

**TOPIC:- Employee Management System**

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**UNDER THE GUIDANCE OF OUR TEACHER**

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**SubmittedTo**:-

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**Declaration**

We hereby declare that the project work entitled (“Employee Management System ”) is an authentic record of our own work carried out as requirements of Capstone Project for the award of B.Tech degree in \_\_\_CSE\_\_\_\_\_\_\_\_\_(Programme Name) from Lovely Professional University, Phagwara, under the guidance of (“ Mr.RANJITH KUMAR SIR”), during March-April 2023. All the information furnished in this capstone project report is based on our own intensive work and is genuine.

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# 1.INTRODUCTION

Everything has been digitised in our age of ever-increasing technology. The human workforce has grown as a result of the abundance of job options. As a result, a system that can handle the data of such a vastnumber of people in a company is required. Because of its user-friendly design, this project makes theprocess of keeping records easier. The "EMPLOYEE MANAGEMENT SYSTEM" was created to address the issues of earlier system or address the issues that plagued the previous manual system. This programme is designed to eliminate,and in some cases, decrease, the problems that the current system has. To eliminate data entry mistakes, the software is kept as simple as possible. When inputting incorrect data, it also displays an error notice. The user doesn’t require any formal expertise to operate this system. The admin will be able to add new employees to this project. Employee data may also be seen and printed by the administrator. Admins can also remove an employee and change their details.

**2.Objective**

The objective of this work is to give a complete approach to personnel information management.

This will be accomplished by developing and deploying an HR management system that will result

in a significant shift in the way employee data is managed.

This system's objectives include the following:

1. Design of an HR management system to meet needs such as adding and deleting

employees, viewing and printing employee data, and updating employee information.

2. Employee data is stored in a well-designed database.

3. An easy-to-use interface that will let user interact with the system.

# 3.REQUIREMENTANALYSIS (SRS)

# NON-FUNCTIONAL REQUIREMENT:

1. Performance: The system should be responsive and able to handle a large number of users and data transactions without significant delays or downtime.
2. Scalability: The system should be able to accommodate growth in the number of users, data, and features without significant performance degradation.
3. Security: The system should be designed to protect sensitive employee information from unauthorized access, hacking, or data breaches.
4. Reliability: The system should be able to operate consistently and reliably, without errors, failures, or crashes.
5. Usability: The system should be easy to use and navigate, with clear and intuitive user interfaces that support efficient and effective management of employee data.
6. Accessibility: The system should be accessible to all authorized users, regardless of their physical or technical limitations.
7. Compatibility: The system should be compatible with other enterprise software and hardware systems, and be able to integrate data seamlessly across multiple platforms and applications.

**FUNCTIONAL REQUIREMENT:**

1. Secure the company's database by requiring a valid and

2. Password and username are registered.

3. Make it easier to enter, organize, retrieve, modify, and delete data

from the database in steps without having to go into the database itself.

4. It's easy to add new employee information.

5. Provide users with a means of updating information.

6. Erase existing employee data.

7. Provide a list of participant codes that represent previous employee.

8. Show employee data in a coordinated way for simple understandability.

REQUIREMENT FOR THE EXTERNAL INTERFACE:

INTERFACE WITH USERS: The software's user interface will include appropriately

labeled text-boxes for relatively simple data input processes. As command buttons are functionally labeled, it will also have a user-friendly view of the entire system, making it easy to perform

action-driven processes. Because of all of these features, the intended users of this software

should not have any trouble using it.

# Hardware and Software Requirements Hardware Requirements

The following are the initial/tentative Infrastructure Requirements:

* 1. Deployment Platform

32 core, RAM: 64GB RAM, Storage: 10 TB(tentative)

* 1. Testing Platform

32 core, RAM: 64GB RAM, Storage: 10 TB(tentative)

c. One Public IP

d. SSL Certificate, Domain name

# Software Requirements

Following are the softwares used for application.

|  |  |
| --- | --- |
| SoftwareUsed | Application |
| Operating System | Windows XP, Windows 7, Windows 8,Windows 10 |
| Database and Performance | MySQL and The turn-around time of the project will be medium. |
| Internet connection | Existing telephone lines, Data card. |
| Browser | Google chrome latest version |

# FEASIBILITY STUDY

# In order to do a feasibility study, we must consider the following:

**TECHNICAL FEASIBILITY**

The availability of hardware & Software necessary for the creation of the system, as-well as the compatibility and maturity of the technology planned to be used, and the availability of the requisite technical staff to create the system, are all factors to consider.

**OPERATIONAL FEASIBILITY**:

Problems that may develop during operations are the focus of operation feasibility. There are two parts to this problem to consider:

• What are the chances that the solution provided will not be used or will not work?

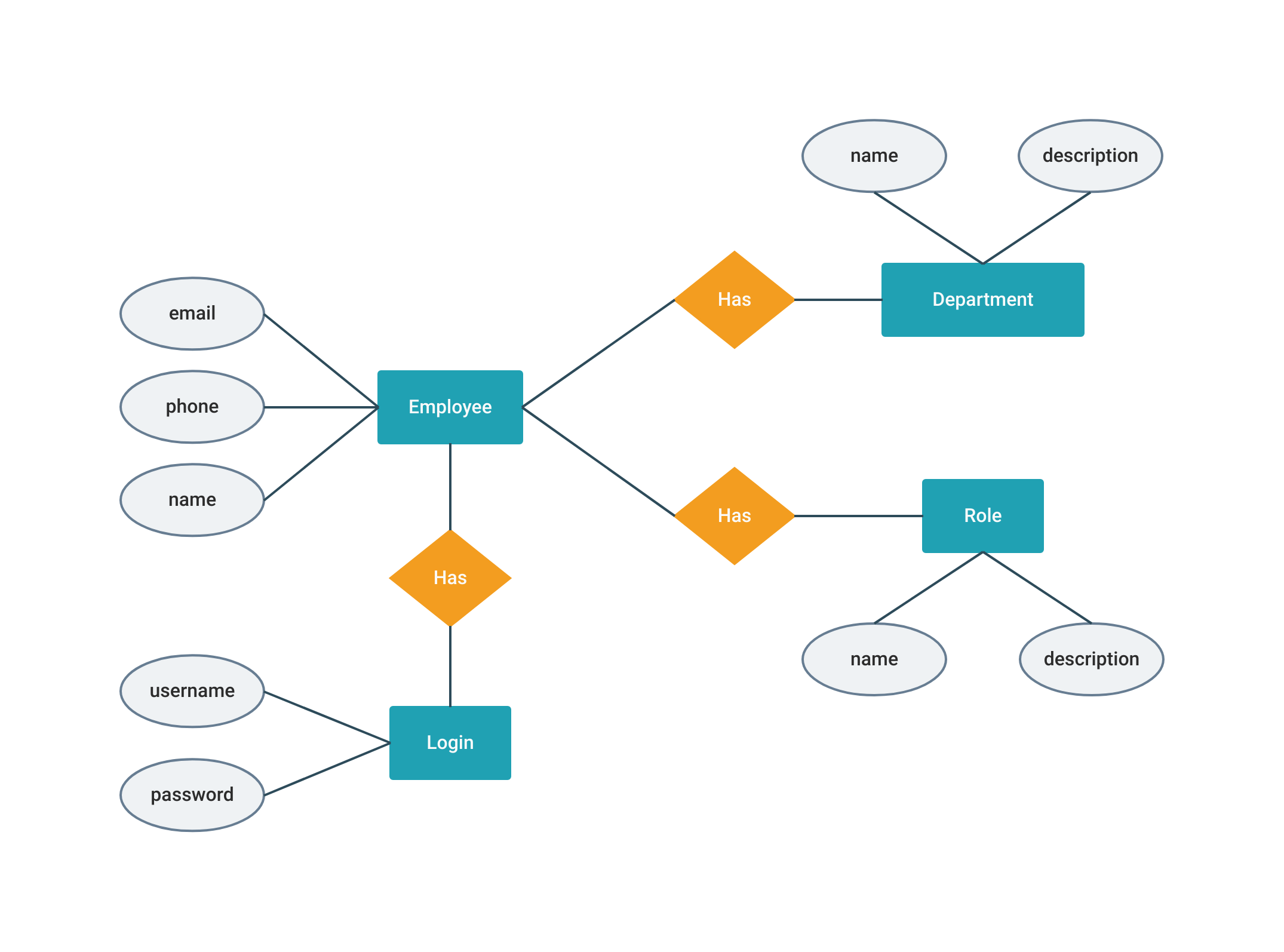
• What is the inclination of-the management and end users towards the solution?

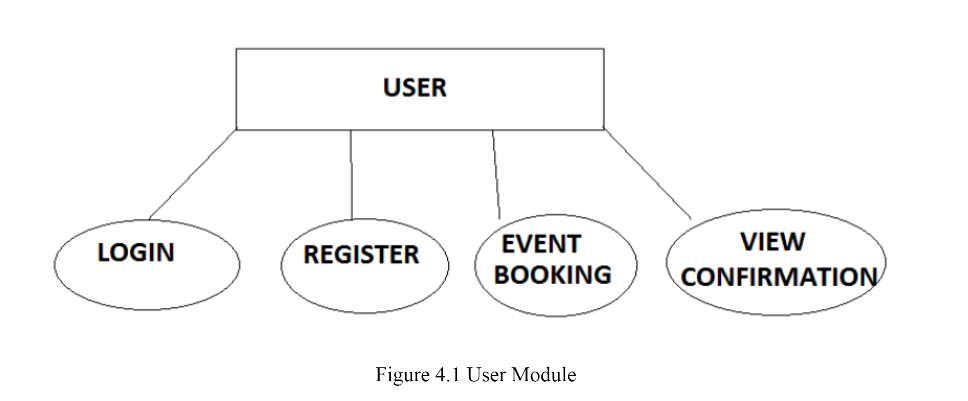
**ECONOMICAL FEASIBILITY**

The concept of economic feasibility is determining whether or not the potential benefit of fixing difficulties is worth while. Because member needs &alternative solutions haven’t been specified at this point, it is difficult to estimate the cost at this level.

**SOFTWARE DESIGN:**

ER Diagram:

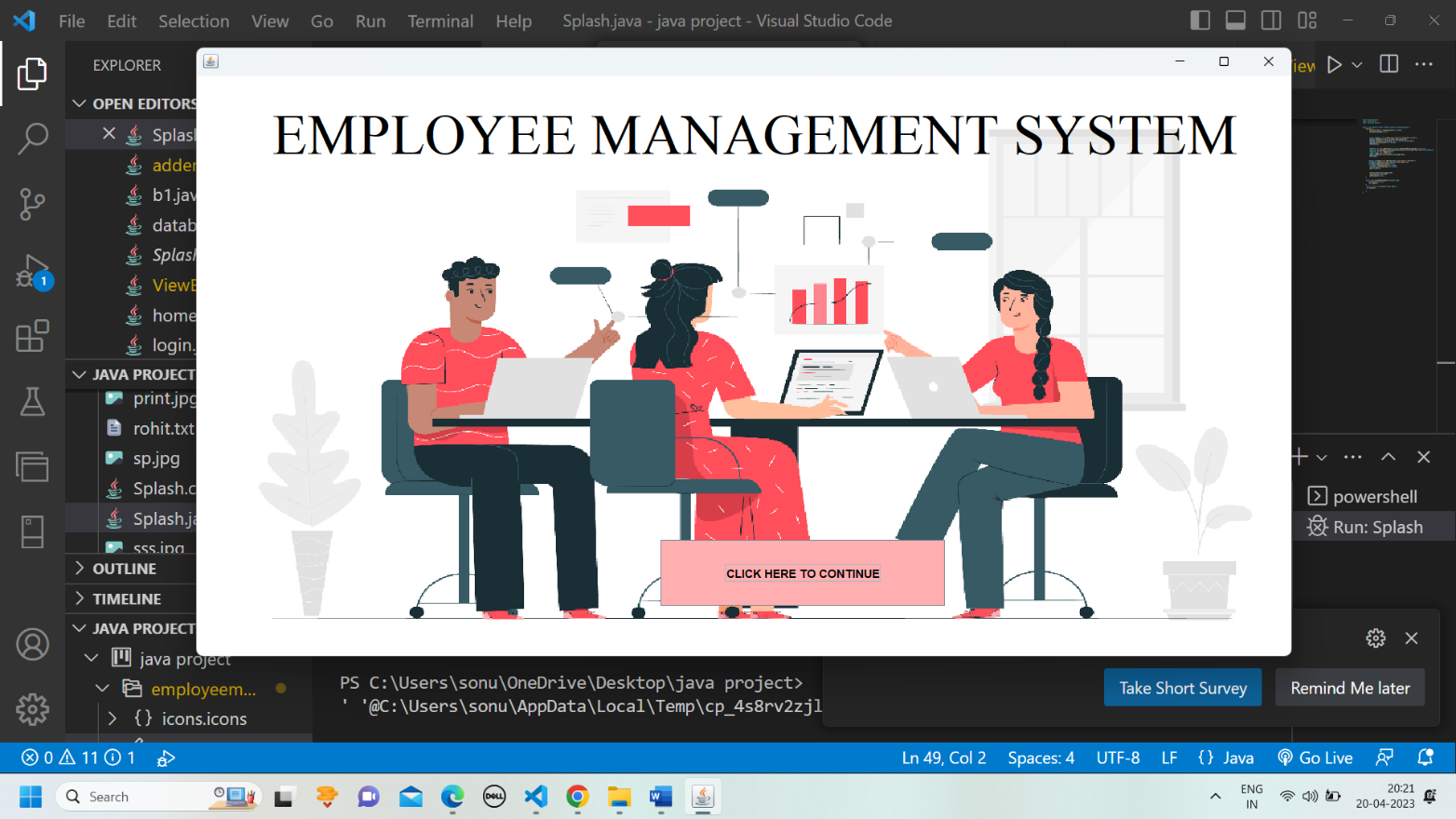


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**5.IMPLEMENTATION AND RESULT :**

Following are the screens of the Employee Management System where you can see all the features of this system in use and you can also see the GUI of the system:

**1.Front page:-**



**Re**

**CODE:**

import javax.swing.\*;

import java.awt.\*;

import java.awt.event.\*;

public class Splash extends JFrame implements ActionListener {

    Splash() {

        getContentPane().setBackground(Color.PINK);

        setLayout(null);

         JLabel heading = new JLabel("EMPLOYEE MANAGEMENT SYSTEM");

         heading.setBounds(80,30,1200,60);

         heading.setFont(new Font("serif",Font.PLAIN,60));

         heading.setForeground(Color.BLACK);

         add(heading);

         ImageIcon i1 =new ImageIcon(ClassLoader.getSystemResource("sp.jpg"));

         Image i2 =i1.getImage().getScaledInstance(1170,650,Image.SCALE\_DEFAULT);

         ImageIcon i3 =new ImageIcon(i2);

         JLabel image =new JLabel(i3);

         image.setBounds(0,0,1170,650);

         add(image);

        JButton clickhere =new JButton("CLICK HERE TO CONTINUE");

        clickhere.setBounds(490,490,300,70);

        clickhere.addActionListener(this);

         clickhere.setBackground(Color.PINK);

         clickhere.setForeground(Color.BLACK);

         add(clickhere);

         setSize(1170,650);

         setLocation(200,50);

         setVisible(true);

    }

    public void actionPerformed(ActionEvent ae){

        setVisible(false);

        new login();

    }

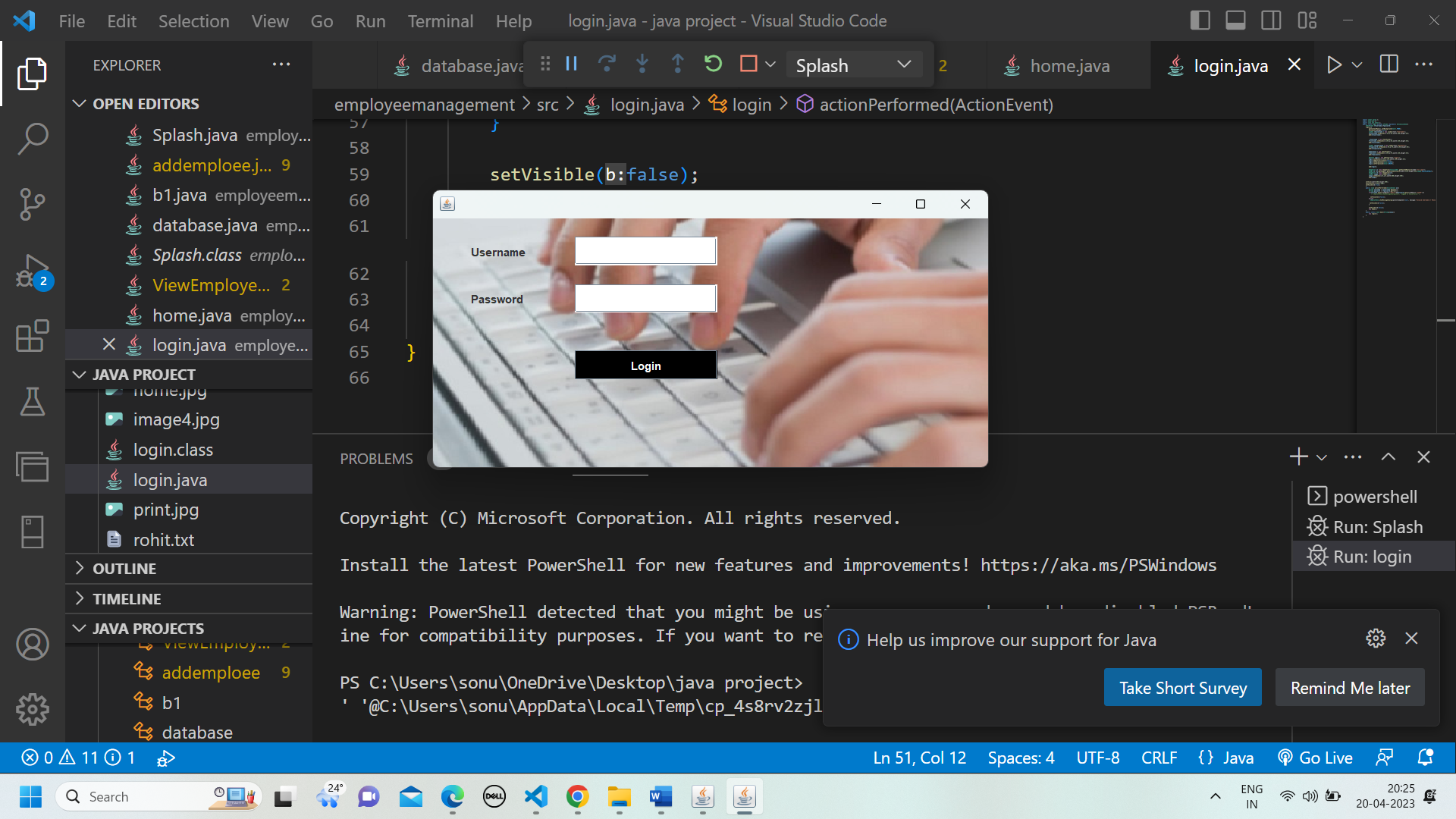
     public static void main(String[] args) {

     new Splash();

    }

}

**2.LOGIN FRMAE:**



**CODE:**

import javax.swing.\*;

import java.awt.\*;

import java.awt.event.\*;

public class login extends JFrame implements ActionListener{

    JTextField tfusername,tfpassword;

    login(){

        getContentPane().setBackground(Color.PINK);

        setLayout(null);

        JLabel lblusername = new JLabel("Username");

        lblusername.setBounds(40,20,100,30);

        add(lblusername);

         tfusername = new JTextField();

        tfusername.setBounds(150,20,150,30);

        add(tfusername);

        JLabel lblupassword = new JLabel("Password");

        lblupassword.setBounds(40,70,100,30);

        add(lblupassword);

        tfpassword = new JTextField();

        tfpassword.setBounds(150,70,150,30);

        add(tfpassword);

        JButton login = new JButton("Login");

        login.setBounds(150,140,150,30);

        login.addActionListener(this);

        login.setBackground(Color.BLACK);

        login.setForeground(Color.WHITE);

        add(login);

        ImageIcon i1 =new ImageIcon(ClassLoader.getSystemResource("sss.jpg"));

        Image i2 =i1.getImage().getScaledInstance(1170,650,Image.SCALE\_DEFAULT);

        ImageIcon i3 =new ImageIcon(i2);

        JLabel image =new JLabel(i3);

        image.setBounds(0,0,600,350);

        add(image);

    setSize(600,300);

    setLocation(450,200);

    setVisible(true);

    }

    public void actionPerformed(ActionEvent ae){

        String username = tfusername.getText();

        String password = tfpassword.getText();

        if(username.equals("admin")&&password.equals("12345")){

           // JOptionPane.showMessageDialog(null, "Logged in Succesfully!");

          setVisible(false);

        }else{

          JOptionPane.showMessageDialog(null, "Invalid Username or Password");

         setVisible(false);

        }

        setVisible(false);

        new home();

    }

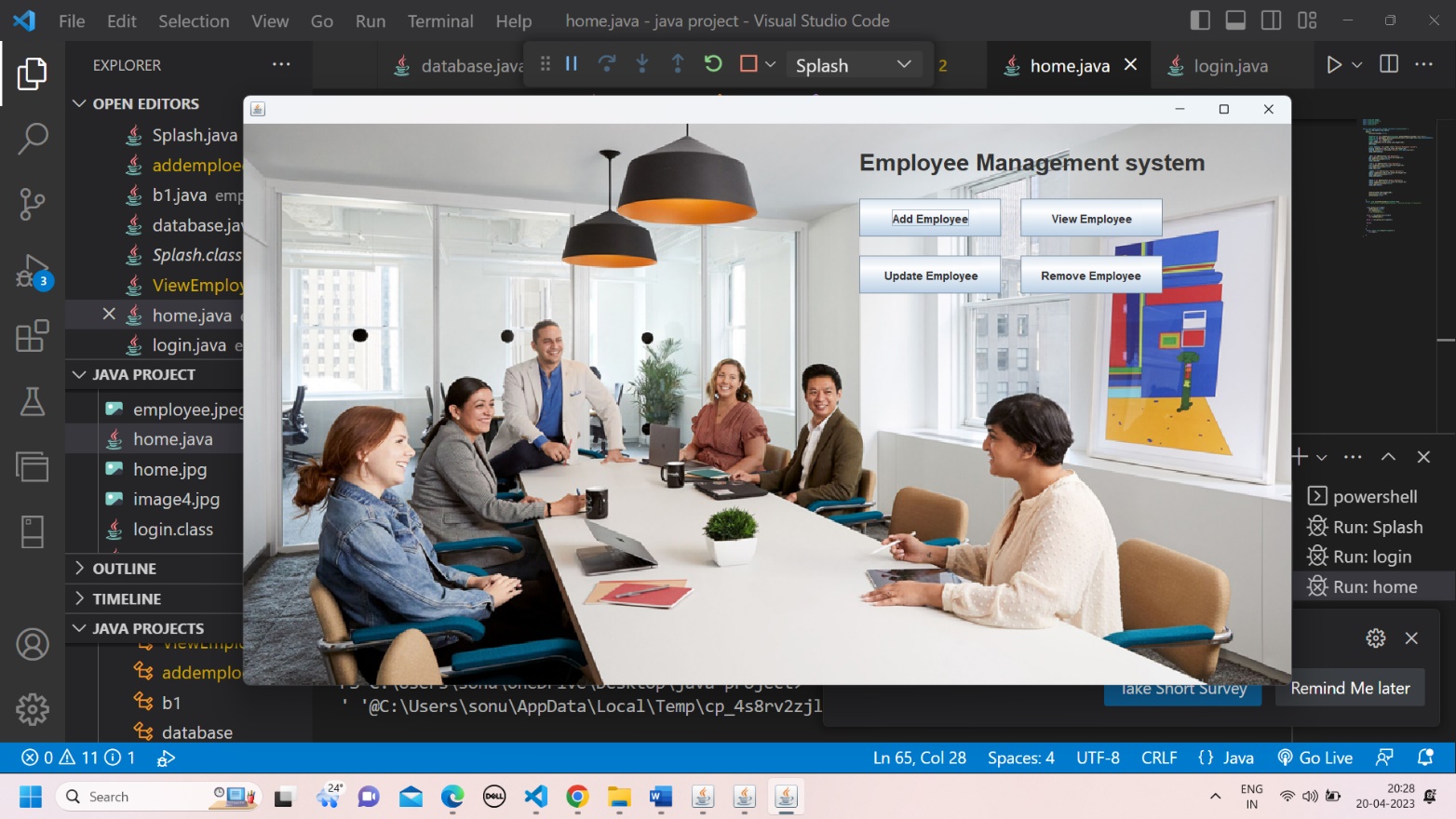
    public static void main(String[]args){

        new login();

    }

}

**3.HOME PAGE:**



**CODE:**

import java.awt.Image;

import java.awt.event.\*;

import javax.swing.\*;

import java.awt.\*;

public class home extends JFrame implements ActionListener {

    JButton add,update,view,remove;

    home(){

        setLayout(null);

        ImageIcon i1 =new ImageIcon(ClassLoader.getSystemResource("home.jpg"));

        Image i2 =i1.getImage().getScaledInstance(1120,630,Image.SCALE\_DEFAULT);

        ImageIcon i3 =new ImageIcon(i2);

        JLabel image =new JLabel(i3);

        image.setBounds(0,0,1120,630);

        add(image);

        JLabel heading = new JLabel ("Employee Management system");

        heading.setBounds(650,20,400,40);

        heading.setFont(new Font("Raleway",Font.BOLD,25));

        image.add(heading);

         add = new JButton("Add Employee");

        add.setBounds(650,80,150,40);

        add.addActionListener(this);

        image.add(add);

         view = new JButton("View Employee");

        view.setBounds(820,80,150,40);

        view.addActionListener(this);

        image.add(view);

         update = new JButton("Update Employee");

        update.setBounds(650,140,150,40);

        update.addActionListener(this);

        image.add(update);

        remove = new JButton("Remove Employee");

        remove.setBounds(820,140,150,40);

        remove.addActionListener(this);

        image.add(remove);

        setSize(1120,630);

        setLocation(250,100);

        setVisible(true);

    }

    public void actionPerformed(ActionEvent ae){

       // JOptionPane.showMessageDialog(null, "Invalid Username or Password");

     if(ae.getSource()==add){

        setVisible(false);

        new addemploee();

       // new ViewEmployee();

     }else if (ae.getSource()==view){

        new ViewEmployee();

     }else if (ae.getSource()==update){

     }else{

     }

    }

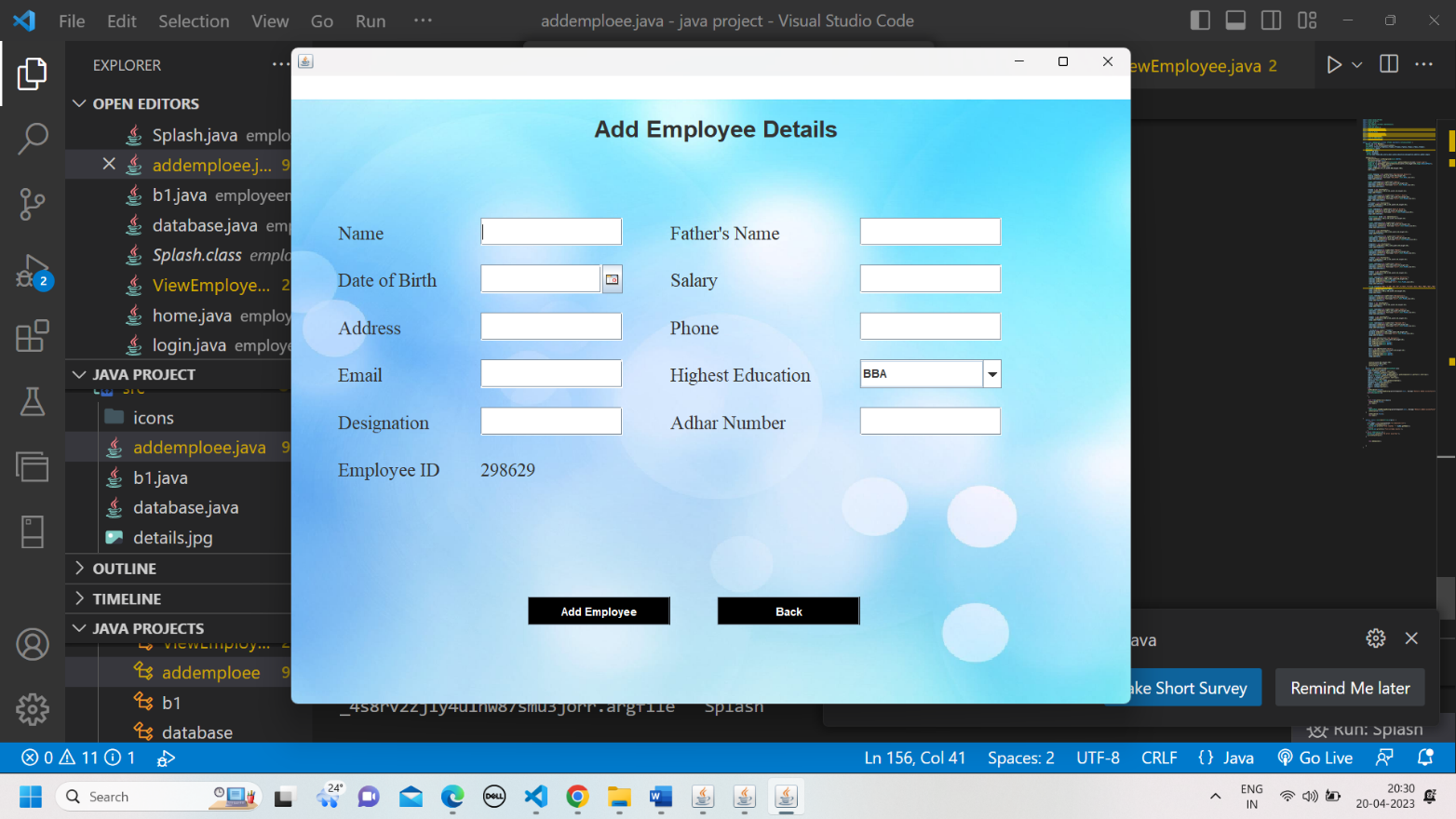
     public static void main(String[]rk) {

        new home();

    }

}

**4.ADD EMPLOYEE :**



**CODE:**

import javax.swing.JFrame;

import javax.swing.\*;

import java.awt.\*;

import com.toedter.calendar.JDateChooser;

import java.util.\*;

import java.awt.event.\*;

import java.io.DataInputStream;

import java.io.DataOutputStream;

import java.io.File;

import java.io.FileInputStream;

import java.io.FileOutputStream;

import java.io.FileWriter;

import java.io.IOException;

import java.io.InputStream;

public class addemploee extends JFrame implements ActionListener {

    Random ran =new Random();

    int number = ran.nextInt(999999);

    JTextField tfsalary,tfaddress,tfname1,tffname1,tfphone,tfemail,tfdesi,tfadhar;

    JDateChooser dcdob;

    JComboBox chedu;

    JButton add,back;

     JLabel lblempid;

     String name,fname,dob,salary,email,phone,education,designation,address,aadhar,empid;

    addemploee(){

       getContentPane().setBackground(Color.WHITE);

       setLayout(null);

       ImageIcon i1 =new ImageIcon(ClassLoader.getSystemResource("image4.jpg"));

       Image i2 =i1.getImage().getScaledInstance(1170,650,Image.SCALE\_DEFAULT);

       ImageIcon i3 =new ImageIcon(i2);

       JLabel image =new JLabel(i3);

       image.setBounds(0,0,900,700);

       add(image);

       JLabel heading = new JLabel("Add Employee Details");

       heading.setBounds(320,30,500,50);

       heading.setFont(new Font("SAN\_SERIE",Font.BOLD,25));

       image.add(heading);

       JLabel labelname1=new JLabel("Name");

       labelname1.setBounds(50,150,150,30);

       labelname1.setFont(new Font("serif",Font.PLAIN,20));

       image.add(labelname1);

       tfname1 = new JTextField();

       tfname1.setBounds(200,150,150,30);

       image.add(tfname1);

       JLabel labelfname1=new JLabel("Father's Name");

       labelfname1.setBounds(400,150,150,30);

       labelfname1.setFont(new Font("serif",Font.PLAIN,20));

      image. add(labelfname1);

        tffname1 = new JTextField();

       tffname1.setBounds(600,150,150,30);

       image.add(tffname1);

       JLabel labeldob=new JLabel("Date of Birth");

       labeldob.setBounds(50,200,150,30);

       labeldob.setFont(new Font("serif",Font.PLAIN,20));

       image.add(labeldob);

        JDateChooser dcdob =new JDateChooser();

        dcdob.setBounds(200,200,150,30);

        image.add(dcdob);

        JLabel labelsalary=new JLabel("Salary");

        labelsalary.setBounds(400,200,150,30);

        labelsalary.setFont(new Font("serif",Font.PLAIN,20));

        image.add(labelsalary);

        tfsalary = new JTextField();

        tfsalary.setBounds(600,200,150,30);

        image.add(tfsalary);

        JLabel labeladdress=new JLabel("Address");

        labeladdress.setBounds(50,250,150,30);

        labeladdress.setFont(new Font("serif",Font.PLAIN,20));

        image.add(labeladdress);

        tfaddress = new JTextField();

        tfaddress.setBounds(200,250,150,30);

        image.add(tfaddress);

        JLabel labelphone=new JLabel("Phone");

        labelphone.setBounds(400,250,150,30);

        labelphone.setFont(new Font("serif",Font.PLAIN,20));

        image.add(labelphone);

         tfphone = new JTextField();

        tfphone.setBounds(600,250,150,30);

        image.add(tfphone);

        JLabel labelemail=new JLabel("Email");

        labelemail.setBounds(50,300,150,30);

        labelemail.setFont(new Font("serif",Font.PLAIN,20));

        image.add(labelemail);

        tfemail = new JTextField();

        tfemail.setBounds(200,300,150,30);

        image.add(tfemail);

        JLabel labeledu=new JLabel("Highest Education");

        labeledu.setBounds(400,300,150,30);

        labeledu.setBackground(Color.BLACK);

        labeledu.setFont(new Font("serif",Font.PLAIN,20));

        image.add(labeledu);

        String course[]={"BBA","B.COM","BA","MA","B.TECH","M.TECH","BCA","MCA","MBA","BSC","MSC","PHD"};

         chedu = new JComboBox(course);

        chedu.setBackground(Color.WHITE);

        chedu.setBounds(600,300,150,30);

        image.add(chedu);

        JLabel labeldesi=new JLabel("Designation");

        labeldesi.setBounds(50,350,150,30);

        labeldesi.setFont(new Font("serif",Font.PLAIN,20));

        image.add(labeldesi);

        tfdesi = new JTextField();

        tfdesi.setBounds(200,350,150,30);

        image.add(tfdesi);

        JLabel labeladhar=new JLabel("Adhar Number");

        labeladhar.setBounds(400,350,150,30);

        labeladhar.setFont(new Font("serif",Font.PLAIN,20));

        image.add(labeladhar);

        tfadhar = new JTextField();

        tfadhar.setBounds(600,350,150,30);

        image.add(tfadhar);

        JLabel labelempid=new JLabel("Employee ID");

        labelempid.setBounds(50,400,150,30);

        labelempid.setFont(new Font("serif",Font.PLAIN,20));

        image.add(labelempid);

         lblempid=new JLabel(""+number);

        lblempid.setBounds(200,400,150,30);

        lblempid.setFont(new Font("serif",Font.PLAIN,20));

        image.add(lblempid);

        add  = new JButton("Add Employee");

        add.setBounds(250,550,150,30);

        add.addActionListener(this);

        add.setBackground(Color.BLACK);

        add.setForeground(Color.WHITE);

        image.add(add);

        back = new JButton("Back");

        back.setBounds(450,550,150,30);

        back.addActionListener(this);

        back.setBackground(Color.BLACK);

        back.setForeground(Color.WHITE);

        image.add(back);

        setSize(900,700);

        setLocation(300,50);

        setVisible(true);

    }

    public void actionPerformed(ActionEvent ae){

      if(ae.getSource()==back){

       name = tfname1.getText().toString();

       fname = tffname1.getText().toString();

       dob =((JTextField) dcdob.getDateEditor().getUiComponent()).getText().toString();

       salary = tfsalary.getText().toString();

       address = tfaddress.getText().toString();

       email= tfemail.getText();

       education =(String) chedu.getSelectedItem();

       designation = tfdesi.getText();

       aadhar = tfadhar.getText();

       phone = tfphone.getText();

       empid = lblempid.getText();

      try{

       setVisible(false);

       JOptionPane.showMessageDialog(null, "Details added successfully");

      }catch(Exception e){

      }

        }

       else if(ae.getSource()==back){

        setVisible(false);

        new home();

       }

       else{

        JOptionPane.showMessageDialog(null, "Details added successfully");

        setVisible(false);

    }

        setVisible(false);

        new home();

}

    public static void main(String args[]) {

        try {

      File myObj = new File("D:\\employee.txt");

      if (myObj.createNewFile()) {

        System.out.println("File created: " + myObj.getName());

      } else {

        System.out.println("File already exists.");

      }

    } catch (IOException e) {

      System.out.println("An error occurred.");

      e.printStackTrace();

    }

        new addemploee();

    }

}

**6.Conclusion:**

In this report, an information system’s development has been presented. It was emphasized on the basic steps, consequently taken during the project’s development course as a particular attention was turned to the basic operative functions performed upon the data into the database. The report’s content comprises the whole task solution, starting from the programming environments have been selected, going through the database, the application’s analyze and construction, and finishing with the code-implementation and test-samples, shown separately in Appendix chapters. As a future work, some additional stuff could be implemented and integrated into the application code making it much more reliable and flexible; especially what concerns a pay-roll module, for instance. Apparently, the role of such systems is basic and essential within each company that wants to keep a really good control and record concerning its personnel data, functionality and performance on all levels in its structure. Every organization, in nowadays, has the necessity of managing its staff on a really good level as the staff has definitely the greatest merit of building up a company as such as it is. The wellmanaged staff means giving the appropriate financial award-ness and all kind of benefits as such as they have been deserved. That’s why the development of such systems is not just a programming business – a lot of people are ordinarily involved in such projects and one of the basic requirements is the reliability of the system, especially what concerns the storage of data and all of the operations that will be performed upon it.

The goal of the initiative is to digitise personnel databases in businesses and provide administrators access to computers. Employees and administrators use software as an information system. The user can store his or her database safe and secure for an indefinite amount of time here. Adding, deleting, accessing, and changing employee information is simple and easy using the Employee Management System.

**7.References:**

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