Payroll Processing System

Problem Statement:

The main objective of the payroll management system is to provide an easy way out to automate all the functionalities. It manages the details of the employees, calculates their salary, marks attendance. It will manage all the details of the employees and payments. The project is totally built at administrative end and thus only the administrator is guaranteed the access.

The Payroll Administrator maintains employee information. The Payroll Administrator is responsible for adding new employees, deleting employees and changing all employee information such as name, address, and payment classification (hourly, salaried, commissioned), as well as running administrative reports.

Identification of classes:

Conceptual Class Category List :

Role: Admin

Specification, design or description of things: EmployeeDetails, Paydescription, Attendence Management

Other computer or electro-mechanical systems external to the system: Pay Calculation

Abstract noun concepts: Pay satisfaction, Authorization system

Events: Adding details, Pay Calculation, Employee database events, Payroll database events.

Processes: FillForm, CalculatePay, View employee records, Update employee records, Add employee records, Payroll records.

Identification of Noun Phrases:

Payroll Processing System

Application form

Admin

Employee

Employee Details

Salary Calculation

Employee Details database

Payroll database

Identification of Associations:

Association Category list

A is a logical part of B- Employee-Salary

A is logically contained in B- Employee description-Employee salary

A is a description for B- Employee description- Employee details

A is known/logged in B- Details- Database

A is a member of B- Admin- Payroll Processing system

A uses or manages B- Admin- Payroll Processing system

A communicates with B- Employee- Payroll Processing system

A is owned by B- Database- Payroll Processing system

A is an event related to B- Employee- Salary

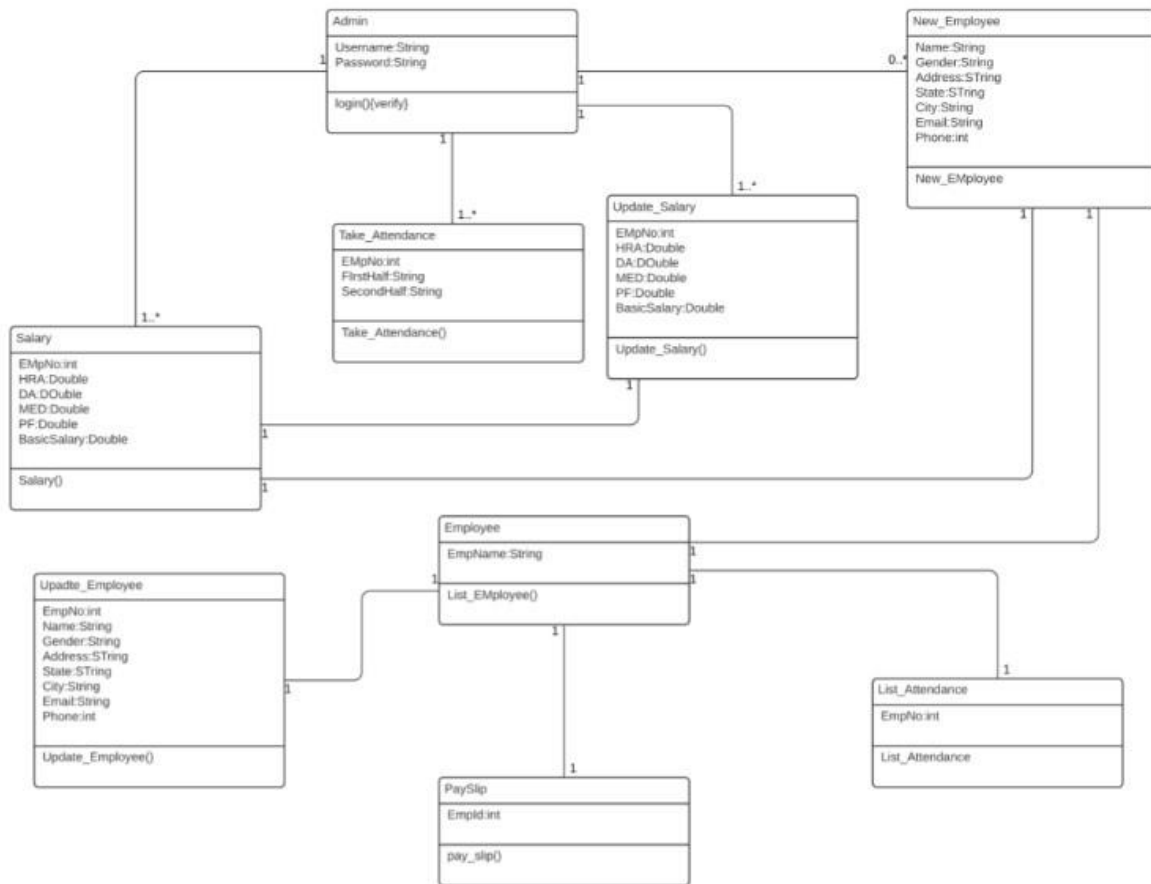Definition of Associations and their notations

An association is a structural relationship that indicates that objects of one classifier are connected and can navigate to objects of another classifier.

Aggregation is when a cluster of domain objects are treated as a single unit.

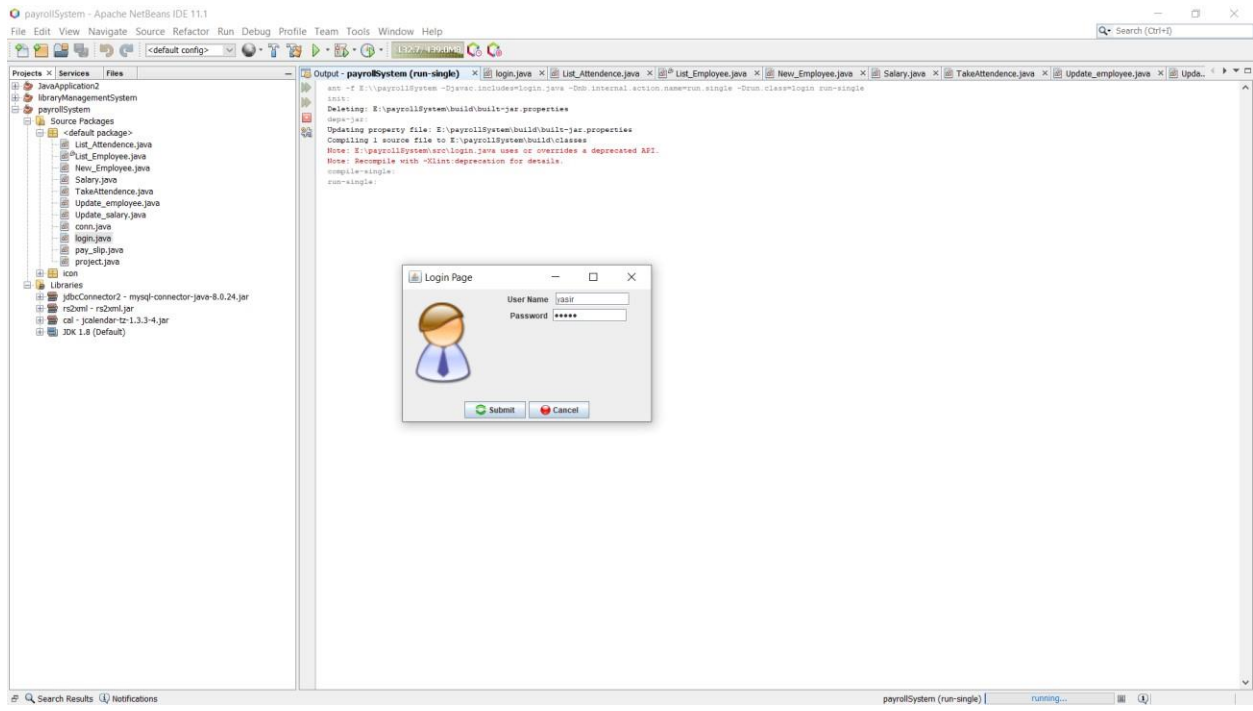An association is known as composition when one object owns another.

Generalization is the process of extracting shared characteristics from two or more classes, and combining them into a generalized superclass.
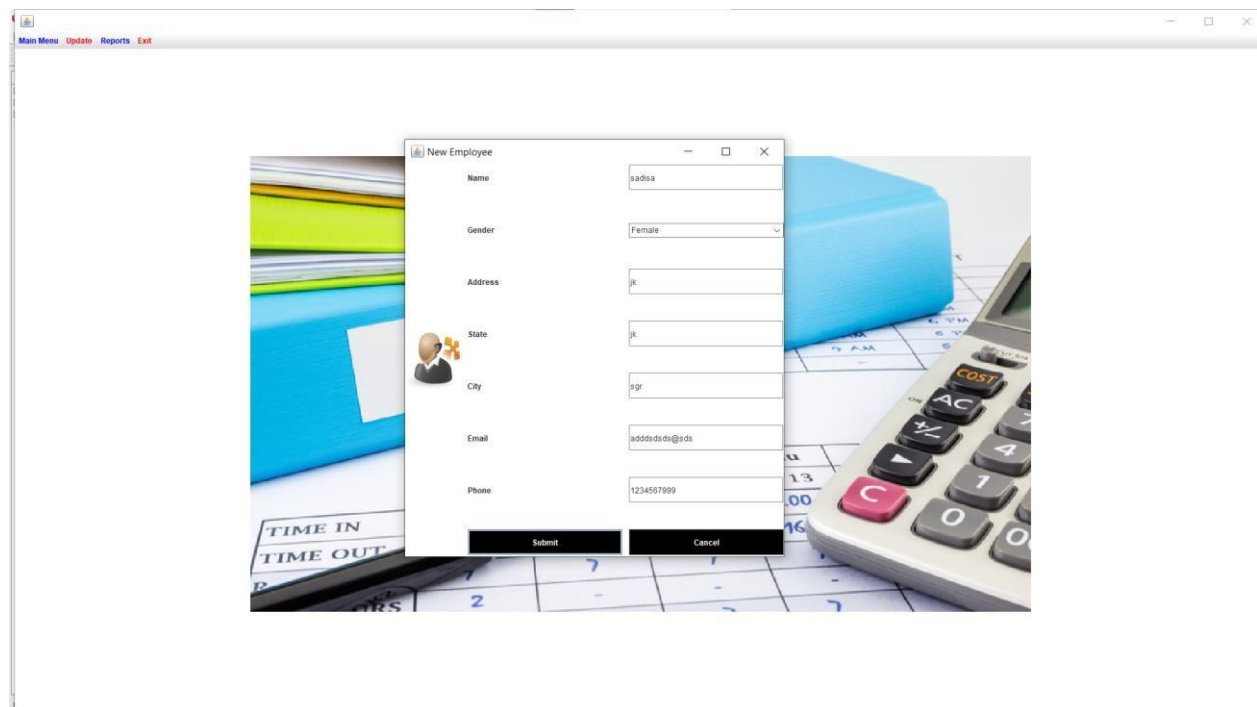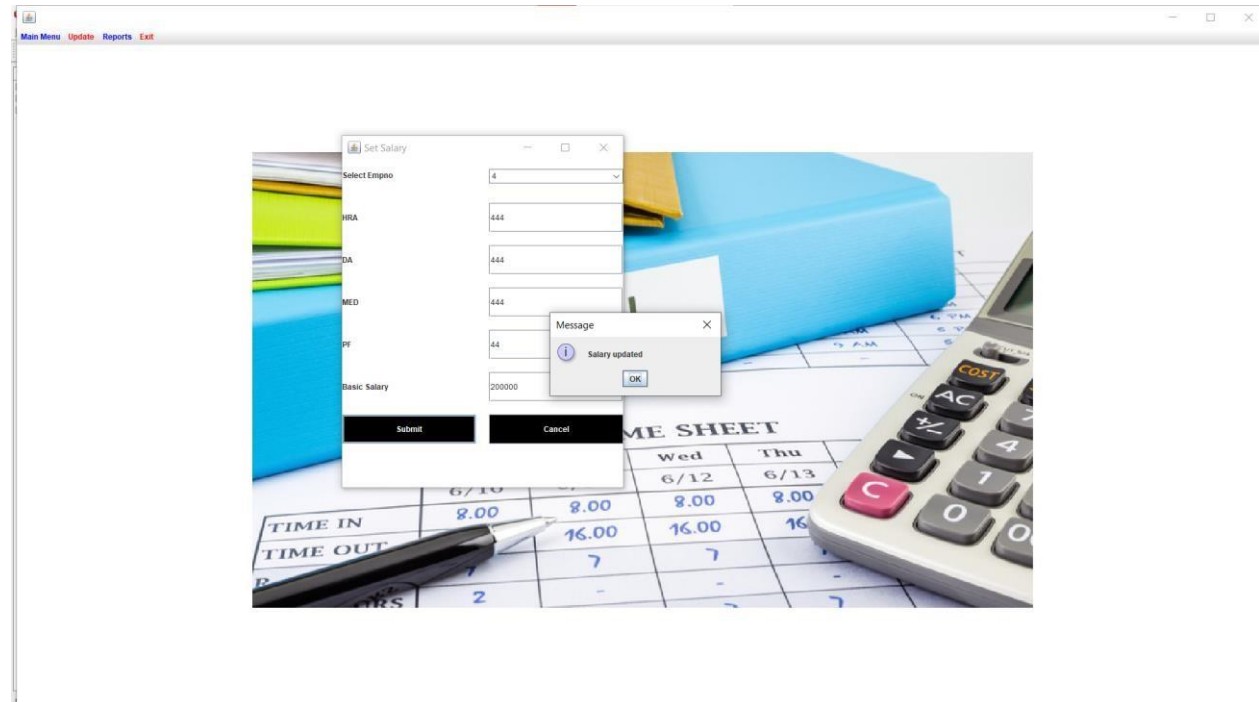
Package Diagram:

Admin

Username:String
Password:String

login(){verify}

New_Employee

Name:String
Gender:String
Address:STring
State:STring
City:String
Email:String
Phone:int

New_EMployee

Take_Attendance

EMpNo:int
FIrstHalf:String
SecondHalf:String

Take_Attendance()

Update_Salary

EMpNo:int
HRA:Double
DA:DOuble
MED:Double
PF:Double
Basic:Salary:Double

Update_Salary()

Salary

EMpNo:int
HRA:Double
DA:DOuble
MED:Double
PF:Double
BasicSalary:Double

Salary()

Employee

EmpName:String

List_EMployee()

Upadte_Employee

EmpNo:int
Name:String
Gender:String
Address:STring
State:STring
City:String
Email:String
Phone:int

Update_Employee()

List_Attendance

EmpNo:int

List_Attendance

PaySlip

EmpId:int

pay_slip()

OUTPUT

loginpage

Adding employee

Adding salary

List employee

Payslip

Select Id 4

---------------- PAY SLIP FOR THE MONTH OF 4 ,2019 ----------------

Employee ID 4
Employee Name sadisa

    HRA   : 444.0
    DA   : 444.0
    MED   : 444.0
    PF   : 44.0
    BASIC SALARY : 200000.0

GROSS SALARY :201376.0
NET SALARY : 201332.0
GST   : 2% of gross 4027.52
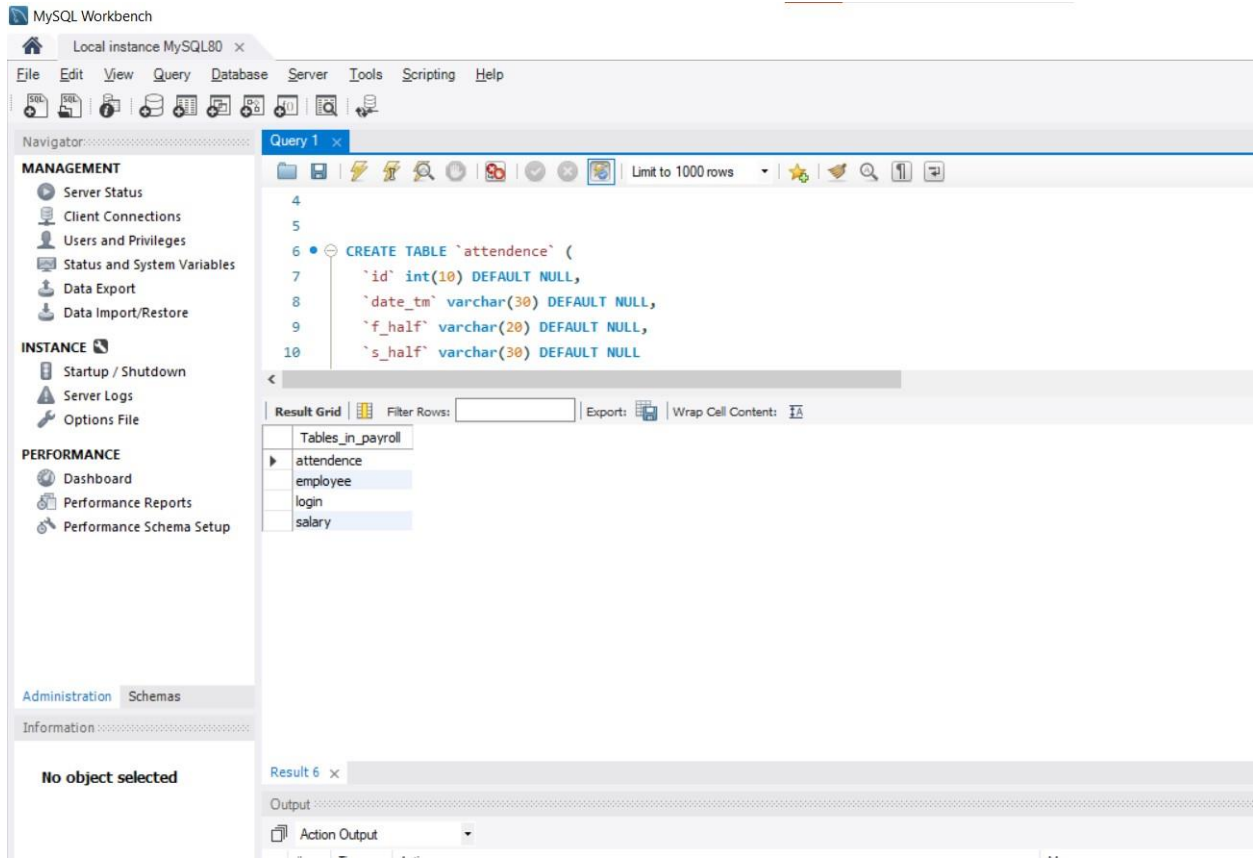---

Generate Pay Slip

Attendence List:
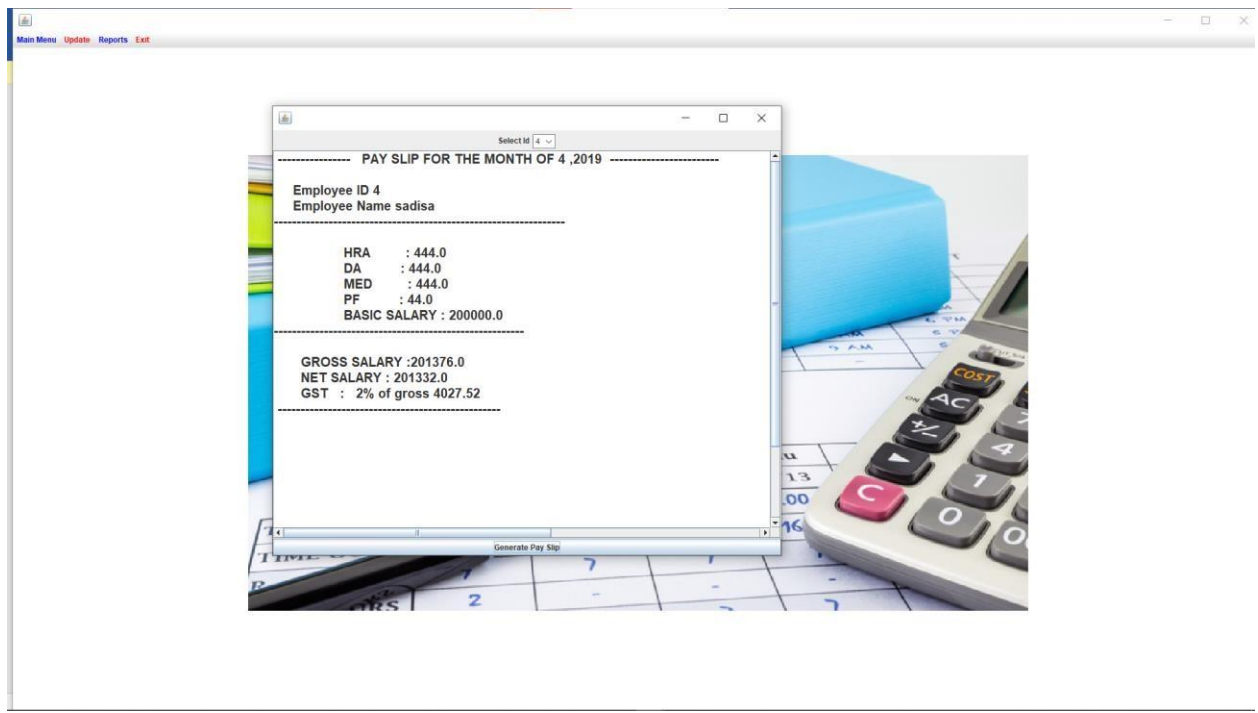
Database backend

Testing:

Test case	Expected outcome	Actual outcome	Success/fail
Admin_login success	Manage & Display Employee Record	Admin Was able to Manage & Display Employee Record	Success
Admin_login Failure	Display invalid credentials alert	Display invalid credentials alert	Failure

Employee registration form	Registration form display	Registration form display	Success
Employee pay calculation	Update & Calculates gross pay	Update & Calculates gross pay	Success
Employee Attendence	Updating daily Attendence	Updating daily Attendence	Success
Generate Attendence List	Generating Attendence List	Generating Attendence List	Success
Admin logout	Display logout alert & redirect to login screen	Display logout alert & redirect to login screen	Success

Improvement In Design:

As small as well as large scale industries are coming more into action with it comes the effort to maintain employee details and generate their payslip. These industrial people have employees work on an hourly basis as per their project requirement.

These days companies need to keep track of their employees pay as well as their own buying and selling, and with tax and legislation ever changing it the need for accurate and efficient payroll solutions has become paramount.These days companies no longer need to manage their own payroll as there are companies that specialise in payroll management who can take care of it for you.

In today's workplace any business which employs staff needs a fluent and effective payroll system. It

enables you to comply with legal obligations and to ensure that you are deducting the right amount of

income tax and national insurance contributions.

It's important for companies to keep on top of this as failure to comply can land businesses in trouble –

and end up costing them a lot of money, and the larger your company is the more difficult it will be to

manage your payroll.