

EX.NO.15 PROJECT: EMPLOYEES DETAILS MANAGEMENT SYSTEM DESKTOP APP.

Done By:-

Name	Reg-No:-
A Sampath Abhishek	RA1811029010035
Krishna prasad	RA1811029010031
Venkata chaitanya	RA1811029010007
Shefali Rai	RA1811029010062

ABSTRACT

In this world of growing technologies everything has been computerized. With large number of work opportunities the human workforce has increased. Thus there is a need of system which can handle data of such large employees of organization. This project simplifies the task of maintaining records, viewing highest pay among employees and assigning group ids because of its user friendly nature. The “EMPLOYEE DETAILS MANAGEMENT” is Developed to override the problems prevailing in the practicing manual system. Moreover this system is designed to carry out operations in a smooth and effective manner. The application is reduced as much as possible to avoid errors while entering the data. It also provides error message while entering invalid data. No formal knowledge is needed for the user to use the system. Thus by this all, it proves it is user friendly.

FUNCTIONALITIES ILLUSTRATED

From below images, both the user and admin modes these are few things we would like to show you

1. Display Employee:- The add button is used to add the record in the database and same time works as a caller to display the same in the JTABLE .

2. Update Employee- This button will show you how the employee details of a particular record can be updated.

3. COUNT – This button will show you the total salary of all the employees on pressing the button.

Dbms select query along with sum function is used for the same.

4. group(natural join)- This button will display the employee name, group id obtained from combining the two tables using the natural join.

5. DELETE Employee– This button will show you how the EXECUTE 2 DELETE Statements IN Transaction Block.The delete command is used to delete the record from both referenced and referencing tables of block.

6.Submit:- The submit button performs nested subquery and fetches the tables by creating a view.

7.DROP:- This button is used to drop the employee table.This privilege is set only to the admin.

User Mode:-

The screenshot shows a window titled 'Welcome' with the main heading 'Employee Details Storage System'. It features three input fields for 'Name', 'Salary', and 'Number'. To the right of the 'Salary' field are two buttons: 'count' and 'group(naturaljoin)'. Below the input fields is a row of five buttons: 'Add', 'Update', 'Delete', 'Clear', and 'exit'. At the bottom, there is a table with three columns: 'Name', 'Salary', and 'Number'. The table is currently empty.

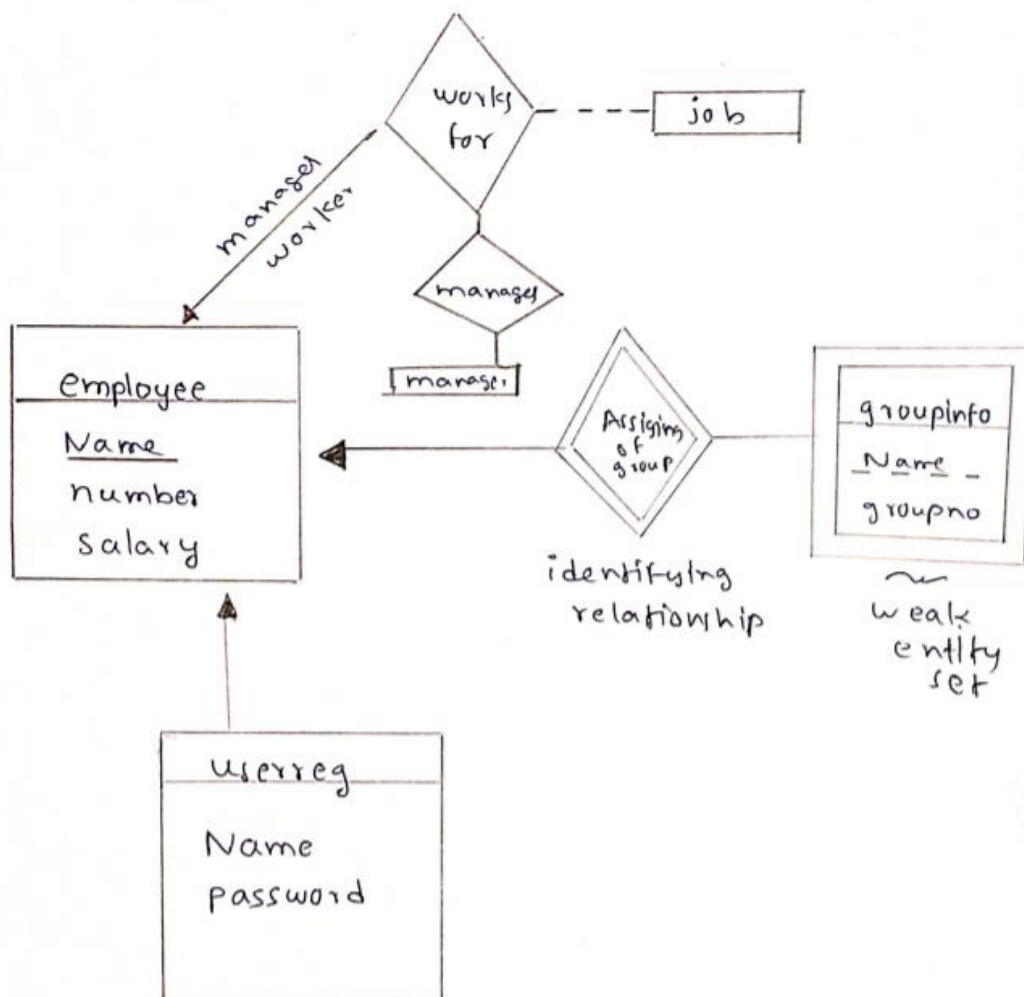
Admin mode:-

The screenshot shows a window titled 'admin' with the heading 'Fetching Employee Information' in red. It contains a 'Select name' dropdown menu with 'Sampath' selected. To the right of the dropdown is a 'DROP' button. Below the dropdown are two buttons: 'submit' and 'exit'.

ER – DIAGRAM FOR EMPLOYEE DETAILS

MANAGEMENT:-

ER diagram for employee details management system:-



PROCEDURE AND CODING

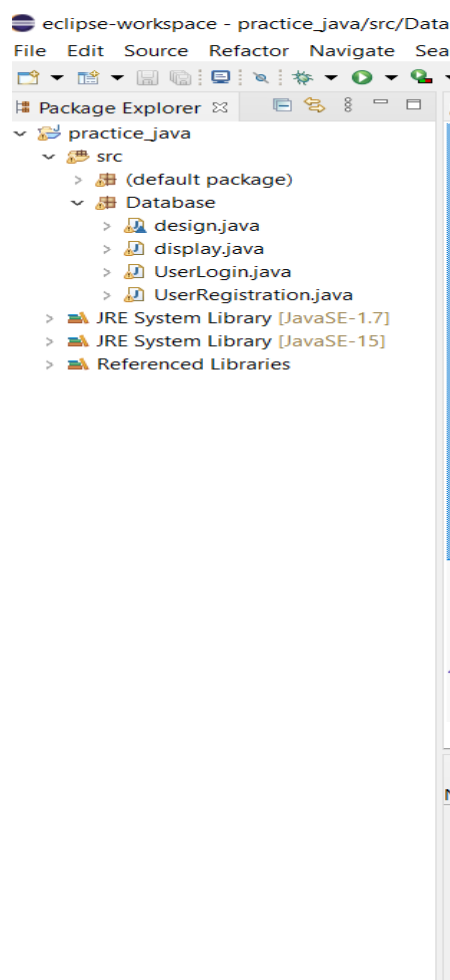
The entire project is implemented in Java Eclipse workspace using JAVA SWING

For front end and JDBC for connecting database. The database is implemented using mysql.

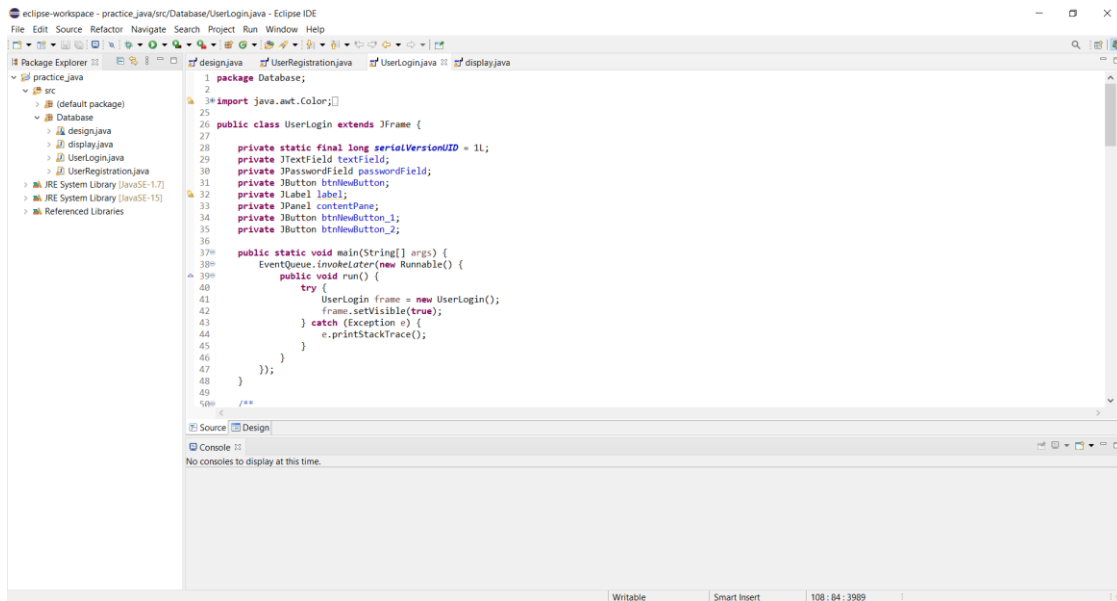
The mysql-connector8.0 is used in establishing connection between front end UI and back end database,

The procedure opted is as follows:-

1. Create project Database .The setting of the project is as follows:-



2. Now create the necessary packages with the class names of UserLogin, UserRegistration, design and display.java. Run the program to check the user interface.



2. The Mysql is now used for storing the necessary details of user in the tables of project database;

Use :- `mysql -u root -p -----` For connecting to mysql from terminal.

Then enter ur set password .This open the mysql interface from command prompt.

```
Command Prompt - mysql -u root -p
C:\Program Files\MySQL\MySQL Server 8.0\bin>mysql -u root -p
Enter password: *****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 316
Server version: 8.0.23 MySQL Community Server - GPL

Copyright (c) 2000, 2021, Oracle and/or its affiliates.

Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql>
```

3.The userreg , groupinfo and employee tables are created and stored in the database projectdbms .

```
Command Prompt - mysql -u root -p

mysql> DESC userreg;
+-----+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id     | int       | YES  |     | NULL    |       |
| Name   | varchar(250) | YES  |     | NULL    |       |
| password | varchar(250) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> DESC employee;
+-----+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| Name   | varchar(250) | NO   | PRI | NULL    |       |
| salary | int         | YES  |     | NULL    |       |
| phone  | bigint      | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> DESC groupinfo;
+-----+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| Name   | varchar(250) | YES  | MUL | NULL    |       |
| groupid | int         | NO   | PRI | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql>
```

This will complete building up necessary packages and storage of database.

DATA DICTIONARY

The project consists of the following database tables:

Database:- projectdbms

CREATE database projectdbms;

use projectdbms;

1.Employee Table:- This table stores Employees details like Name,phone number and salary. employee(Name varchar(250),salary int(12),phone int(12));

Query:-

create table employee (Name varchar(250),salary int(12),phone int(12));

2.Userreg Table:-This table stores registered users details.It will store their Name and password.userreg(id int,Name varchar(250),password varchar(250));

Query:-

CREATE TABLE userreg (id int,Name varchar(250),password varchar(250));

ALTER TABLE employee ADD PRIMARY KEY (Name);

3.Groupinfo Table:- This table stores users groupinfo details.It will store their Name and Will assign groupid to the employees of database..

Query:-

CREATE TABLE groupinfo (Name varchar(250),groupid int ,PRIMARY KEY (groupid), FOREIGN KEY (Name) REFERENCES employee (Name));

JAVA CODE SNIPPET

The following Java code was used to insert sample data,implement the Application from backend using java jdbc and mysql connector.

```
Connection connection = (Connection)
DriverManager.getConnection("jdbc:mysql://localhost:3306/projectdbms","root",
"abhiSurya@54");

        PreparedStatement st = (PreparedStatement) connection
        .prepareStatement("Select name, password from userreg
where name=? and password=?");

Connection con=DriverManager.getConnection(
"jdbc:mysql://localhost:3306/projectdbms","root","abhiSurya@54");
        String query1 ="insert into employee values(?,?,?)";
        String query2 ="insert into groupinfo values (?,?)";

t1.setText(model.getValueAt(i,0).toString());
        t2.setText(model.getValueAt(i,1).toString());
        t3.setText(model.getValueAt(i,2).toString());
        JOptionPane.showMessageDialog(null, "Updated
successfully");

Connection con=DriverManager.getConnection(
"jdbc:mysql://localhost:3306/projectdbms","root","abhiSurya@54");
        String query1 = "delete from groupinfo where Name=?";
        String query2 ="delete from employee where Name=?";

Connection con=DriverManager.getConnection(
"jdbc:mysql://localhost:3306/projectdbms","root","abhiSurya@54");
        String query1 ="select SUM(Salary)  from employee";

Connection con=DriverManager.getConnection(
"jdbc:mysql://localhost:3306/projectdbms","root","abhiSurya@54");
        String query1 ="select Name,groupid from employee
NATURAL JOIN groupinfo where salary > 75000";

Connection connection = (Connection)
DriverManager.getConnection("jdbc:mysql://localhost:3306/projectdbms","root",
"abhiSurya@54");

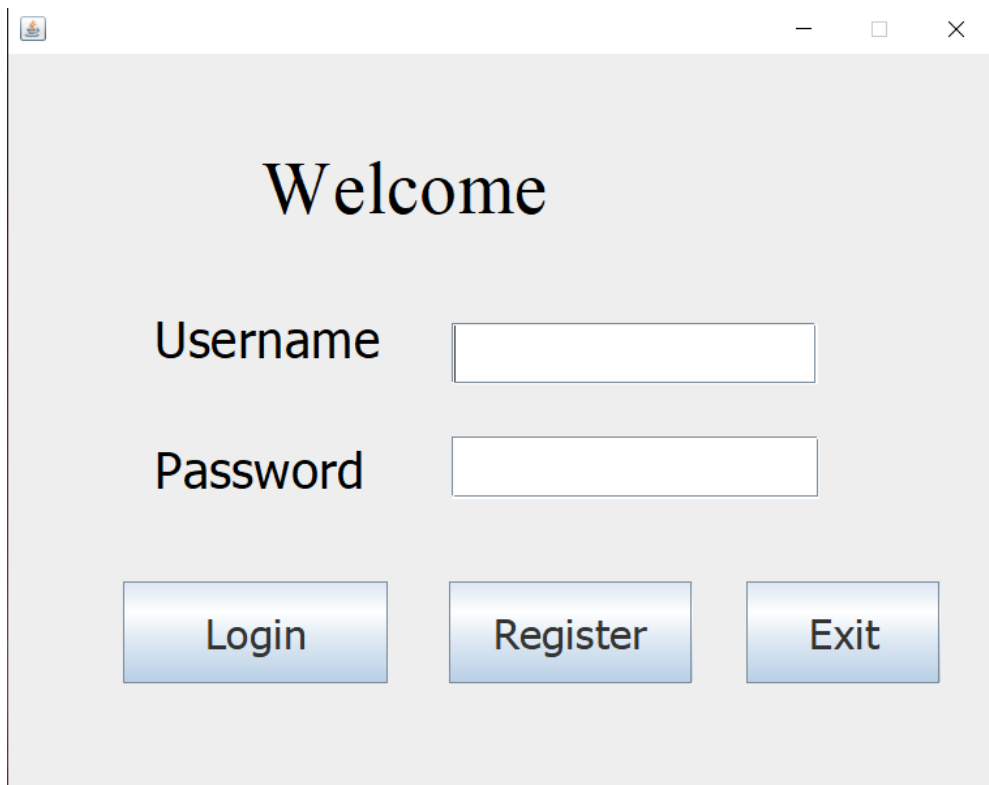
        PreparedStatement st = (PreparedStatement) connection
        .prepareStatement("insert into userreg values(?,?,?)");

Connection con=DriverManager.getConnection(
        "jdbc:mysql://localhost:3306/projectdbms","root","abhiSurya@54");

        String query1 ="select * from employee where Name='" + from + "'";
```

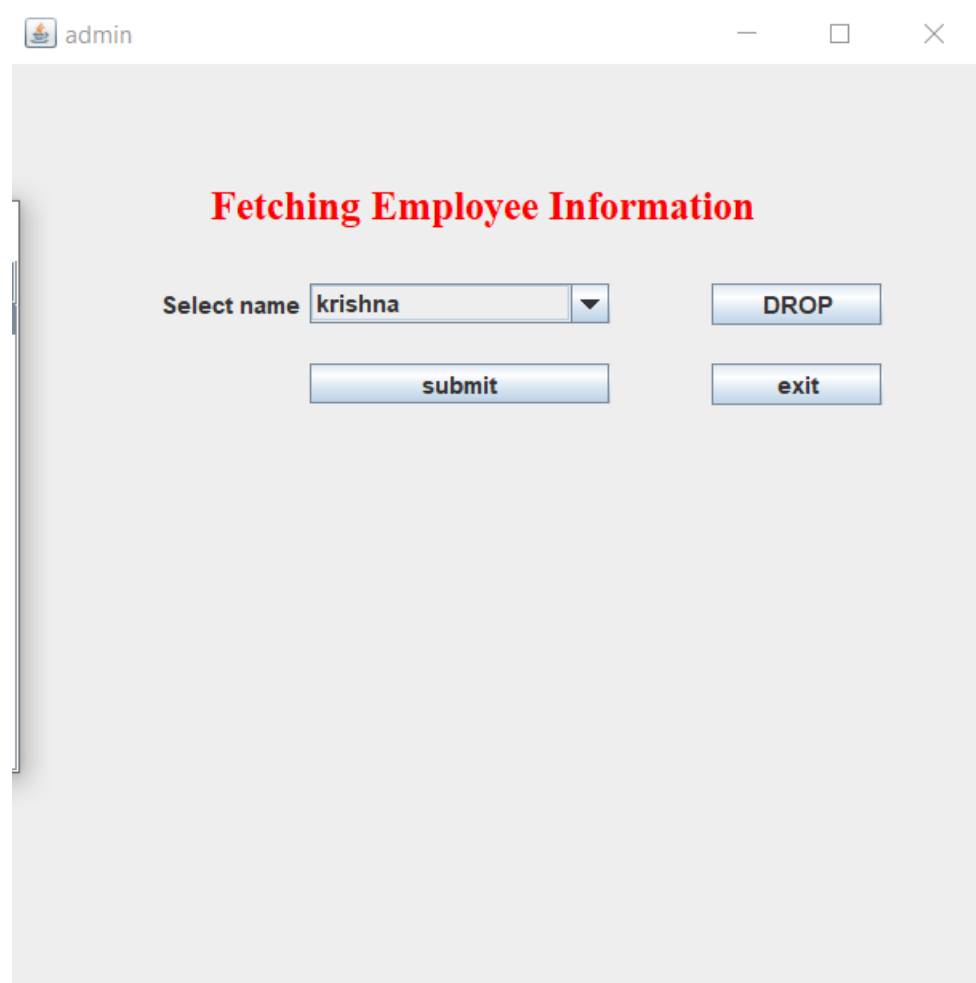
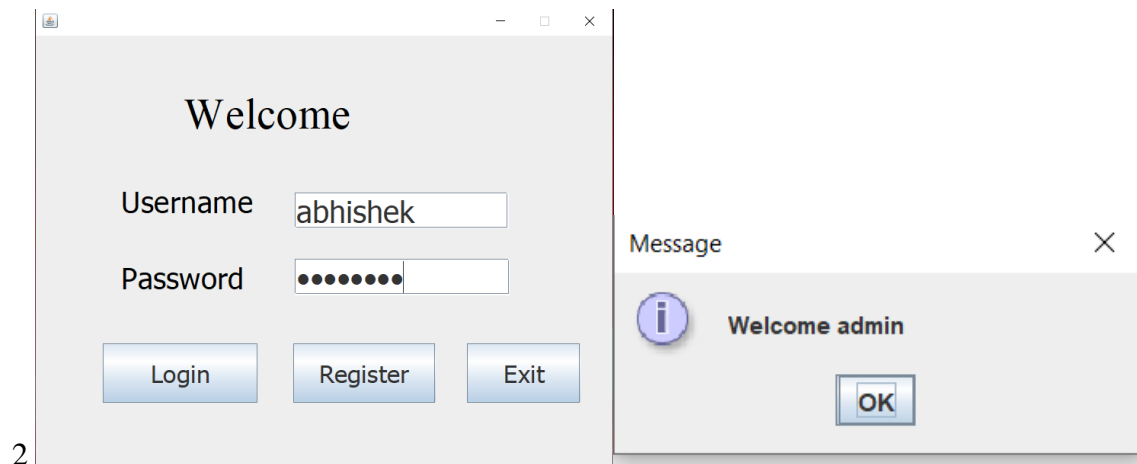

IMPLEMENTATION OF PROJECT AND SCREENSHOTS

1.User/Admin Login Page:-



A screenshot of a web application window titled "Welcome". The window has a light gray background and a standard Windows-style title bar with a minimize button, a maximize button, and a close button. The main content area displays the word "Welcome" in a large, black, serif font. Below this, there are two input fields: "Username" and "Password", each followed by a white text box with a thin blue border. At the bottom of the window, there are three blue buttons with white text: "Login", "Register", and "Exit".

Login as Administrator:-



Database Search Result		
Name	Salary	Phone
krishna	45000	9654878

User Registration:-

Welcome				
User Registration				
Username	<input type="text"/>			
Password	<input type="password"/>			
enumber	<input type="text"/>			
<input type="button" value="Register"/>		<input type="button" value="exit"/>		<input type="button" value="Back"/>

Login as a User:-

Retrieve data,store information,count sum salary and performing natural join.

Welcome

Employee Details Storage System

Name

Salary

Number

Name	Salary	Number
Rahul	25000	69456632

Welcome

Employee Details Storage System

Name

Salary

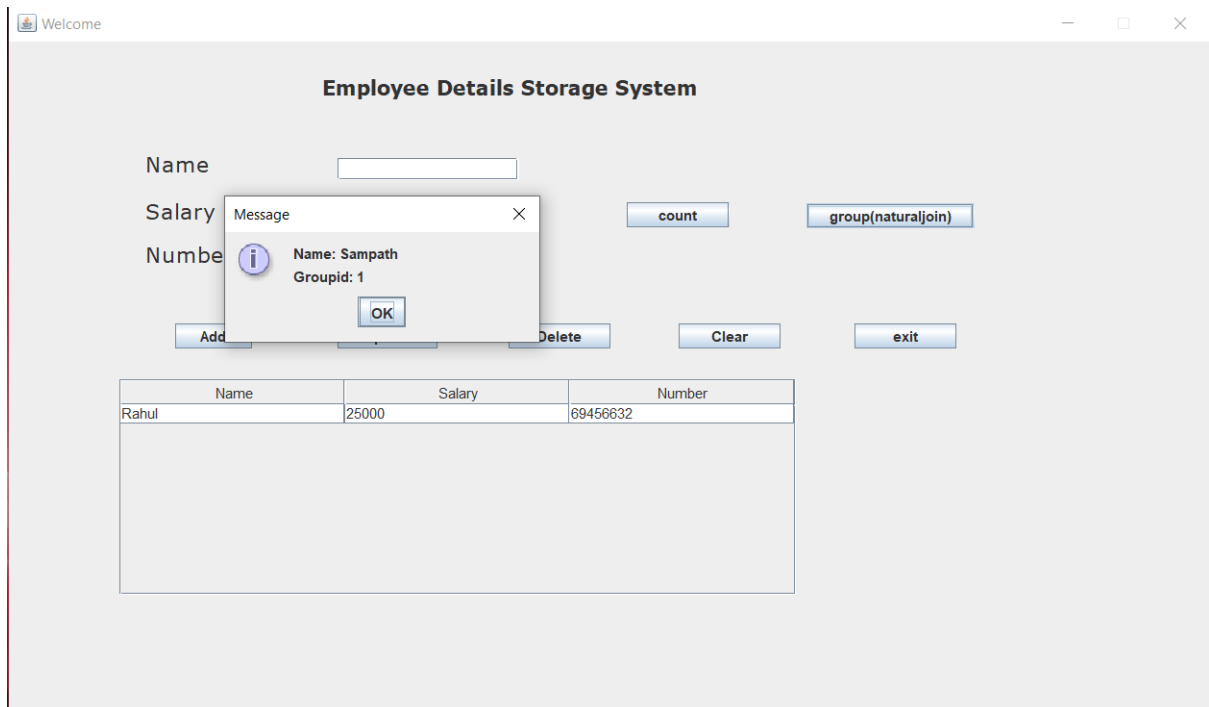
Num

Message

The total salary of all employees is:362735

OK

Name	Salary	Number
Rahul	25000	69456632



The record is successfully stored in database project dbms. It can be accessed by performing suitable query from mysql to verify.

```

Command Prompt - mysql -u root -p
8 rows in set (0.00 sec)

mysql> select * from employee;
+-----+-----+-----+
| Name  | salary | phone |
+-----+-----+-----+
| dennis | 25000  | 65000 |
| hardik | 2500   | 987456 |
| hello  | 1235   | 654   |
| krishna | 45000  | 9654878 |
| Rahul  | 25000  | 69456632 |
| Sampath | 89000  | 94123155 |
| vinay  | 98000  | 12987456 |
| vinod  | 12000  | 98652100 |
+-----+-----+-----+
8 rows in set (0.00 sec)

mysql> select * from groupinfo;
+-----+-----+
| Name  | groupid |
+-----+-----+
| dennis | 9 |
| hardik | 3 |
| hello  | 19 |
| Rahul  | 15 |
| sampath | 1 |
| vinay  | 8 |
| vinod  | 0 |
+-----+-----+
7 rows in set (0.00 sec)

```

CHALLENGES IN BUSINESS PERSPECTIVE:-

- 1.MANUAL PROCESSES :- There are chances for error prone,results to leakage and productivity efficiency
- 2.VISIBILITY :- tracking issued work orders,attendance ot etc.
- 3.COMPLIANCE:-pf remittanc tracking.
- 4.SYSTEM INTEGRATION:-erp integration and challenges.
- 5.OVER INVOICING :-Manual invoic generation and management.
- 6.EMPLOYMENT DATA AND ORDER MANAGEMENT.:-paper/excel based data management.

CONCLUSION:-

So as a whole by the effective utilisation of our 'EMPLOYEE STORAGE SYSTEM' Data storage ibecomes easier. Paper work will be reduced and the company staffs spend more time on monitoring the progress.

The **system** is user friendly and easy to use. All the important data's will be stored in a database and it avoids miscalculation.

REFERENCES:-

- 1.<https://www.javatpoint.com/java-jdbc>.
2. https://creately.com/usage/star-diagram-template/?gclid=CjwKCAjw-e2EBhAhEiwAJI5jg3uSSoesyfb2c2F-LhWCQ78cGAUEOO2FhVkOGkzM9uOnDs_Vpgs6ehoCqUgQAvD_BwE

--- can be used for creation of ER DIAGRAM .software (STAR-UML).