PROJECT REPORT

TOPIC : Employee Management

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SYNOPSIS

Employee Management System is an application, which is developed to maintain the details of employees working in an organization. It maintains the information about the details of their employees/Admins. This application can be accessed by admin and employees both.

This Project is very helpful to those who want to learn more about **Employee Management System .**

We can enter the Details of Employees like Name, Salary, Experience etc. which is stored and saved for later use. It is simple to understand and can be used by anyone who is not even familiar with the simple employee system. It is user friendly and just asks the user to follow step by step operations by giving him a few options.

All the necessary requirements for the employee Management System are present in our project.

INTRODUCTION:

This report begins with a brief introduction about this project and the different stages of the design and the development of the **Employee Management System.** Before detailed discussion, first of all we would like to give an overall idea about this project.

In our **Employee Management System** data is processed and the results are used for running the essential services as efficiently as possible. This system maintains the list of available Employees and Admin working in a company or a firm, We have also made a login platform where an admin and employee can login, We have also included some level of security by password protecting the users data.

AIM OF THIS PROJECT:

The main goal of the project is to obtain complete and correct information of employees to avoid confusion and data mismanagement.

Its goal is to show How a company maintains the data of the working employees and admins.

Advantages of the Proposed System

- Less time consuming.
- Less paperWork.
- Queries can be done easily.
- Easy Redundancy.

- It is fully user friendly.

- Faster Access of information.

Why using C++

Developments in software technology continue to be dynamic.New tools and techniques are announced in quick succession. This has forced the software engineers and industry to continuously look for new approaches to software design and development, and they are becoming more and more critical in view of the increasing complexity of software systems as well as the highly competitive nature of the industry.

These rapid advances appear to have created a situation of crisis within the industry. The following issues need to be addressed to face this crisis:

- How to represent real-life entities of problems in system design?

- How to design systems with open interfaces?

- How to ensure reusability and extensibility of modules

- How to develop modules that are tolerant to any changes in future?

- How to improve software productivity and decrease software cost?

- How to improve the quality of service?

- How to manage time schedules?

- How to industrialize the software development process?

Benefits of OOP:

Object oriented contributes to the solution of many problems associated with the development quality of software products. The new technology promises greater programmer productivity, better quality of software and lesser maintenance cost. The principal advantages are:

- Through inheritance, we can eliminate redundant code and extend the use of existing classes.

- We can build programs from the standard working modules that communicate with one another rather than having to start writing the code from scratch. This leads to saving of development time and higher productivity.

- The principle of data hiding helps the programmer to build secure programs that cannot be invaded by code in other parts of the program

- It is possible to map objects in the problem domain to those in the program.

- It is easy to partition the work in a project based on objects.

- Object-oriented systems can be easily upgraded from small to large systems.

- Message passing techniques for communication between objects make the interface descriptions with external systems much simpler.

- Software complexity can be easily managed.

S.NO	VARIABLE NAME	DESCRIPTION	DATA TYPE
1	Admin Name	**Name of the Admin as a username**	**string**
2	Admin password	**It stores the given password of admin**	**string**
3	Employee Name	**Stores the name of the employee**	**string**
4	Employee password	**It stores the given password of employee**	**string**
5	Employee salary	**It stores the salary of the employee**	**int**
6	Employee Experience	**It stores the experience of the employee**	**int**

Program Structure

We are developing an employee management system in order to provide a computerized facility to the company organisation and store and modify the records digitally.

Naming Conventions :

Objects	Naming Conventions
Header Files	Employee.h, Admin.h, Login.h
Classes	Employee, Admin, login

Functions	login();
	      login(string,string);
	      getid();
	      getusername();
	      getpassword();
	      setusername(string);
	      setpassword(string);
	admin();
	      admin(string,string);
	      adm_panel();
	Employee();
	      Employee(string,string,int,int);
	      RemoveEmployee();
	      emp_panel();
	      EditEmployee();
	      status();
	      apply();
	      details();
	      review();
	banner();

Program variables	int salary, int experience, string state, int id; string username, string password, static int counter;
Program files	app.cpp, login.cpp, employee.cpp, admin.cpp

Logic of the process

Upon execution of the program, the program prompt a **main panel** with 3 options:

1. Login
2. Register
3. Exit

For logging in the program the minimum requirement is to have an admin account first. So **Starting with the register** option it will allow us to add only admin accounts as Employees can only be added by admins. It will ask for username and password. By default we have permitted **only two admins**.

After creating an account, It will bring us back to the main panel and we can choose the **login panel**. In login panel we will get option for logging in as:-

1. Admin Login
2. Employee Login

As of now Admin has created. Employees can login but first Admin has to add it. So, Let's go and Login as Admin.

After logging in as Admin you'll have admin panel with bunch of options like:-

1. Add Employee : (we can add employee details)

2. Remove Employee : (we can remove employee details)

3. Edit Employee : (we can edit a employee details)

4. List all Employees : (we can list all employees details)

5. Accepting Promotions : (those who asked for promotions can be accepted/declined)

6. Change Your Password

7. Logout

Let's add Employee by pressing 1. We will be asked for it's username, password, salary, experience.

Now let's logout. And try to login as Employee

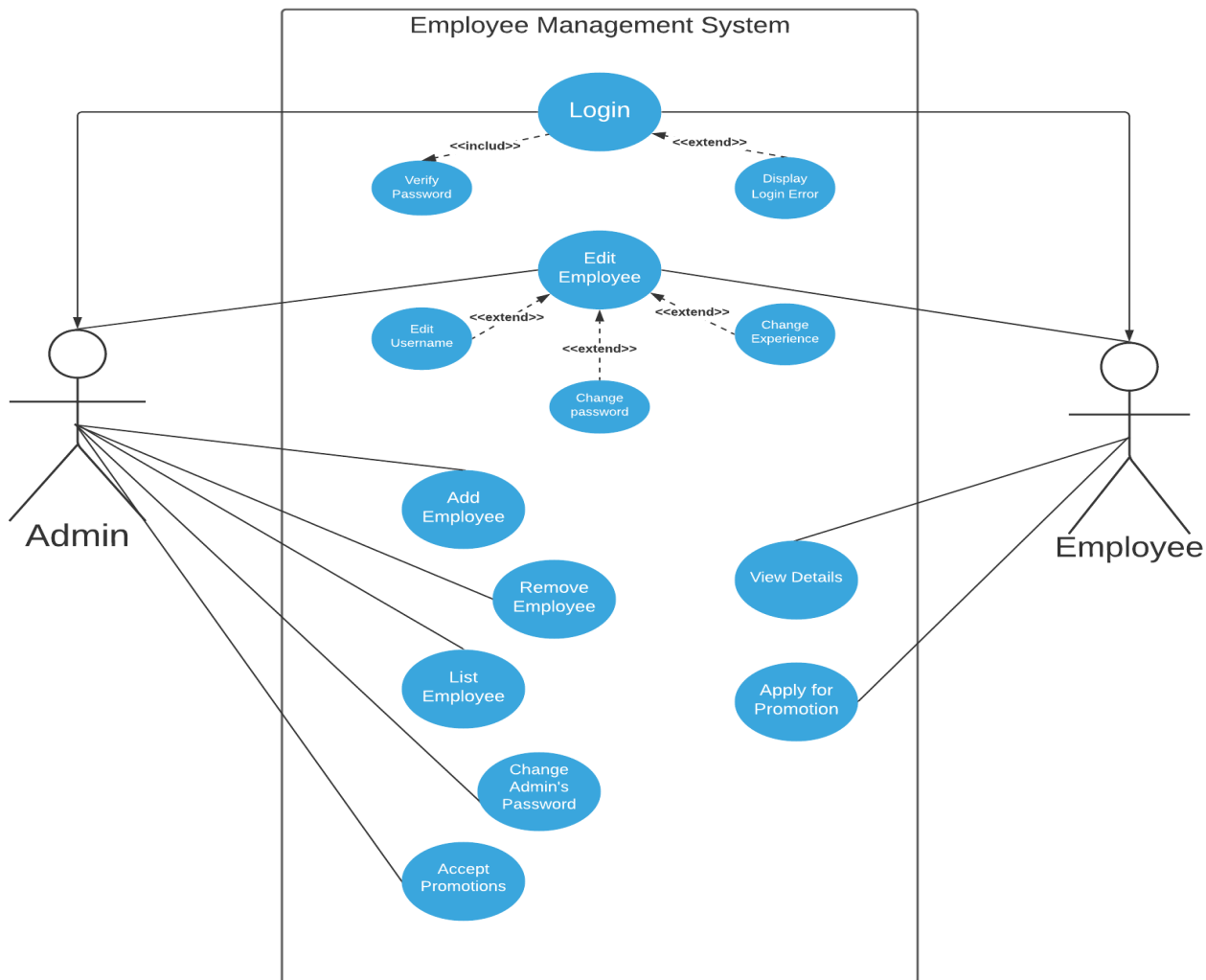We will be prompted with the Employee Panel with some options:-

1. View Your Details : (Employee can view his/her details)
2. Edit Your Information : (Employee can Edit his/her details)
3. Apply for Promotion : (Employee can request for promotion)
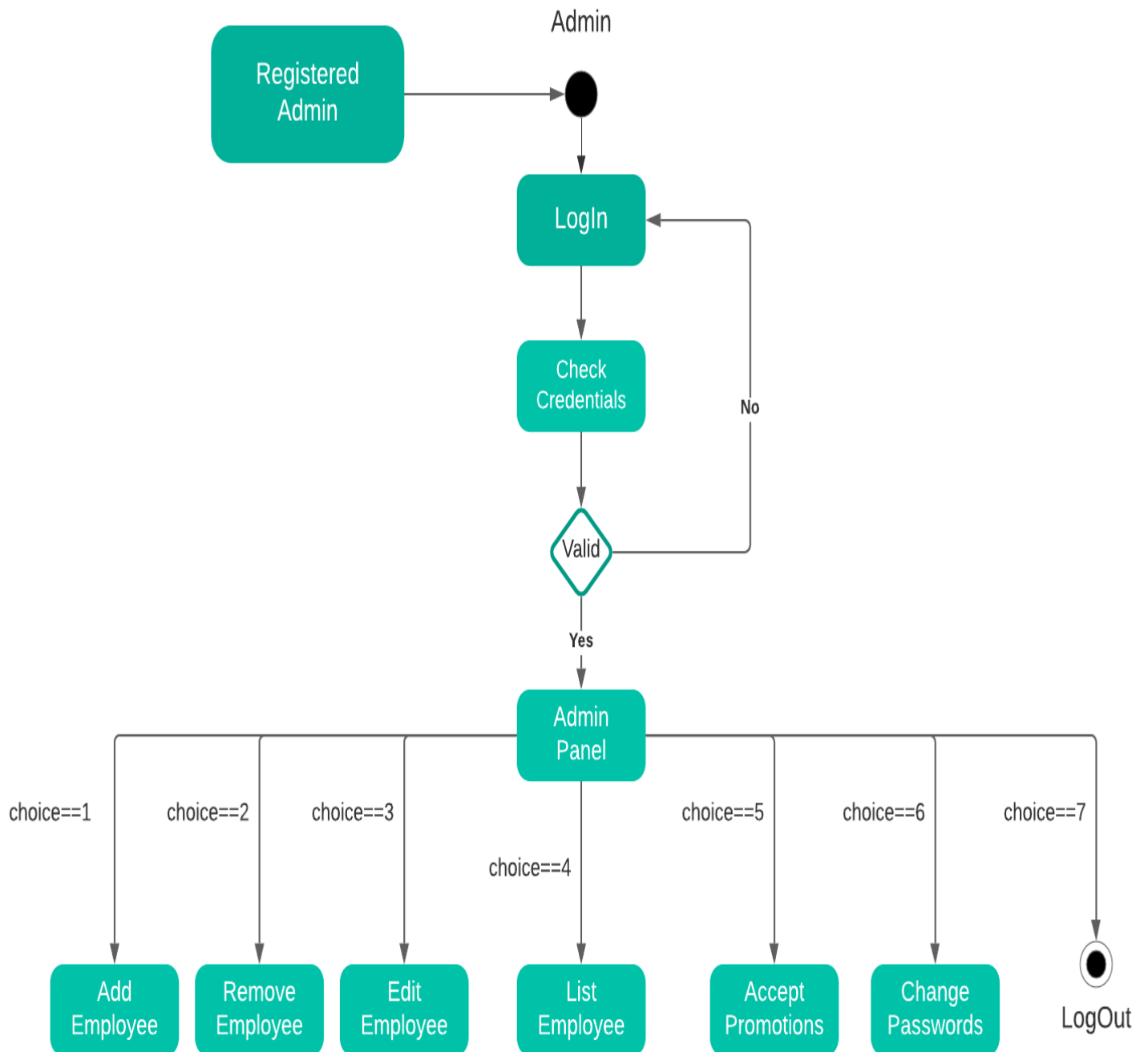4. Any other key for logging out

By pressing another button we can exit as Employee and we again got main panel. Again pressing another button will **Quit Program**…..
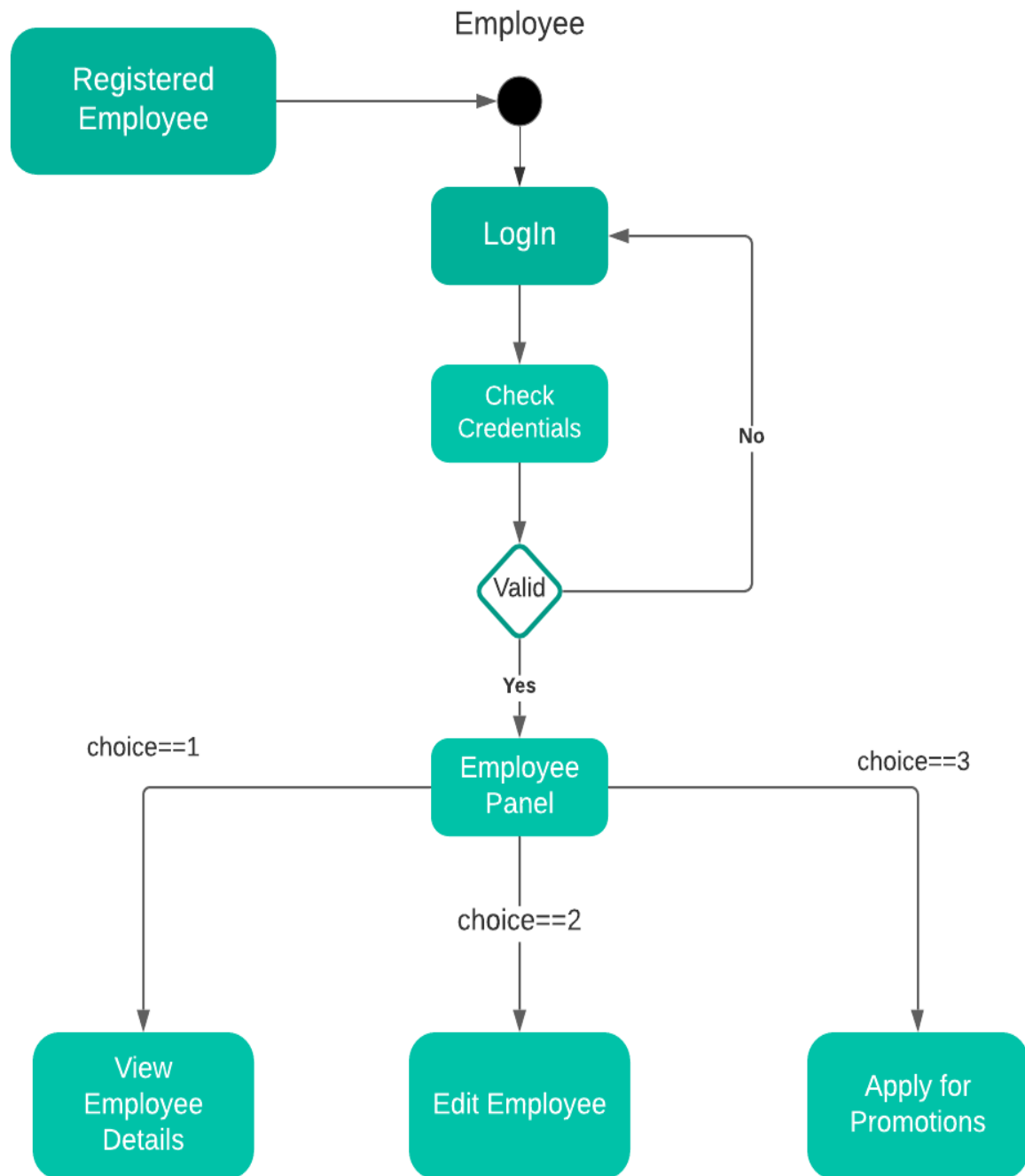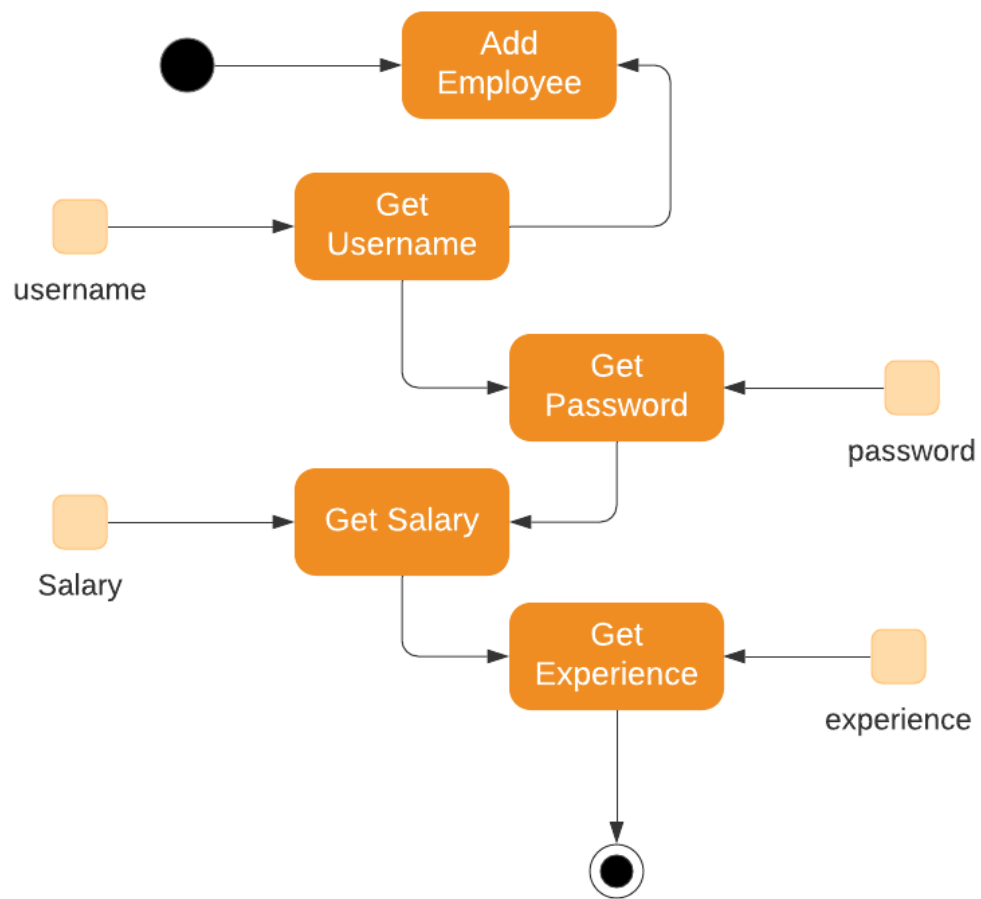
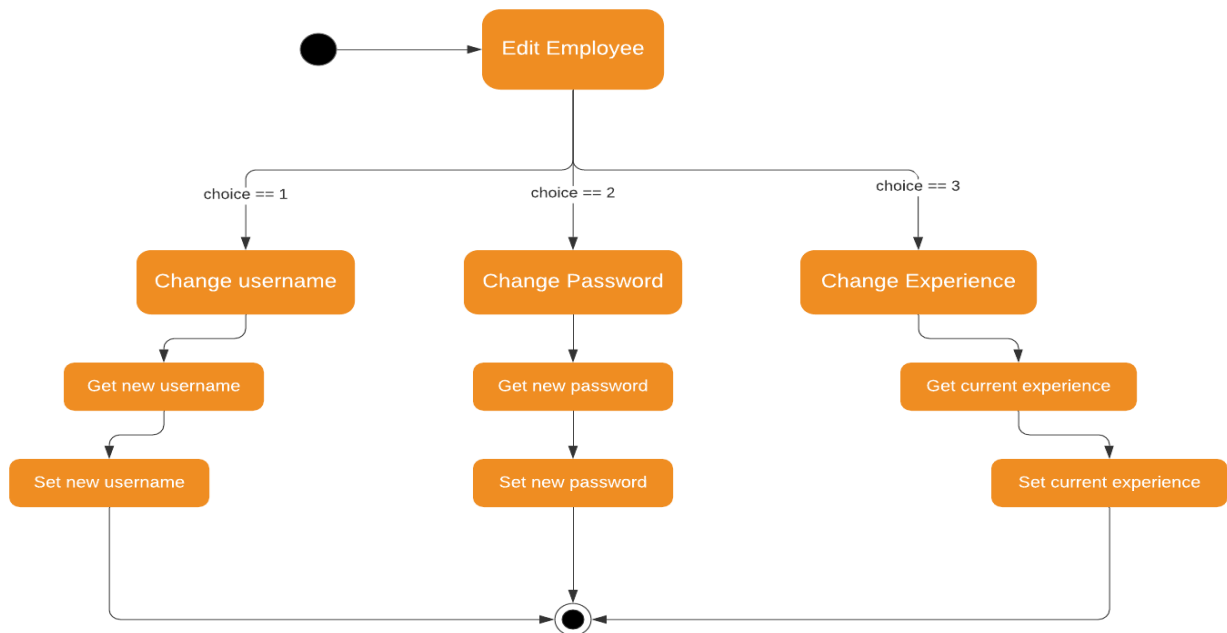# ACTIVITY DIAGRAMS:

Overall Functionality:

Activities:

Employee

```
Registered          ●
Employee

                    ↓

                  LogIn  ←──────┐
                                │
                    ↓           │
                                │
                  Check         │ No
                Credentials     │
                                │
                    ↓           │
                                │
                 ◇ Valid ◇ ─────┘

                    │ Yes
                    ↓

choice==1      Employee Panel      choice==3
    │                 │                 │
    │            choice==2              │
    ↓                 ↓                 ↓

  View          Edit Employee       Apply for
Employee                           Promotions
Details
```
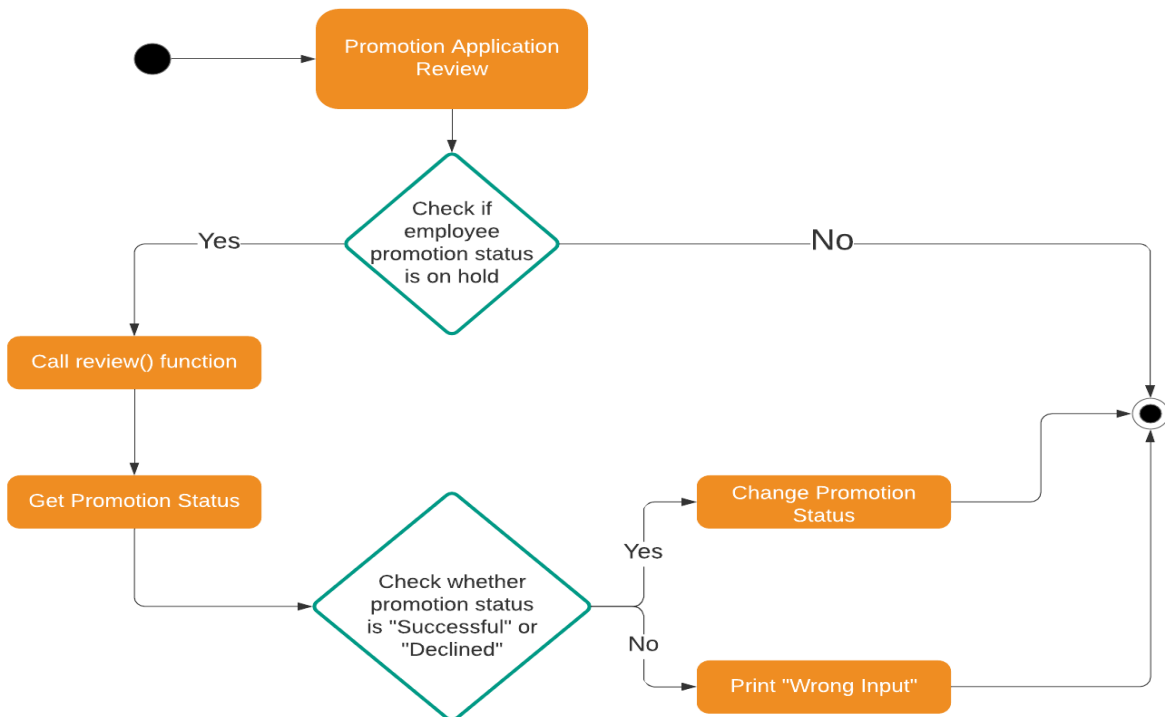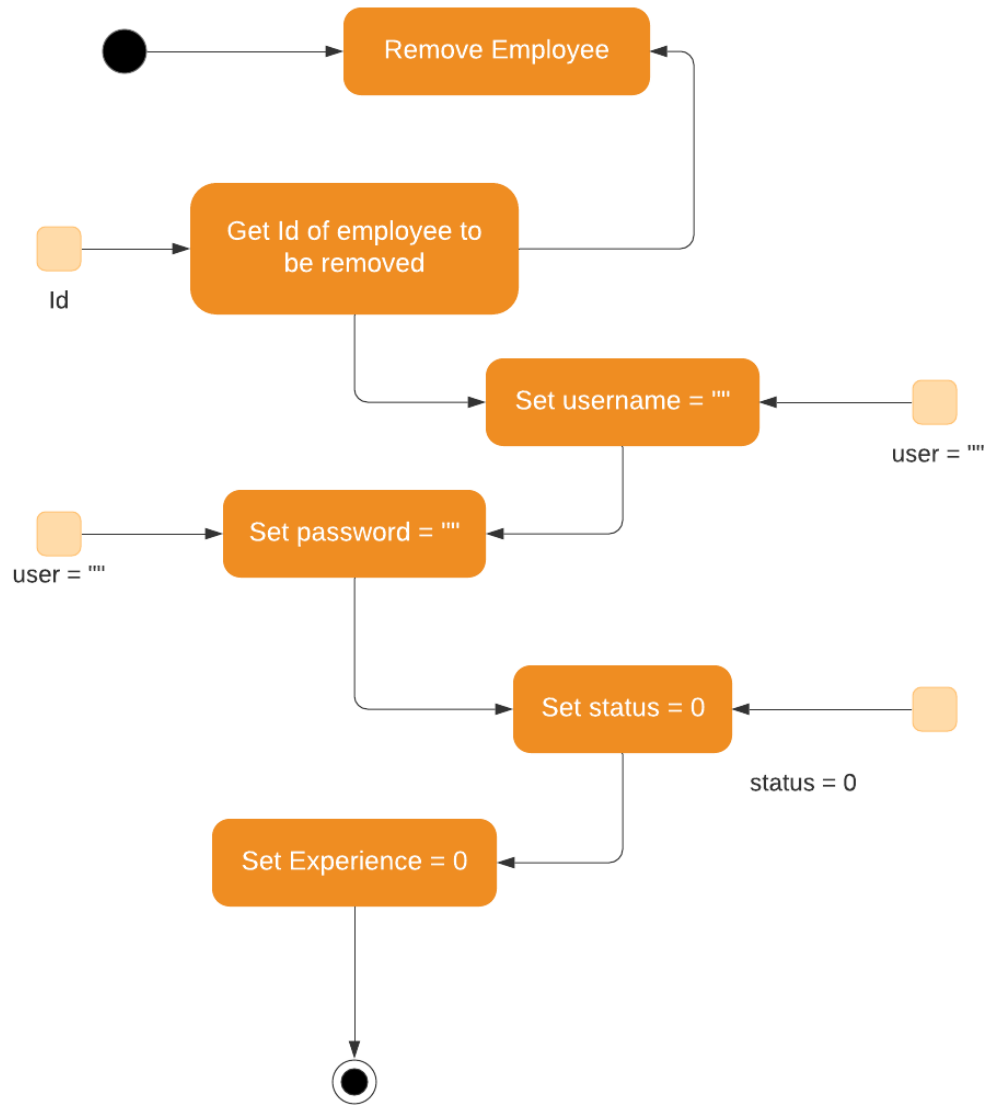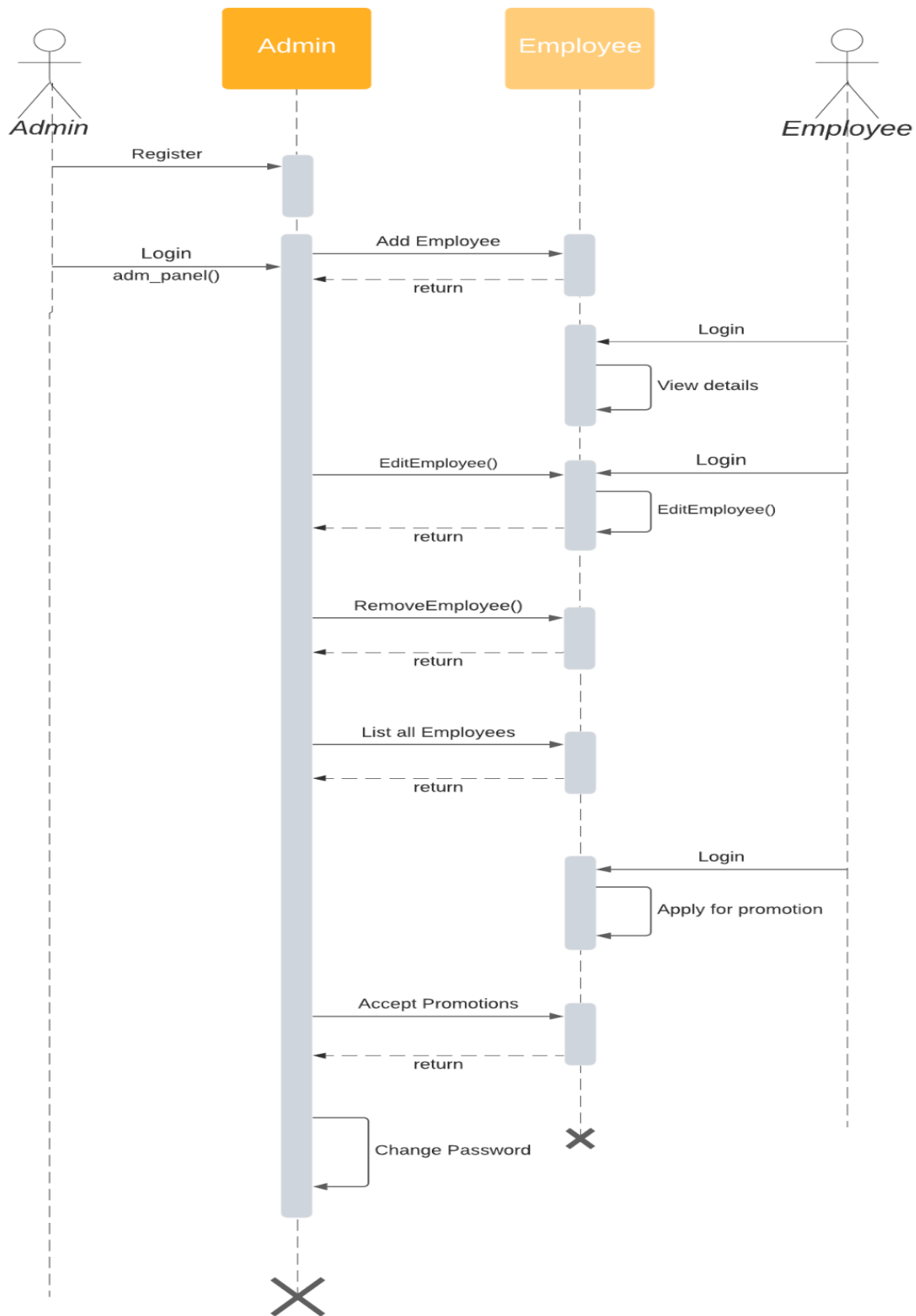
Add Employee:

Edit Employee:

Promotion Status Review :

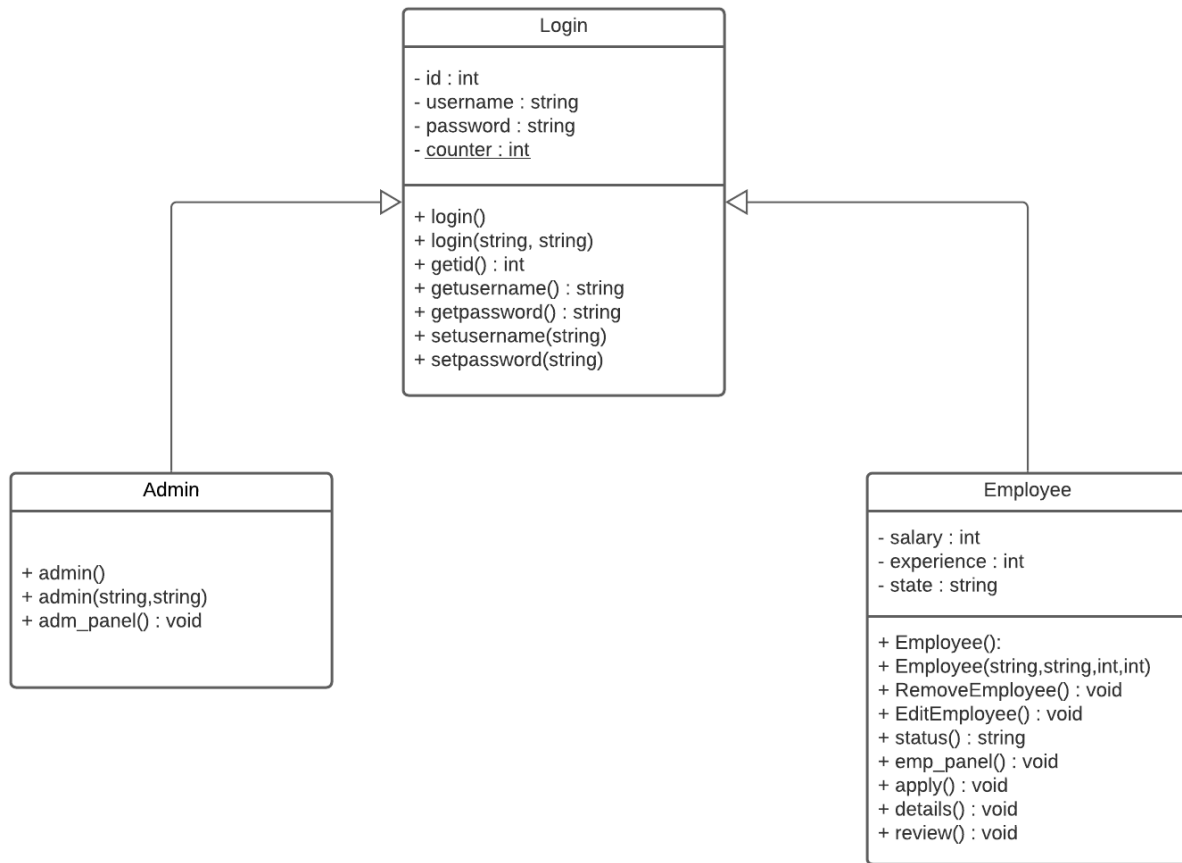**Remove Employee:**

Sequence diagram:

CLASS DIAGRAM:

Output Screenshots

Main Panel

Register Panel

```
================================================================
                    Employeee Management
================================================================
You can only register for Admin.
Enter Your Username: admin
Enter Your Password: admin
```

Admin Panel

```
Welcome back admin
What do you want to do:
1.Add Employee
2.Remove Employee
3.Edit Employee
4.List all Employee
5.Accepting Promotions
6.Change Your Password
Press 0 for logout admin panel
```

Employee Panel

```
Welcome back test
What do You want to do:
1.View your details
2.Edit Your Information
3.Apply for promotion
```

Conclusion

Program Weakness:

As we all know that, no program can be 100% reliable and efficient.So there are also drawbacks from our application which as follows:

● It cannot perform all the required functions as a company requires, it's simply a record of the admins and employees of the company or firm.

 ● Our project is not sharply a graphical user interface. This is just a program with some design.

 ● It's not a multiuser and multitasking program. It can't perform various tasks at the same time.

Program Strength:

There are many advantages of using this program as it contains various features like:

● It is actually a user-friendly software, as it is just easy to use by just following the instructions which are displayed on the screen.

 ● This program contains many options to learn the simple view of how the company employees admin system works.

● This system keeps track of all your Employees/Admins data effectively which is a time saving method.