Α

PROJECT REPORT

ON

STUDENT INFORMATION MANAGEMENT SYSTEM Submitted in partial fulfilment of the Requirements for the award of the Degree of BACHELOR OF ENGINEERING

IN

COMPUTER SCIENCE & ENGINEERING

BY

T VYSHNAVI LAHARI 1602-18-733-061

K KARTHIK 1602-18-733-024

Under the guidance of

M SASHI KUMAR

ASSISTANT PROFESSOR



Department of Computer Science & Engineering

Vasavi College of Engineering

(Affiliated to Osmania University)

Ibrahimbagh Hyderabad-31- 2019

TABLE OF CONTENTS

1. ACKNOWLEDGEMENT	3
2. INTRODUCTION	4
3. DESIGN PHASE	5
4. IMPLEMENTATION OF THE CODE	6
5. OUTPUT	33
6. CONCLUSION	40

ACKNOWLEDGEMENT

We would like to express our gratitude to our professor Mr. Sashi Kumar and our Head Of The Department Dr T.Adilaxshmi, who gave us an opportunity to do this project on the topic Student Information Management. This helped us in exploring new features in java and helped us foster.

We are thankful to and fortunate enough to get constant encouragement, support and guidance which helped us in successfully completing our project work.

We are pleased to acknowledge your valuable guidance during the course of this project.

Introduction

Student Information Management System application is for Institutes, faculty and students to organize, connect and view their statistics from anywhere. It is a user friendly desktop application, by which students can view their performance in Examinations by simply entering their roll numbers.

Achieving this objective is difficult using manual record systems is difficult, as it is redundant and collecting relevant information may be very time consuming. All these problems are solved by this project.

Design Phase

The Program execution starts from main class, in which existing student data is retrieved from files which is done using deserialization and entered data is stored into files using serialization. When we execute, a JFrame is invoked for administrator login. If the administrator provides appropriate credentials then the administrator logins into the application, this leads to another frame which consists of adding faculty details.

After Adding Faculty details, the data gets stored into the array list of class Faculty from package faculty. Thereafter, a roll no check frame pops up, if the roll number entered exists in the student array list, then the admin can add GPA scores of that roll number. After addition, the main user interface i.e. Student Information Management System is displayed, in which admin can add Student details, view Student Details and can view merit list of Students.

Code Implementation

Package ui

Filename: AddFacultyDetails.java

```
package ui;
import javax.swing.JApplet;
import java.io.*;
import javax.swing.JButton;
import javax.swing.JPanel;
import javax.swing.JRadioButton;
import javax.swing.*;
import java.awt.BorderLayout;
import javax.swing.JTextField;
import javax.swing.JLabel;
import java.awt.Font;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.awt.event.ItemEvent;
import java.awt.event.ltemListener;
import faculty. Faculty;
public class AddFacultyDetails extends JFrame implements ActionListener,ItemListener{
        JFrame f;
        private JTextField textField;
        private JTextField textField 1;
        private JTextField textField_2;
        private JTextField textField 3;
        private JTextField textField_4;
        JRadioButton rdbtnCse;
        JRadioButton rdbtnEce;
       JRadioButton rdbtnEee;
       JRadioButton rdbtnCivil;
        JRadioButton rdbtnMech;
        JRadioButton rdbtnlt;
        String str;
        * Create the applet.
```

```
*/
public AddFacultyDetails() {
       f=new JFrame();
       f.getContentPane().setLayout(null);
       ButtonGroup G=new ButtonGroup();
       JPanel panel = new JPanel();
       panel.setBounds(0, 0, 614, 29);
       f.getContentPane().add(panel);
       JLabel lblFacultyDetailsEntry = new JLabel("FACULTY DETAILS ENTRY FORM");
       lblFacultyDetailsEntry.setFont(new Font("Tahoma", Font.BOLD, 15));
       panel.add(lblFacultyDetailsEntry);
       JLabel lblName = new JLabel("Name");
       IblName.setBounds(29, 71, 46, 14);
       f.getContentPane().add(lblName);
       JLabel lblAge = new JLabel("Age");
       IblAge.setBounds(336, 71, 46, 14);
       f.getContentPane().add(lblAge);
       JLabel lblQualification = new JLabel("Qualification");
       IblQualification.setBounds(29, 112, 66, 14);
       f.getContentPane().add(lblQualification);
       JLabel lblPhoneNo = new JLabel("Phone No");
       IblPhoneNo.setBounds(336, 112, 77, 14);
       f.getContentPane().add(lblPhoneNo);
       JLabel lblGender = new JLabel("Gender");
       lblGender.setBounds(29, 155, 77, 14);
       f.getContentPane().add(lblGender);
       JLabel lblBranch = new JLabel("Branch");
       lblBranch.setBounds(336, 155, 77, 14);
       f.getContentPane().add(lblBranch);
       textField = new JTextField();
       textField.setBounds(124, 68, 86, 20);
       f.getContentPane().add(textField);
       textField.setColumns(10);
       textField 1 = new JTextField();
       textField_1.setColumns(10);
       textField 1.setBounds(439, 68, 86, 20);
       f.getContentPane().add(textField_1);
```

```
textField 2 = new JTextField();
textField_2.setColumns(10);
textField 2.setBounds(124, 109, 86, 20);
f.getContentPane().add(textField_2);
textField_3 = new JTextField();
textField_3.setColumns(10);
textField 3.setBounds(439, 109, 86, 20);
f.getContentPane().add(textField_3);
textField 4 = new JTextField();
textField 4.setColumns(10);
textField_4.setBounds(124, 152, 86, 20);
f.getContentPane().add(textField_4);
rdbtnCse = new JRadioButton("CSE");
rdbtnCse.setBounds(429, 151, 54, 23);
G.add(rdbtnCse);
f.getContentPane().add(rdbtnCse);
rdbtnEce = new JRadioButton("ECE");
rdbtnEce.setBounds(488, 151, 63, 23);
G.add(rdbtnEce);
f.getContentPane().add(rdbtnEce);
rdbtnEee = new JRadioButton("EEE");
rdbtnEee.setBounds(548, 151, 66, 23);
G.add(rdbtnEee);
f.getContentPane().add(rdbtnEee);
rdbtnIt = new JRadioButton("IT");
rdbtnlt.setBounds(429, 187, 54, 23);
G.add(rdbtnIt);
f.getContentPane().add(rdbtnIt);
rdbtnMech = new JRadioButton("MECH");
rdbtnMech.setBounds(488, 187, 63, 23);
G.add(rdbtnMech);
f.getContentPane().add(rdbtnMech);
rdbtnCivil = new JRadioButton("CIVIL");
rdbtnCivil.setBounds(548, 187, 66, 23);
G.add(rdbtnCivil);
f.getContentPane().add(rdbtnCivil);
JButton btnSubmit = new JButton("Submit");
btnSubmit.setBounds(260, 276, 89, 23);
f.getContentPane().add(btnSubmit);
```

```
btnSubmit.addActionListener(this);
                                                                   f.setSize(640,524);
                                                                   f.setVisible(true);
                                 }
                                  @Override
                                   public void itemStateChanged(ItemEvent e) {
                                                                   if(rdbtnMech.isSelected())
                                                                   {
                                                                                                      str="MECH";
                                                                   if(rdbtnCse.isSelected())
                                                                   {
                                                                                                      str="CSE";
                                                                   }
                                                                   if(rdbtnEce.isSelected())
                                                                                                      str="ECE";
                                                                   if(rdbtnEee.isSelected())
                                                                                                     str="EEE";
                                                                   if(rdbtnIt.isSelected())
                                                                                                      str="IT";
                                                                   }
                                                                   if(rdbtnCivil.isSelected())
                                                                   {
                                                                                                      str="CIVIL";
                                                                   }
                                                                   // TODO Auto-generated method stub
                                 }
                                  @Override
                                  public void actionPerformed(ActionEvent e) {
                                                                   Faculty temp=new
Faculty (textField\_1.getText()), textField\_2.getText(), Long.parseLong(textField\_1.getText()), textField\_2.getText(), Long.parseLong(textField\_2.getText()), textField\_2.getText(), textField\_2.getTex
extField_3.getText()),textField_4.getText(),str);
```

```
// TODO Auto-generated method stub
Faculty.f.add(temp);
//new UiStudentDetails();
new GPA();
f.dispose();

//new KK();
//new Lily();
}
```

File Name: GPA.java

```
package ui;
import javax.swing.JPanel;
import javax.swing.JLabel;
import javax.swing.JTextField;
import studdetails. Student Details;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import javax.swing.JButton;
import javax.swing.JFrame;
import java.awt.BorderLayout;
public class GPA extends JFrame implements ActionListener{
       JFrame f;
       private JTextField textField;
        private JTextField textField 1;
        * Create the panel.
        */
        public GPA() {
               //getContentPane().add(textField, BorderLayout.NORTH);
               //.setColumns(10);
               f=new JFrame();
               f.getContentPane().setLayout(null);
               JLabel lblGpaCheck = new JLabel("ROLL NO CHECK");
               IblGpaCheck.setBounds(146, 32, 106, 14);
               f.getContentPane().add(lblGpaCheck);
               JLabel lblRollNo = new JLabel("ROLL NO");
               IblRollNo.setBounds(47, 99, 46, 14);
               f.getContentPane().add(lblRollNo);
               textField_1 = new JTextField();
               textField_1.setBounds(181, 98, 86, 20);
               f.getContentPane().add(textField 1);
               textField_1.setColumns(10);
               JButton btnCheck = new JButton("CHECK");
```

```
btnCheck.setBounds(133, 149, 89, 23);
                f.getContentPane().add(btnCheck);
                f.setSize(640,542);
                getContentPane().setVisible(true);
                f.setVisible(true);
                btnCheck.addActionListener(this);
       }
        @Override
        public void actionPerformed(ActionEvent e) {
                for(int i=0;i<StudentDetails.Student.size();i++)</pre>
                {
                        if(StudentDetails.Student.get(i).rollNo.equals(textField_1.getText()))
                        {
                                new GPAForm(textField_1.getText(),i);
                                //System.out.println("hesga");
                                f.dispose();
                        }
                f.dispose();
       }
}
```

File Name: GPAForm.java

```
package ui;
import java.awt.BorderLayout;
import java.awt.EventQueue;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.awt.event.ltemEvent;
import java.awt.event.ltemListener;
import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import studdetails. Student Details;
import studdetails.StudentGPA;
import javax.swing.JLabel;
import javax.swing.JTextField;
import javax.swing.JButton;
public class GPAForm extends JFrame implements ActionListener {
       JFrame f;
        private JTextField textField;
        private JTextField textField_1;
       JButton btnSubmit;
        String rollno;
        int index;
```

```
public GPAForm(String a,int i) {
       f=new JFrame();
       //getContentPane().setLayout(null);
       f.setLayout(null);
       f.setSize(640,524);
       rollno=a;
       index=i;
       JLabel lblGpaEntryDetails = new JLabel("GPA DETAILS ENTRY FORM");
       lblGpaEntryDetails.setBounds(141, 11, 131, 14);
       getContentPane().add(lblGpaEntryDetails);
       JLabel lblRollNo = new JLabel("ROLL NO");
       IblRollNo.setBounds(37, 72, 46, 14);
       f.add(lblRollNo);
       JLabel label = new JLabel("");
       label.setBounds(37, 113, 46, 14);
       f.add(label);
       textField = new JTextField();
       textField.setBounds(209, 69, 86, 20);
       textField.setText(a);
       textField.setEditable(false);
       f.add(textField);
```

```
JLabel lblGpa = new JLabel("GPA");
        lblGpa.setBounds(37, 113, 46, 14);
        f.add(lblGpa);
        textField_1 = new JTextField();
        textField_1.setBounds(209, 107, 86, 20);
        f.add(textField_1);
        textField_1.setColumns(10);
        btnSubmit = new JButton("SUBMIT");
        btnSubmit.setBounds(170, 172, 89, 23);
        f.add(btnSubmit);
        btnSubmit.addActionListener(this);
        //f.add(getContentPane());
        f.setVisible(true);
}
@Override
public void actionPerformed(ActionEvent e) {
        // TODO Auto-generated method stub
```

textField.setColumns(10);

```
StudentGPA temp=new
StudentGPA(StudentDetails.Student.get(index),Float.parseFloat(textField_1.getText()));
StudentGPA.gpalist.add(temp);
System.out.println(StudentGPA.gpalist.get(0).gpa);
System.out.println(StudentGPA.gpalist.get(0).ref.name);
new GPA();
new UiStudentDetails();
f.dispose();
}
```

}

File Name: KK.java

```
package ui;
import javax.swing.JPanel;
import java.io.*;
import javax.swing.JRadioButton;
import javax.swing.JScrollPane;
import javax.swing.JTable;
import javax.swing.JLabel;
import javax.swing.JTextField;
import studdetails. Student Details;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.awt.event.ltemEvent;
import java.awt.event.ltemListener;
import java.io.FileOutputStream;
import java.io.ObjectOutputStream;
import java.util.ArrayList;
import javax.swing.ButtonGroup;
import javax.swing.JButton;
import javax.swing.JFrame;
public class KK extends JPanel implements ActionListener, Serializable {
        //JFrame f;
        private JTextField textField;
        private JTextField textField 1;
        private JTextField textField_2;
        private JTextField textField_3;
        private JTextField textField_4;
        private JTextField branch;
        JButton btnAdd;
        String str;
        /**
        * Create the panel.
        public KK() {
                //f=new JFrame();
                setLayout(null);
                setSize(600,600);
                ButtonGroup g=new ButtonGroup();
                JPanel panel = new JPanel();
```

```
panel.setBounds(0, 45, 600, 185);
add(panel);
panel.setLayout(null);
JLabel lblName = new JLabel("Name");
lblName.setBounds(10, 11, 46, 14);
panel.add(lblName);
textField = new JTextField();
textField.setBounds(77, 8, 107, 20);
panel.add(textField);
textField.setColumns(10);
JLabel lblRollNumber = new JLabel("Roll Number");
lblRollNumber.setBounds(320, 11, 73, 14);
panel.add(lblRollNumber);
textField_1 = new JTextField();
textField 1.setColumns(10);
textField_1.setBounds(431, 8, 107, 20);
panel.add(textField 1);
JLabel lblAge = new JLabel("Age");
IblAge.setBounds(10, 36, 46, 14);
panel.add(lblAge);
textField_2 = new JTextField();
textField 2.setColumns(10);
textField_2.setBounds(77, 33, 107, 20);
panel.add(textField 2);
textField 3 = new JTextField();
textField_3.setColumns(10);
textField_3.setBounds(431, 33, 107, 20);
panel.add(textField_3);
JLabel lblGender = new JLabel("Gender");
lblGender.setBounds(320, 36, 73, 14);
panel.add(lblGender);
JLabel lblPhoneNo = new JLabel("Phone No");
IblPhoneNo.setBounds(10, 65, 58, 14);
panel.add(lblPhoneNo);
textField 4 = new JTextField();
textField_4.setColumns(10);
textField 4.setBounds(77, 62, 107, 20);
```

```
panel.add(textField_4);
                               JLabel lblBranch = new JLabel("Branch");
                               lblBranch.setBounds(320, 65, 46, 14);
                               panel.add(lblBranch);
                       branch=new JTextField();
                       branch.setBounds(431,65,107,20);
                       panel.add(branch);
                                btnAdd = new JButton("ADD");
                               btnAdd.setBounds(264, 136, 65, 23);
                               panel.add(btnAdd);
       btnAdd.addActionListener(this);
       }
        @Override
        public void actionPerformed(ActionEvent e) {
               // TODO Auto-generated method stub
       StudentDetails temp=new
StudentDetails(textField_getText(),textField_1.getText(),Integer.parseInt(textField_2.getText()),textField
_3.getText(),Long.parseLong(textField_4.getText()),branch.getText());
       System.out.println("lily");
               StudentDetails.Student.add(temp);
               try {
                       FileOutputStream fos=new FileOutputStream("pig.txt");
                       ObjectOutputStream oos=new ObjectOutputStream(fos);
                       oos.writeObject(StudentDetails.Student);
                       oos.flush();
                       oos.close();
               } catch (Exception e1) {}
               try {
                       FileInputStream fos1=new FileInputStream("pig.txt");
                       ObjectInputStream oos1=new ObjectInputStream(fos1);
                       StudentDetails.Student=(ArrayList<StudentDetails>)oos1.readObject();
               //
                       oos.flush();
                       oos1.close();
```

```
} catch (Exception e2) {}

//} //new AddFacultyDetails();
//new GPA();
//dispose();
//new KK();
}
```

File Name: LoginPageFaculty.java

```
package ui;
import java.awt.*;
import java.awt.EventQueue;
import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.JTextField;
import java.awt.FlowLayout;
import javax.swing.JLabel;
import javax.swing.JPasswordField;
import java.awt.Font;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import javax.swing.lmagelcon;
import javax.swing.JButton;
public class LoginPageFaculty extends JFrame implements ActionListener{
       JFrame f;
        private JPasswordField passwordField;
        private JTextField textField;
        * Create the frame.
        public LoginPageFaculty() {
               f=new JFrame("ADMINISTRATOR LOGIN");
               f.setSize(640,524);
               f.getContentPane().setLayout(null);
               f.setFont(new Font("Tempus Sans ITC", Font.PLAIN, 15));
               f.getContentPane().setLayout(null);
               ImageIcon ii = new ImageIcon("C:\\Users\\Karthik Kalitkar\\Desktop\\1.jpg");
          //JLabel lable = new JLabel(ii);
           //f.getContentPane().add(lable);
               JLabel lblLoginForm = new JLabel("LOGIN PAGE");
               lblLoginForm.setForeground(Color.WHITE);
               lblLoginForm.setFont(new Font("Times New Roman", Font.BOLD, 20));
               lblLoginForm.setBounds(222, 11, 152, 23);
               f.getContentPane().add(lblLoginForm);
```

```
JLabel lblUserId = new JLabel("User ID");
       lblUserId.setForeground(Color.WHITE);
       lblUserId.setFont(new Font("Yu Gothic Medium", Font.BOLD, 12));
       lblUserId.setBounds(105, 289, 60, 14);
       f.getContentPane().add(lblUserId);
       JLabel lblPassword = new JLabel("Password");
       lblPassword.setForeground(Color.WHITE);
       lblPassword.setFont(new Font("Yu Gothic Medium", Font.BOLD, 12));
       IblPassword.setBounds(105, 347, 78, 14);
       f.getContentPane().add(lblPassword);
       passwordField = new JPasswordField();
       passwordField.setBounds(453, 344, 104, 20);
       f.getContentPane().add(passwordField);
       textField = new JTextField();
       textField.setBounds(453, 286, 104, 20);
       f.getContentPane().add(textField);
       textField.setColumns(10);
       JButton btnLogin = new JButton("Login");
       btnLogin.setForeground(Color.BLACK);
       btnLogin.setBounds(272, 402, 89, 23);
       f.getContentPane().add(btnLogin);
       JLabel lblNewLabel = new JLabel(ii);
       lblNewLabel.setForeground(new Color(102, 204, 255));
       lblNewLabel.setBounds(0, 0, 624, 485);
       f.getContentPane().add(lblNewLabel);
       btnLogin.addActionListener(this);
       //f.add(getContentPane());
       btnLogin.addActionListener(this);
       f.setVisible(true);
}
@Override
public void actionPerformed(ActionEvent e) {
if((textField.getText()).equals("admin")&&((passwordField.getText()).contentEquals("vasavi")))
       {
               //new AddFacultyDetails();
               //new UiStudentDetails();
               f.dispose();
               new AddFacultyDetails();
```

}

File Name: RankListTop.java

```
package ui;
import javax.swing.JPanel;
import javax.swing.JScrollPane;
import javax.swing.JTable;
import studdetails. Student Details;
import studdetails.StudentGPA;
public class RankListTop extends JPanel {
        JPanel f;
        * Create the panel.
        public RankListTop() {
                f=new JPanel();
                //f.setTitle("DISPLAY STUDENT DETAILS");
                JTable j;
                String columnNames[]= {"NAME","ROLL NO","DEPARTMENT","GPA"};
                String data[][]=new String[StudentGPA.gpalist.size()][4];
                for(int i=0;i<StudentDetails.Student.size();i++)</pre>
                        for(int k=0;k<4;k++)
                                if(k==0)
                                        data[i][k]=StudentGPA.gpalist.get(i).ref.name;
                                if(k==1)
                                         data[i][k]=StudentGPA.gpalist.get(i).ref.rollNo;
                                if(k==2)
                                        data[i][k]=StudentGPA.gpalist.get(i).ref.branch;
                                if(k==3)
                                        data[i][k]=Float.toString(StudentGPA.gpalist.get(i).gpa);
                        }
                j = new JTable(data, columnNames);
                j.setBounds(30, 40, 200, 300);
                JScrollPane sp = new JScrollPane(j);
                f.add(sp);
                f.setSize(500,400);
```

```
f.setVisible(true);
}
```

File Name: UiStudentDetails.java

```
package ui;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.awt.event.ltemEvent;
import java.awt.event.ltemListener;
import javax.swing.*;
import javax.swing.event.ChangeEvent;
import javax.swing.event.ChangeListener;
import studdetails. Student Details;
import studdetails.StudentGPA;
import java.awt.Font;
public class UiStudentDetails implements ActionListener {
       JFrame f;
       JTabbedPane tabbedPane;
       UiStudentDetails(){
               f=new JFrame("WELCOME TO STUDENT INFO MANAGEMENT SYSTEM");
               f.setSize(640,524);
               //f.setSize(400,400);
               f.getContentPane().setLayout(null);
               tabbedPane = new JTabbedPane(JTabbedPane.TOP);
               tabbedPane.setBounds(10, 11, 603, 465);
               f.getContentPane().add(tabbedPane);
               KK kk = new KK();
               tabbedPane.add("Student Entry",kk);
               tabbedPane.add("List",Studlist());
               tabbedPane.add("Merit List",TopRankList());
               JLabel lblStudentDetailsEntry = new JLabel("STUDENT DETAILS ENTRY");
               lblStudentDetailsEntry.setFont(new Font("Times New Roman", Font.BOLD, 13));
               lblStudentDetailsEntry.setBounds(200, 11, 164, 14);
               kk.add(lblStudentDetailsEntry);
               JButton btnStopAddingEntries = new JButton("Stop Adding Entries");
               btnStopAddingEntries.addActionListener(new ActionListener() {
                       public void actionPerformed(ActionEvent e) {
                              f.dispose();
                               new UiStudentDetails();
```

```
}
                });
                btnStopAddingEntries.setBounds(216, 234, 184, 23);
                kk.add(btnStopAddingEntries);
                //tabbedPane.add("hello",new JPanel());
                f.setVisible(true);
        }
        public static JPanel Studlist()
                JPanel f = new JPanel();
                //f.setTitle("DISPLAY STUDENT DETAILS");
                JTable j;
                String columnNames[]= {"NAME","ROLL NO","GENDER","DEPARTMENT"};
                String data[][]=new String[StudentDetails.Student.size()][4];
                for(int i=0;i<StudentDetails.Student.size();i++)
                        for(int k=0;k<4;k++)
                        {
                                if(k==0)
                                        data[i][k]=StudentDetails.Student.get(i).name;
                                if(k==1)
                                        data[i][k]=StudentDetails.Student.get(i).rollNo;
                                if(k==2)
                                        data[i][k]=StudentDetails.Student.get(i).gender;
                                if(k==3)
                                        data[i][k]=StudentDetails.Student.get(i).branch;
                        }
                j = new JTable(data, columnNames);
                j.setBounds(30, 40, 200, 300);
                JScrollPane sp = new JScrollPane(j);
                f.add(sp);
                f.setSize(200, 200);
                f.setVisible(true);
                return f;
       }
public static JPanel TopRankList() {
                JPanel f=new JPanel();
```

//new GPA();

```
//f.setTitle("DISPLAY STUDENT DETAILS");
        JTable j;
        String columnNames[]= {"NAME","ROLL NO","DEPARTMENT","GPA"};
        String data[][]=new String[StudentGPA.gpalist.size()][4];
        for(int i=0;i<StudentGPA.gpalist.size();i++)</pre>
                for(int k=0;k<4;k++)
                {
                        if(k==0)
                                data[i][k]=StudentGPA.gpalist.get(i).ref.name;
                        if(k==1)
                                data[i][k]=StudentGPA.gpalist.get(i).ref.rollNo;
                        if(k==2)
                                data[i][k]=StudentGPA.gpalist.get(i).ref.branch;
                        if(k==3)
                                data[i][k]=Float.toString(StudentGPA.gpalist.get(i).gpa);
                }
        }
        j = new JTable(data, columnNames);
        j.setBounds(30, 40, 200, 300);
        JScrollPane sp = new JScrollPane(j);
        f.add(sp);
        f.setSize(500,400);
        f.setVisible(true);
        return f;
}
@Override
public void actionPerformed(ActionEvent e) {
}
```

}

Package: studdetails

File Name: StudentDetails.java

```
package studdetails;
import java.io.Serializable;
import java.util.*;
import ui.*;
public class StudentDetails implements Serializable {
                public String name;
                public String rollNo;
                public int age;
                public String gender;
                public long phone;
                public String branch;
                public static ArrayList<StudentDetails> Student=new ArrayList<StudentDetails>();
                public StudentDetails(String name,String rollNo,int age,String gender,long phone,String
branch)
                {
                        this.name=name;
                        this.rollNo=rollNo;
                        this.gender=gender;
                        this.age=age;
                        this.phone=phone;
                        this.branch=branch;
                }
                public static String method(StudentDetails ref)
                {
                        return(ref.name+","+ref.rollNo+","+ref.gender+","+ref.branch);
                }
}
```

File Name: StudentGPA.java

```
package studdetails;
import java.util.ArrayList;

public class StudentGPA {
        public StudentDetails ref;
        public float gpa;

        public static ArrayList<StudentGPA> gpalist=new ArrayList<StudentGPA>();

        public StudentGPA(StudentDetails ref,float gpa)
        {
            this.ref=ref;
            this.gpa=gpa;
        }
}
```

Package: mainclass

File Name: StudentInformation.java

```
package mainclass;
import java.io.FileInputStream;
import java.io.ObjectInputStream;
import java.util.ArrayList;
import javax.swing.JFrame;
import studdetails. Student Details;
import ui.*;
public class StudentInformationManagement {
        public static void main(String args[])
        {
               try {
                        //ArrayList<StudentDetails> temp1=new ArrayList<StudentDetails>();
                        FileInputStream fos1=new FileInputStream("pig.txt");
                        ObjectInputStream oos1=new ObjectInputStream(fos1);
                        StudentDetails.Student=(ArrayList<StudentDetails>)oos1.readObject();
                        //StudentDetails.Student.add(temp1);
                        //temp1
               //
                       oos.flush();
                        oos1.close();
               } catch (Exception e1) {}
               new LoginPageFaculty();
       }
}
```

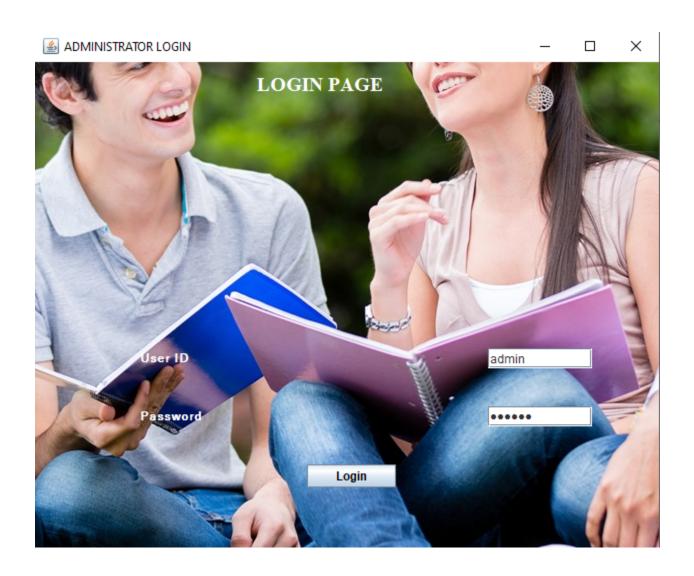
Package: faculty

File Name: Faculty.java

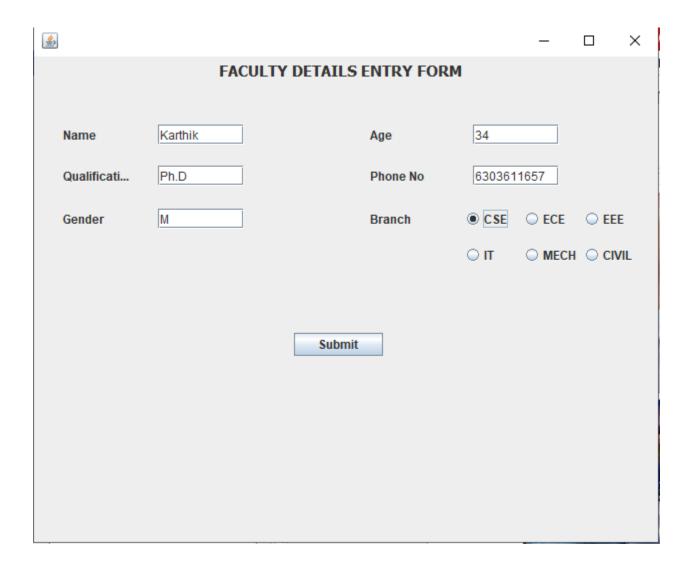
```
package faculty;
import java.util.ArrayList;
public class Faculty {
        public String name;
        public String qualification;
        public int age;
        public String gender;
        public String branch;
        public long phno;
        public static ArrayList<Faculty> f=new ArrayList<Faculty>();
        public Faculty(String name,int age,String qualification,long phno,String gender,String branch)
                this.name=name;
                this.qualification=qualification;
                this.branch=branch;
                this.phno=phno;
                this.age=age;
                this.gender=gender;
        }
}
```

OUTPUT:

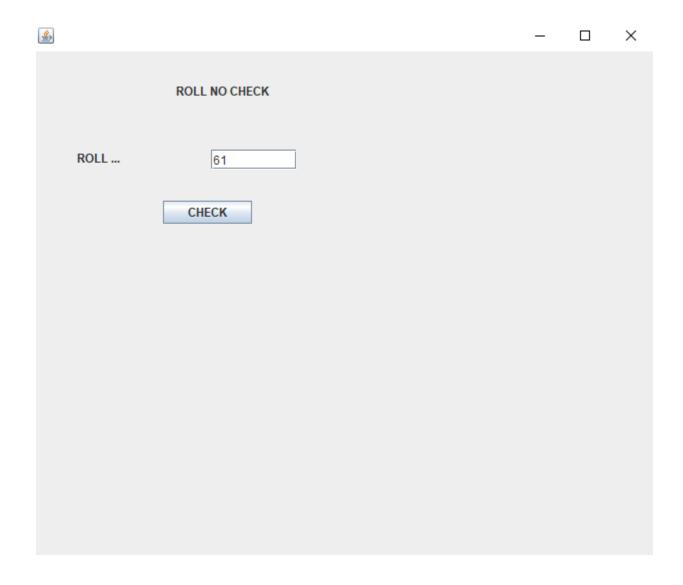
1. Administrator Login Page



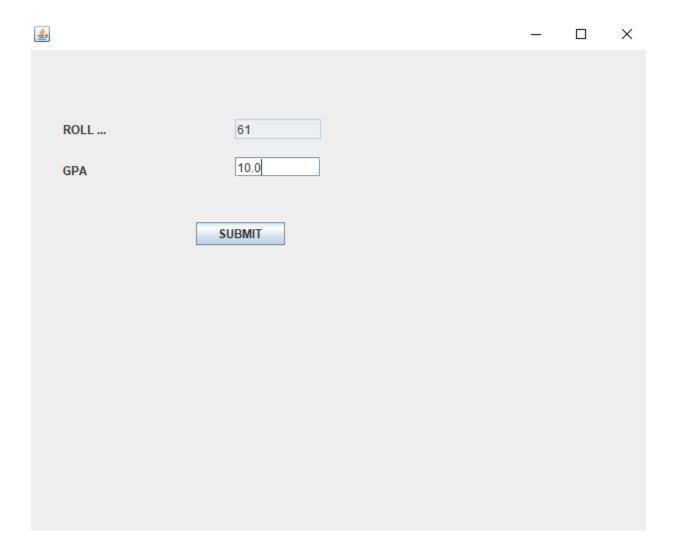
2. Faculty Details Entry Form



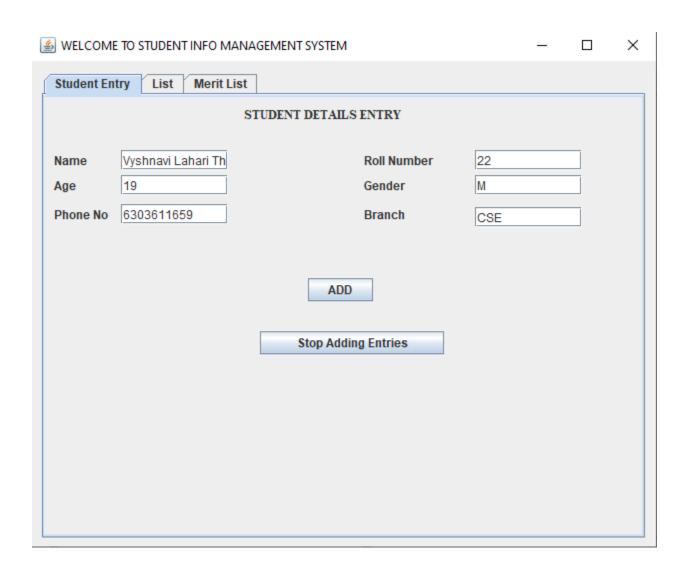
3. ROLL NUMBER CHECK



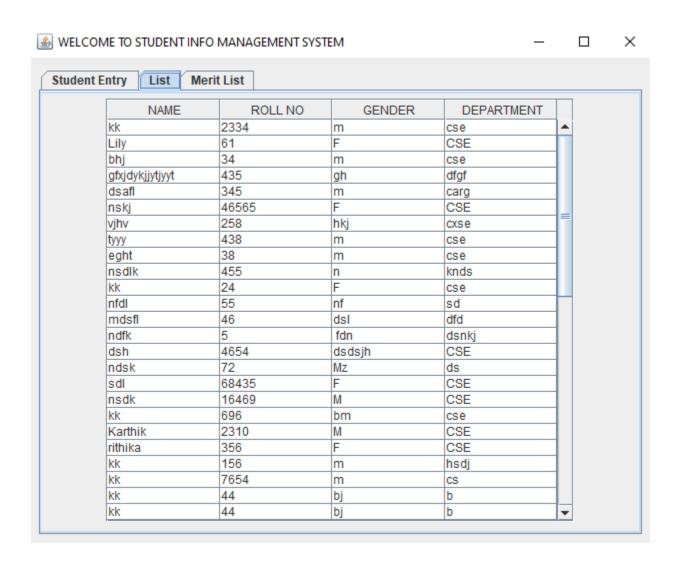
4. GPA ENTRY FORM



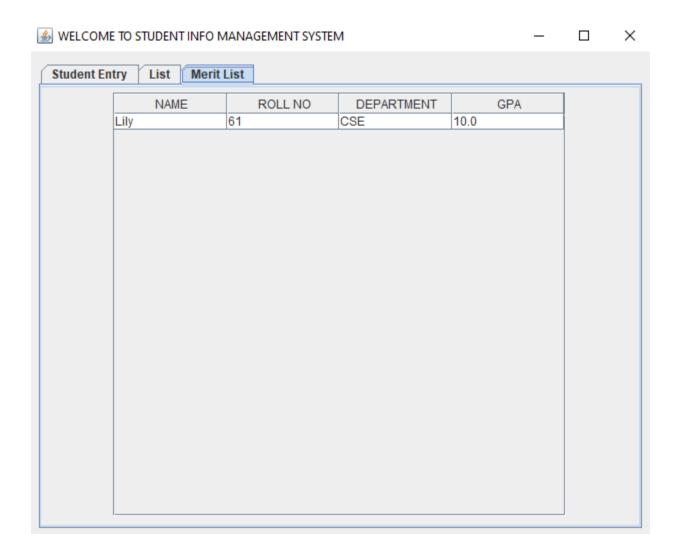
5. WELCOME TO STUDENT INFORMATION MANAGEMENT SYSTEM



6. View Student List



7. View Merit List



Conclusion

Through this project, we would like to help Institutes to maintain their Faculty and Students Information in an organised manner which is low cost when compared to manual student management systems, which costs a lot of money. This application is developed using Java Swing. Students can view their statistics, and foster their career by studying better in the upcoming examinations.