Display the message that the Teacher is added

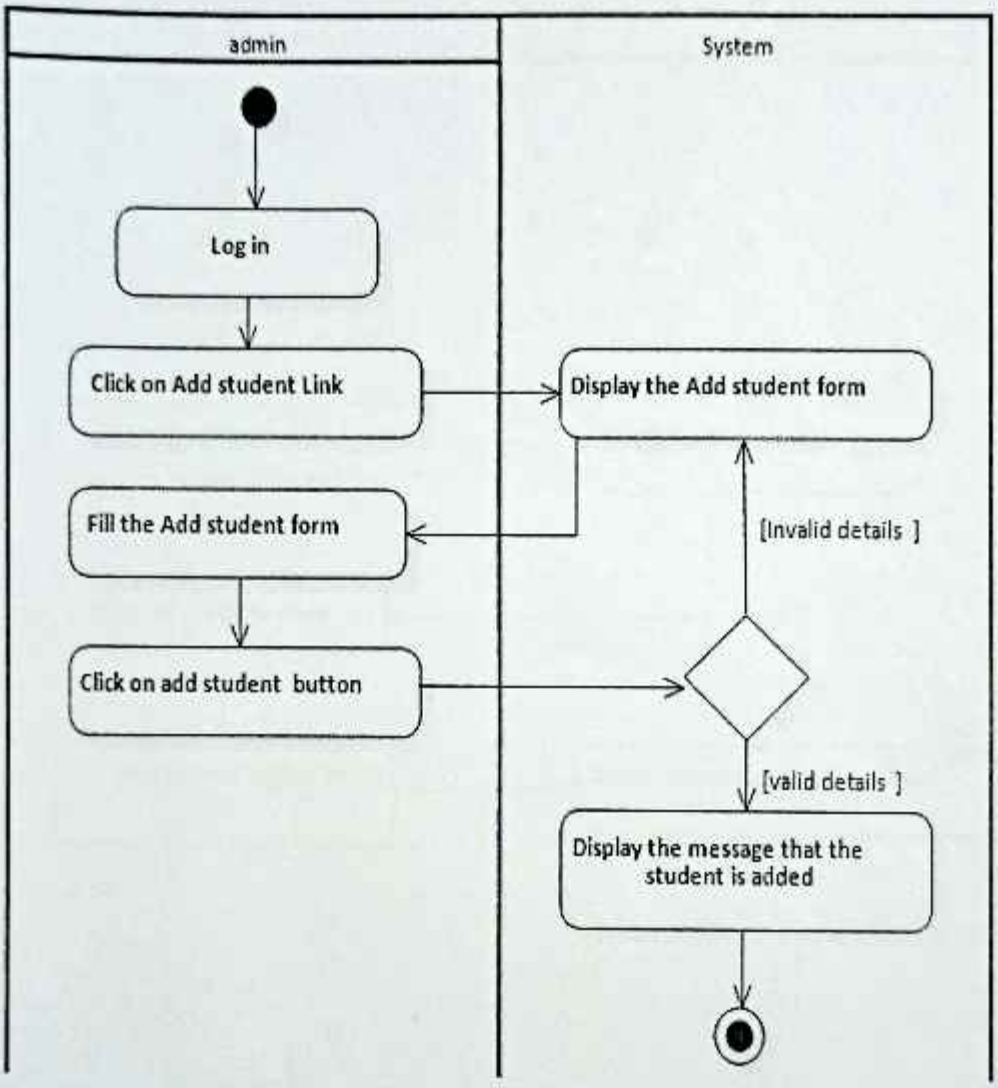
DELETE TEACHER



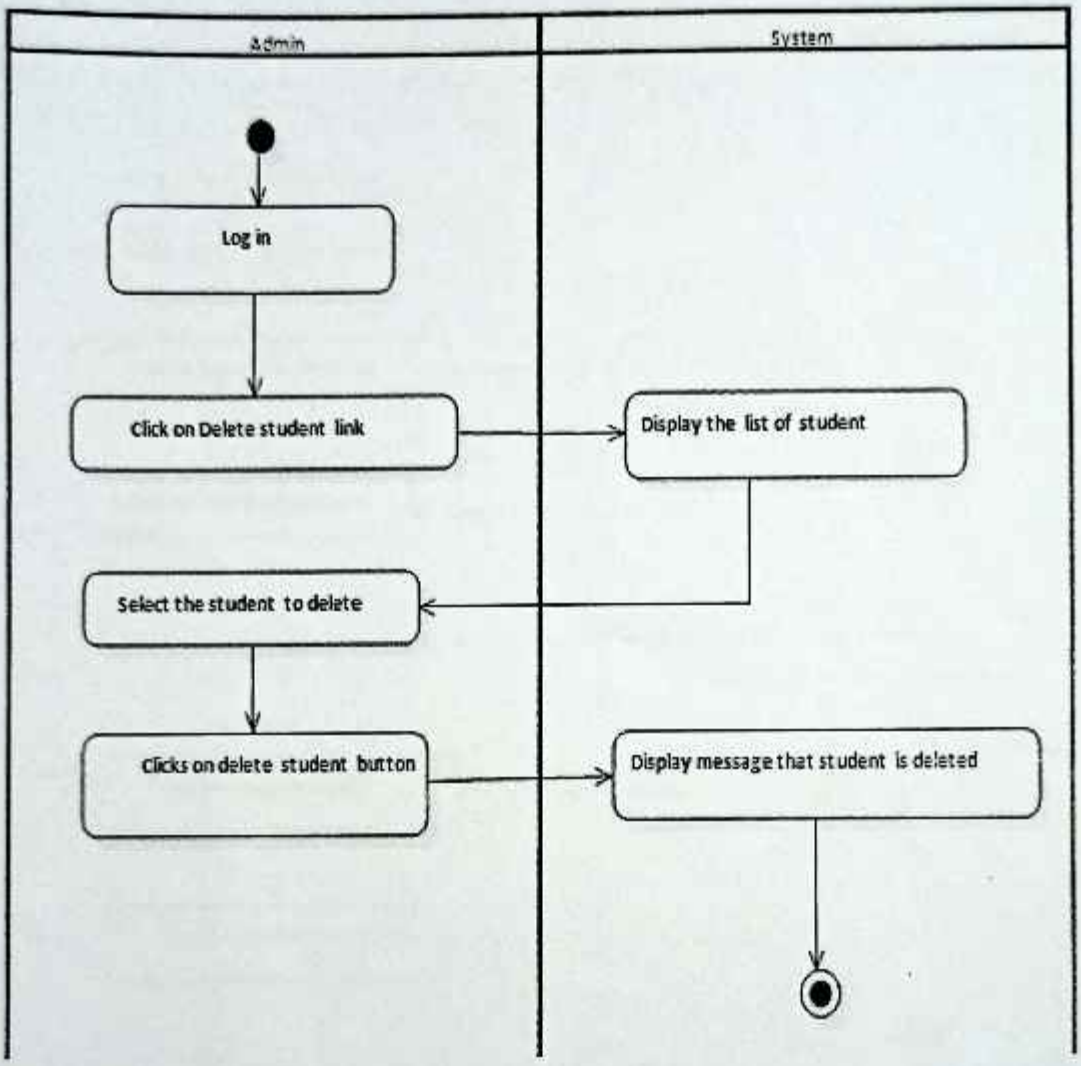
UPDATE TEACHER



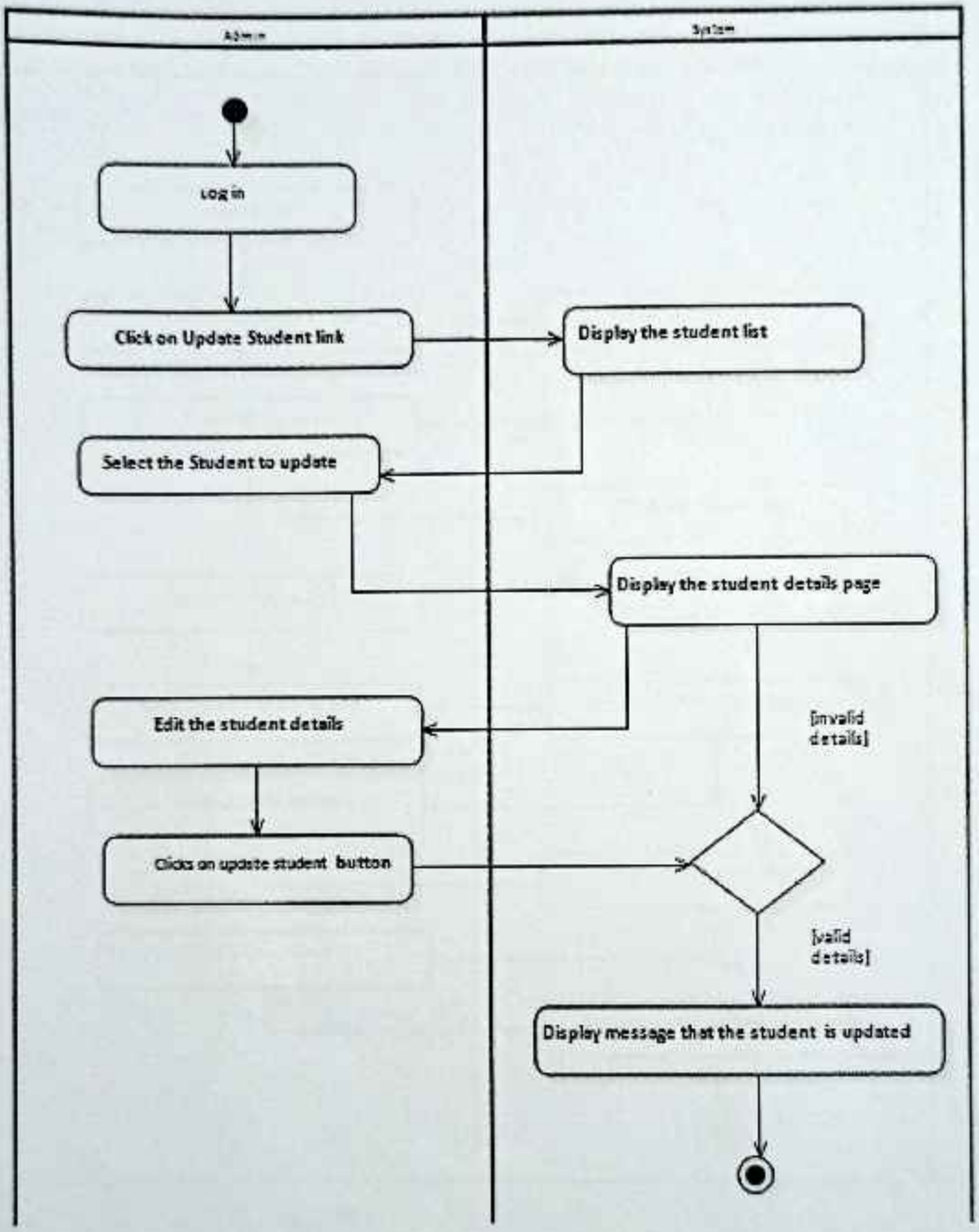
ADD STUDENT


admin
System
Log in
Click on Add student Link
Display the Add student form
Fill the Add student form
[Invalid details]
Click on add student button
[valid details]
Display the message that the student is added

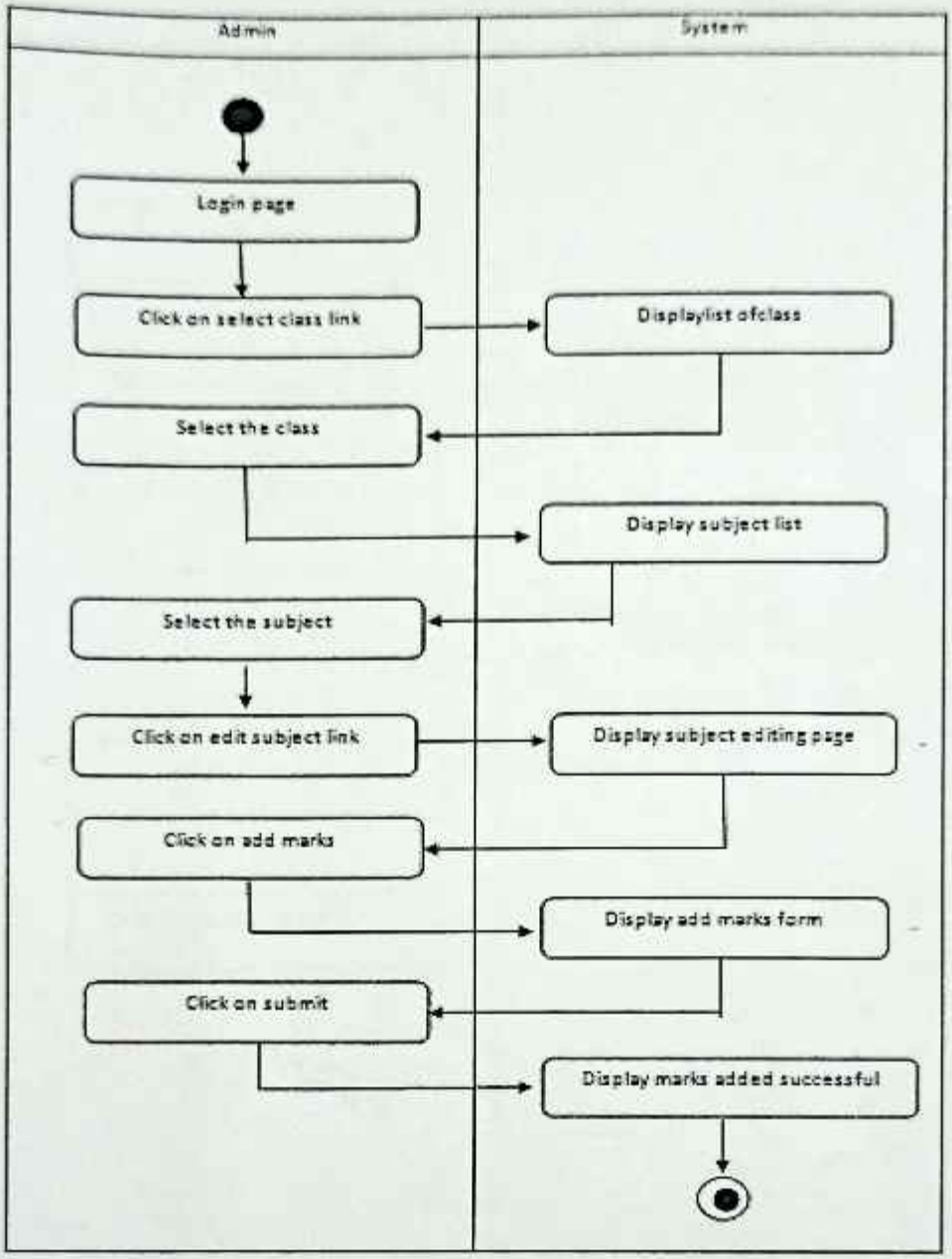
DELETE STUDENT



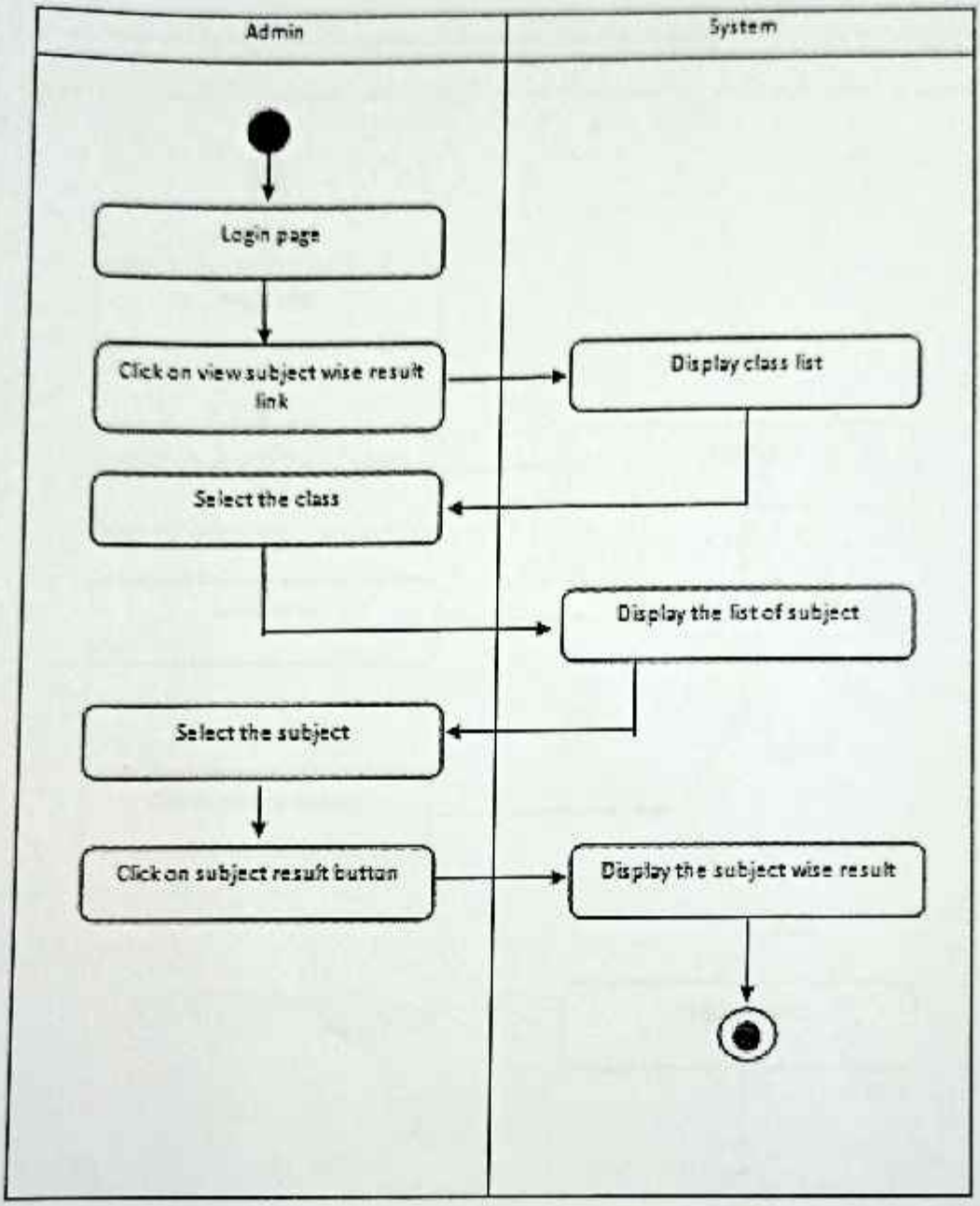
UPDATE STUDENT



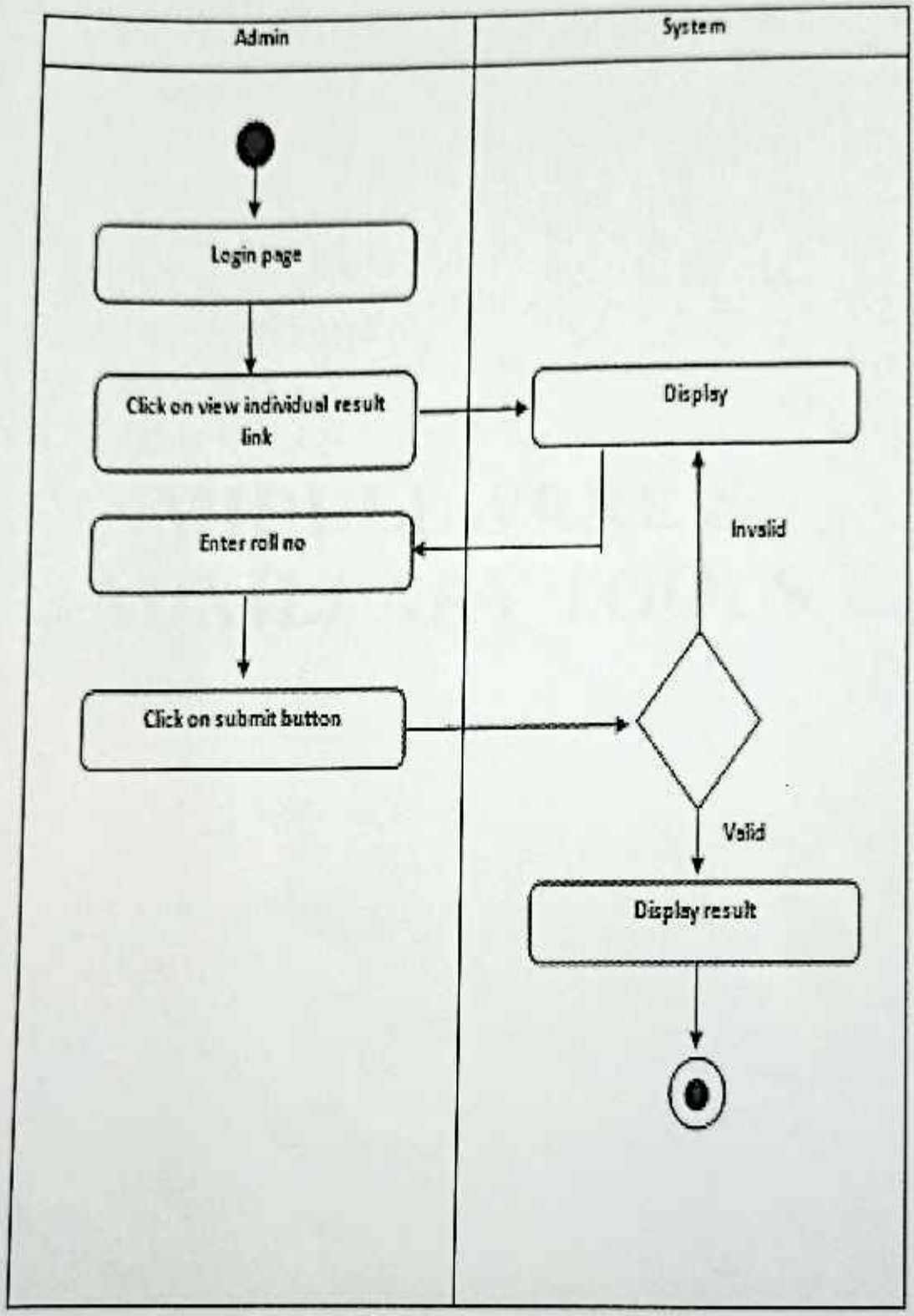
ADD/DELETE/UPDATE MARKS



SUBJECT WISE MARKS



INDIVIDUAL RESULT



MIDDLEWERE & AUXILLARY TOOLS

WAMPSERVER

WampServer refers to the software stack for the Microsoft windows operating system, created by Romain Bourdon and consisting of the apache web server, openSSL, for SSL support, mysql database and php programming language.

ADOBE PHOTOSHOP

Adobe Photoshop is a raster graphics editor developed and published by Adobe Systems for macOS and Windows. Photoshop was created in 1988 by Thomas and John Knoll. Since then, it has become the *de facto* industry standard in raster graphics editing, such that the word "Photoshop" has become a verb as in "to Photoshop an image," "photo shopping" and "Photoshop", though Adobe discourages such use. It can edit and compose raster images in multiple layers and supports masks, alpha compositing and several color models including RGB, CMYK, Lab color space, spot color and duotone.

USER MANUAL

LOGIN FORM

DESCRIPTION :-

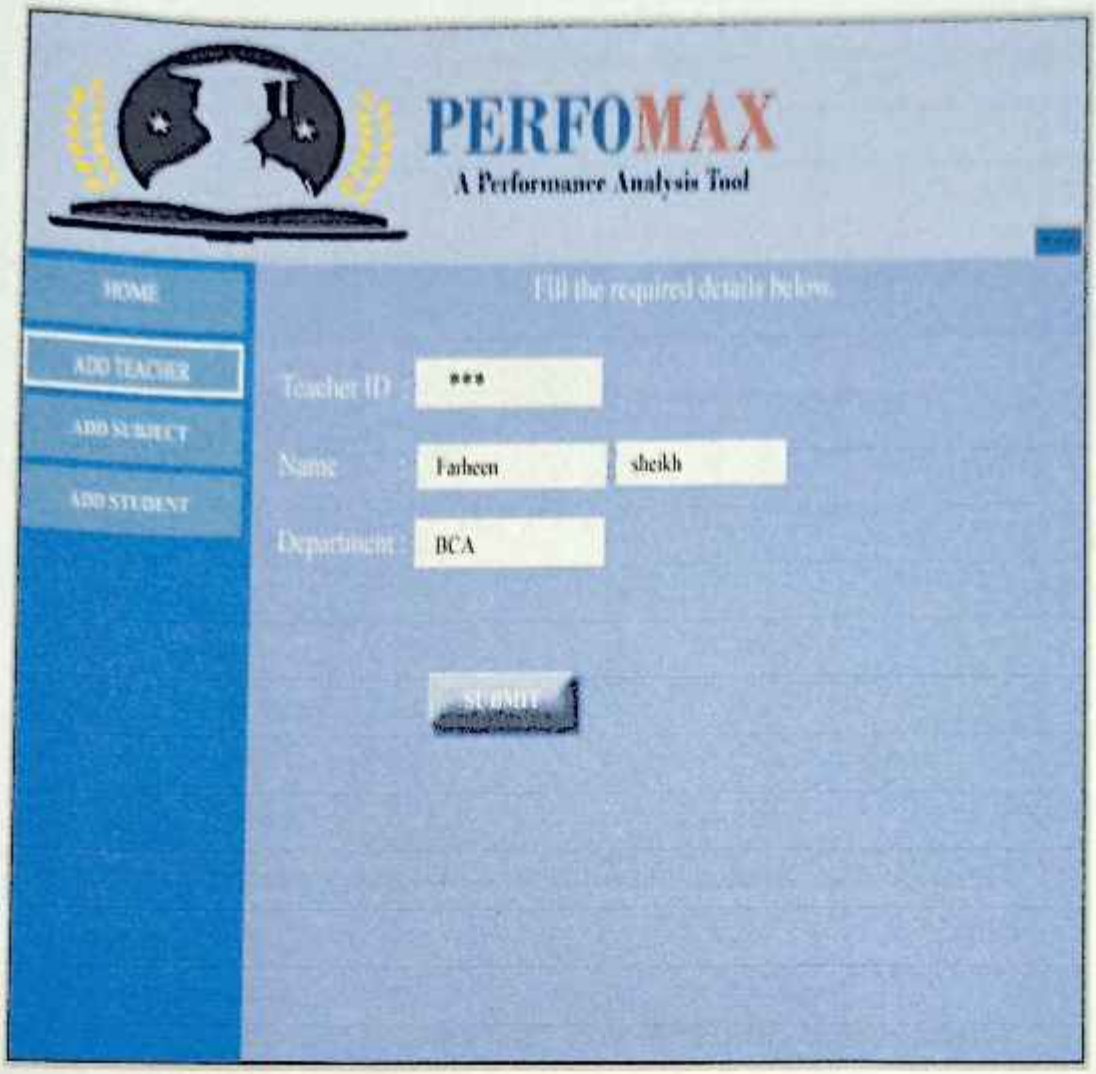
Username : It allows the user to enter his/her username.

Password : User needs to enter the password. If the username & password exist in database, then clicking on **LOGIN** button takes you to the home page of the software.

Forgot Password: This link allows the user to reset his/her password. Link goes to forgot password form .

Cancel Button : It will close the website.

ADMINISTRATOR PAGE :- Add Faculty



DESCRIPTION :-

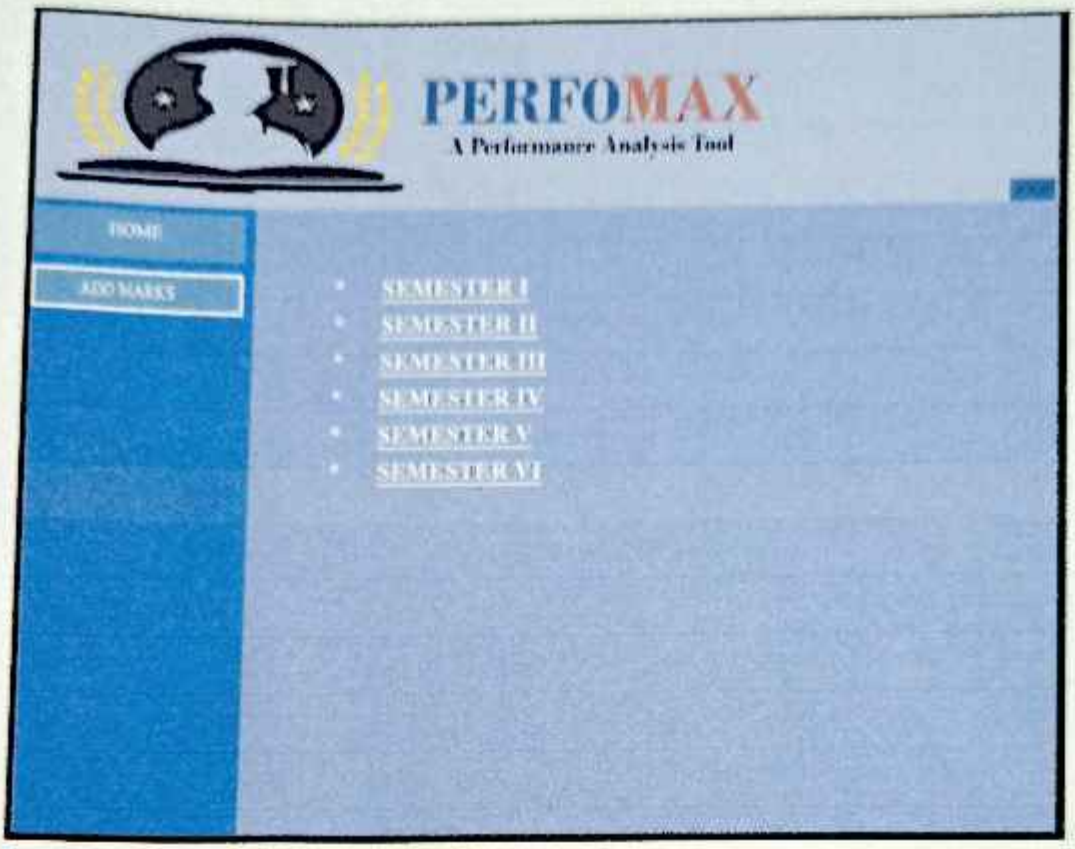
Teacher id: It allows the admin to enter unique id for each faculty member.

Name: Admin needs to enter the name of the faculty.

Department: Admin needs to enter the department in which that particular faculty member is teaching.

Submit button: After clicking on this button faculty member is been added.

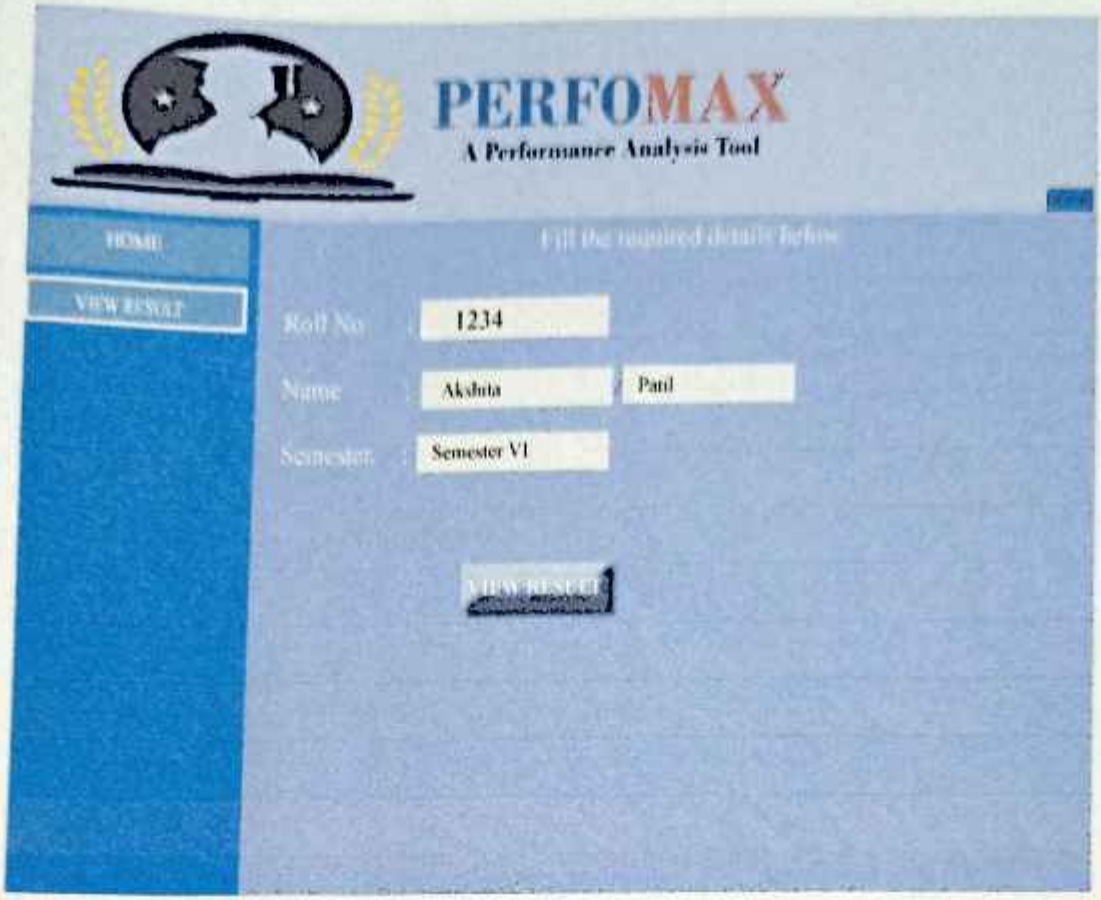
FACULTY FORM :- Add Marks



DESCRIPTION :-

There are Links of each semester in which faculty person should select the desire Semester link for further process of entering marks of students in their respective subject.

STUDENT FORM :- View Result



DESCRIPTION :-

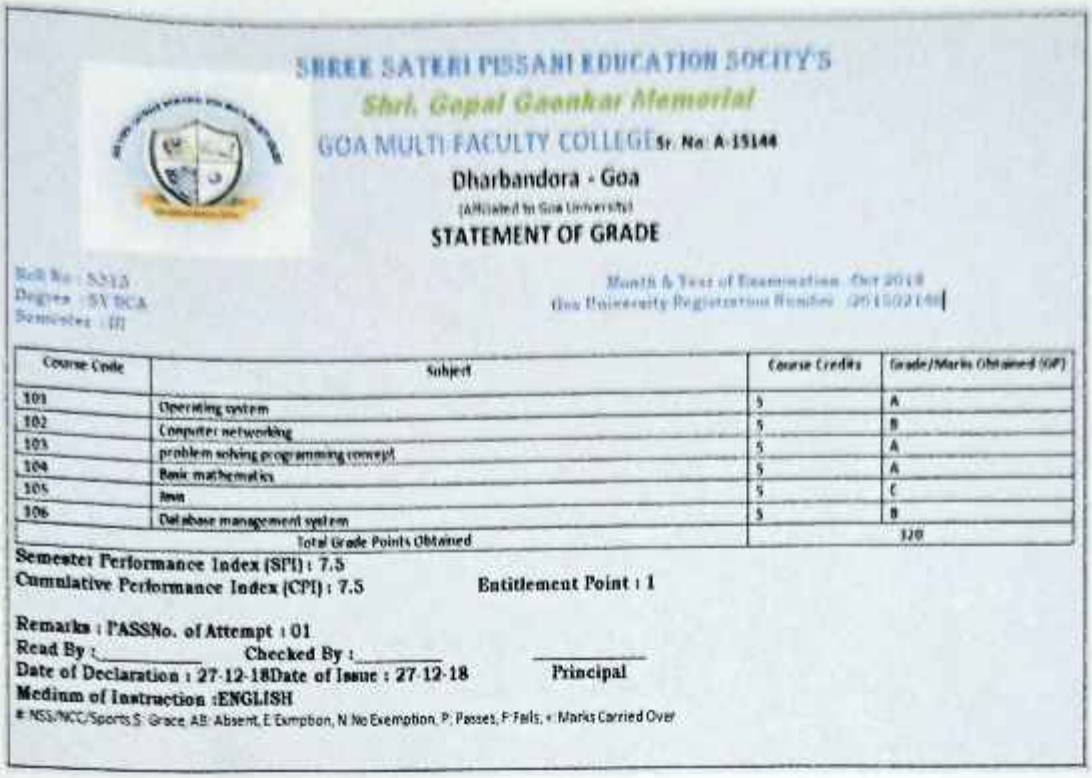
Roll no: It allows the student to enter his/her roll no.

Name: It allows the student to enter his/her name.

Semester : Student needs to enter particular semester in which he /she is studying .

View result button : After clicking on this button system display the result of that particular student .

MARKSHEET



SHREE SATERI PUSSANI EDUCATION SOCITY'S
Shri. Gopal Gaonkar Memorial
GOA MULTI FACULTY COLLEGE Sr. No: A-15144
Dharbandora - Goa
(Affiliated to Goa University)
STATEMENT OF GRADE

Roll No : 5313
Degree : BV BCA
Semester : III

Month & Year of Examination : Oct 2018
Goa University Registration Number : 201502144

Course Code	Subject	Course Credits	Grade/Marks Obtained (GP)
101	Operating system	5	A
102	Computer networking	5	B
103	problem solving programming concept	5	A
104	Basic mathematics	5	A
105	Java	5	C
106	Database management system	5	B
	Total Grade Points Obtained		120

Semester Performance Index (SPI) : 7.5
Cumulative Performance Index (CPI) : 7.5 **Entitlement Point : 1**

Remarks : PASSNo. of Attempt : 01
Read By :_____ Checked By :_____
Date of Declaration : 27-12-18Date of Issue : 27-12-18 **Principal**
Medium of Instruction :ENGLISH
NSS/NCC/Sports S: Grace, AB: Absent, E:Exmption, N:No Exemption, P: Passes, F:Fails, + Marks Carried Over

DESCRIPTION :-

- The above image is how the actual result will look like.
- It includes all the details of particular student like roll no, degree, semester, etc.
- It also shows the subject & marks that are obtained by student with course credit.
- It also shows the grade and total marks obtained with remark.

FUTURE ENHANCEMENT

Future Enhancement

In future we would like to make some changes to our project to improve its functionality and provide better services to the students. Some of them are stated below:

- Registration & Authentication through Mobile Number .
- Notification services for student.
- Add more services for user.

BIBLIOGRAPHY
&
REFERENCES

Bibliography & References

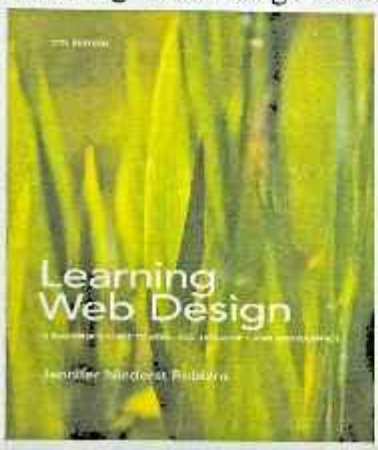
- WWW.W3SCHOOL.COM

W3Schools is a web developers site, with tutorials and references on web development languages such as HTML, CSS, JavaScript, PHP, MySQL, etc.

- Head First PHP and MySQL

Authors: Lynn Beighley Micheal Morrison

- Learning Web Design Book



O'REILLY

A Beginner's Guide to HTML, Graphics, and Beyond, author Jennifer Niederst shares the knowledge she's gained from years of web design experience.

- WWW.TUTORIALSPOINT.COM