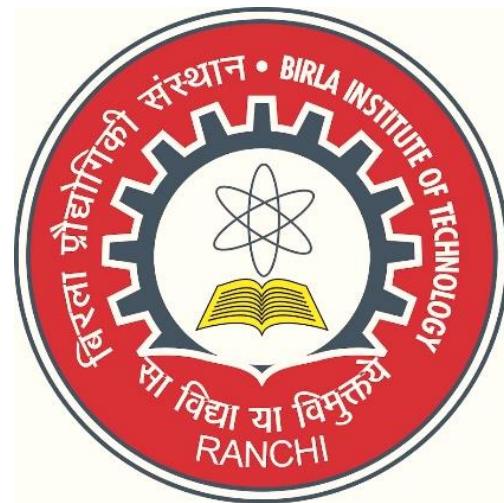


# Birla Institute of Technology,Mesra



## SOFTWARE ENGINEERING LAB ASSIGNMENT 04

**Professor → Dr. Kamta Nath Mishra**

**NAME → SUBHOJEET GHOSH**

**ROLL NO. → BTECH/60017/19**

**COMPUTER SCIENCE ENGINEERING 5<sup>TH</sup> SEMESTER**

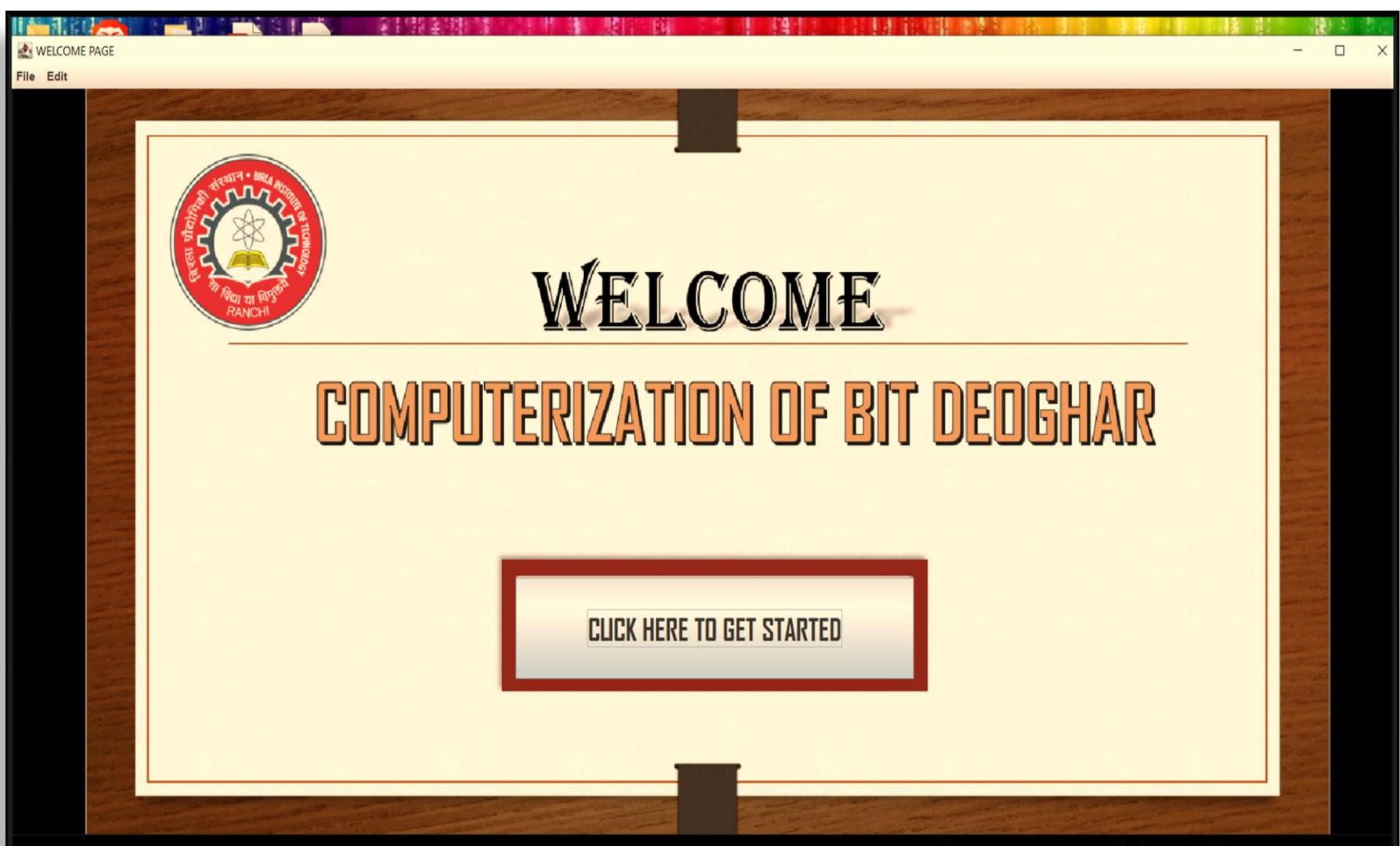
## QUESTION

Construct Input Screens (07), Output Screens (7), forms (04), connect screens and databases, and generate reports (02) for one or more of the selected modules of your project.

### (I) Computer Science Module

#### WELCOME PAGE

This is Welcome Page of Computerization of BIT DEOGHAR . My Project Starts from here with my first screen as Welcome Page . This Page was Created using Java Swing . Further into my project you will see how I used Data base Connection and jdbc to make my project look more dynamic.



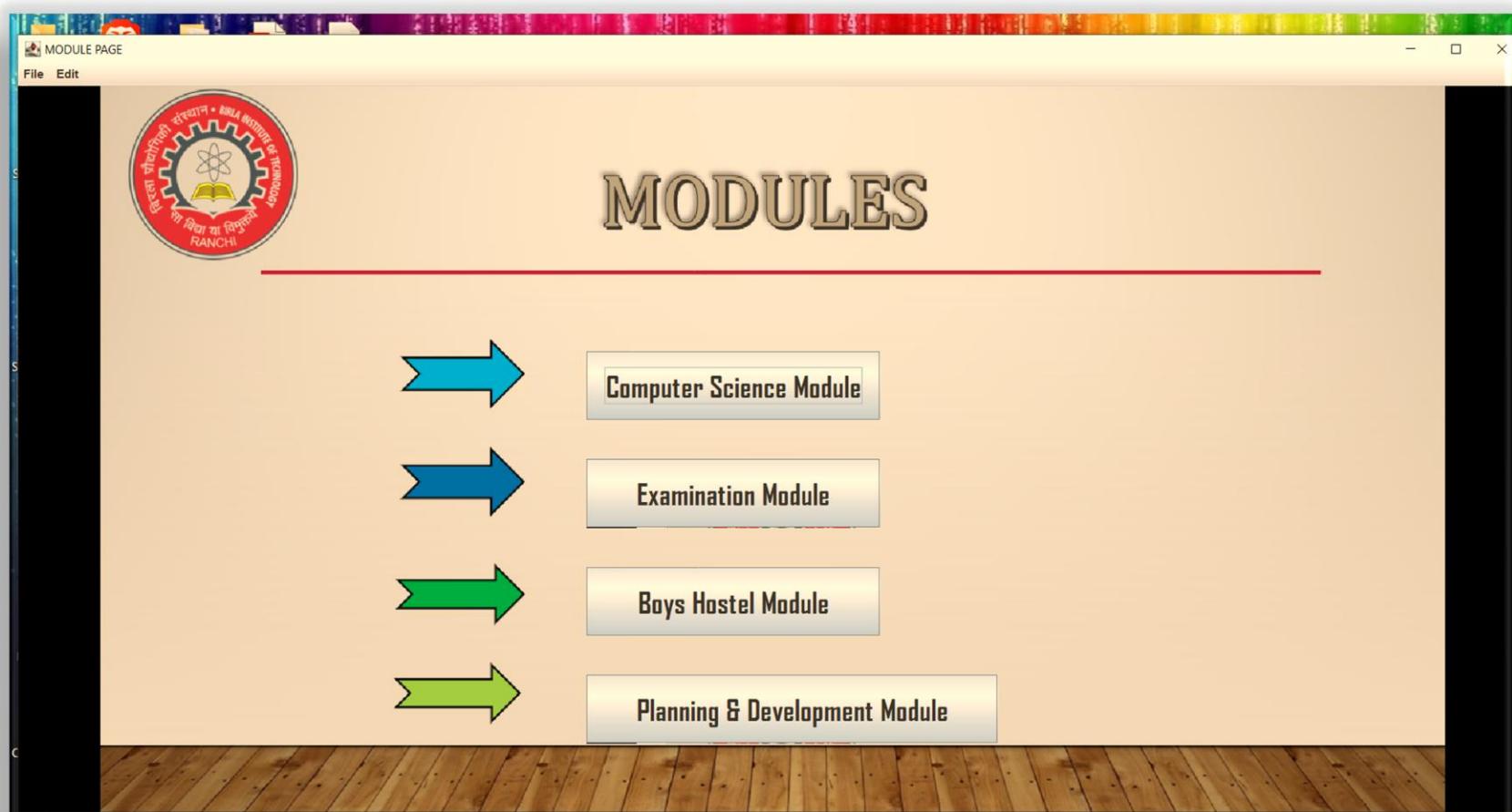
## Code For Welcome Page

```
package maincodes;
import javax.swing.*;
import java.awt.event.*;
import java.awt.*;
class Welcome extends JFrame{
    public static Container h;
    public static JButton lgs;
    public Welcome(){
        setTitle("WELCOME PAGE");
        setSize(1590,800);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        h=ContentPane();
        setLayout(new BorderLayout());
        h.setBackground(Color.BLACK);
        JLabel c=new JLabel(new ImageIcon("maincodes/images/WELCOME.png"));
        h.add(c);
        lgs=new JButton("CLICK HERE TO GET STARTED");
        lgs.setBounds(557,480 ,440,100);
        Font font2=new Font("Agency FB",Font.BOLD,30);
        lgs.setFont(font2);
        Cursor cur=new Cursor(Cursor.HAND_CURSOR);
        lgs.setCursor(cur);
        c.add(lgs);
        JMenuBar menubar1=new JMenuBar();
        JMenu file=new JMenu("File");
        JMenuItem item1=new JMenuItem("new");
        JMenuItem item2=new JMenuItem("open");
        JMenuItem item3=new JMenuItem("save");
        file.add(item1);
        file.add(item2);
        file.add(item3);
        menubar1.add(file);
        JMenu Edit=new JMenu("Edit");
        JMenuItem tem1=new JMenuItem("undo");
        JMenuItem tem2=new JMenuItem("redu");
        JMenuItem tem3=new JMenuItem("cut");
        Edit.add(tem1);
        Edit.add(tem2);
        Edit.add(tem3);
        menubar1.add(Edit);
        setJMenuBar(menubar1);
        setVisible(true);
        lgs.addActionListener(new ActionListener(){
            @Override
            public void actionPerformed(ActionEvent e) {
                modules obb=new modules();
                setVisible(false);
                obb.setVisible(true);
            }
        });
    }
    public static void main(String[] args) {
        new Welcome();
    }
}
```

After Clicking the Button "Click Here To Get Started" , The code will lead us to the Modules Page

## MODULES PAGE

This is the modules page where my chosen 4 modules are listed in the form of button .Each button resembles the modules for which I created this project to computerize BIT DEOGHAR. Lets Gets Started with the first module of my project Computer Science Module.



## Code For Modules Page

```
package maincodes;
import javax.swing.*;
import java.awt.event.*;
import java.awt.*;
class modules extends JFrame{
    public static Container h;
    public static JButton cse,boys,exam,padm;
    public modules(){
        setTitle("MODULE PAGE");
        setSize(1590,800);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        h=getContentPane();
        setLayout(new BorderLayout());
        h.setBackground(Color.BLACK);
        JLabel c=new JLabel(new ImageIcon("maincodes/images/modules.png"));
        h.add(c);
        Font font2=new Font("Agency FB",Font.BOLD,30);
        cse=new JButton("Computer Science Module");
        cse.setBounds(580,270,300,70);
```

```

cse.setFont(font2);
exam=new JButton("Examination Module");
exam.setBounds(580,380,300,70);
exam.setFont(font2);
boys=new JButton("Boys Hostel Module");
boys.setBounds(580,490,300,70);
boys.setFont(font2);
padm=new JButton("Planning & Development Module");
padm.setBounds(580,600,420,70);
padm.setFont(font2);
Cursor cur=new Cursor(Cursor.HAND_CURSOR);
cse.setCursor(cur);
exam.setCursor(cur);
boys.setCursor(cur);
padm.setCursor(cur);
c.add(cse);
c.add(exam);
c.add(boys);
c.add(padm);
JMenuBar menubar1=new JMenuBar();
JMenu file=new JMenu("File");
JMenuItem item1=new JMenuItem("new");
JMenuItem item2=new JMenuItem("open");
JMenuItem item3=new JMenuItem("save");
file.add(item1);
file.add(item2);
file.add(item3);
menubar1.add(file);
JMenu Edit=new JMenu("Edit");
JMenuItem tem1=new JMenuItem("undo");
JMenuItem tem2=new JMenuItem("redu");
JMenuItem tem3=new JMenuItem("cut");
Edit.add(tem1);
Edit.add(tem2);
Edit.add(tem3);
menubar1.add(Edit);
setJMenuBar(menubar1);
setVisible(true);
cse.addActionListener(new ActionListener(){

    @Override
    public void actionPerformed(ActionEvent e){
        cselog css=new cselog();
        setVisible(false);
        css.setVisible(true);
    }
});

exam.addActionListener(new ActionListener(){

    @Override
    public void actionPerformed(ActionEvent e){
        Examdashboard css=new Examdashboard();
        setVisible(false);
        css.setVisible(true);
    }
});

}
public static void main(String[] args) {
    new modules();

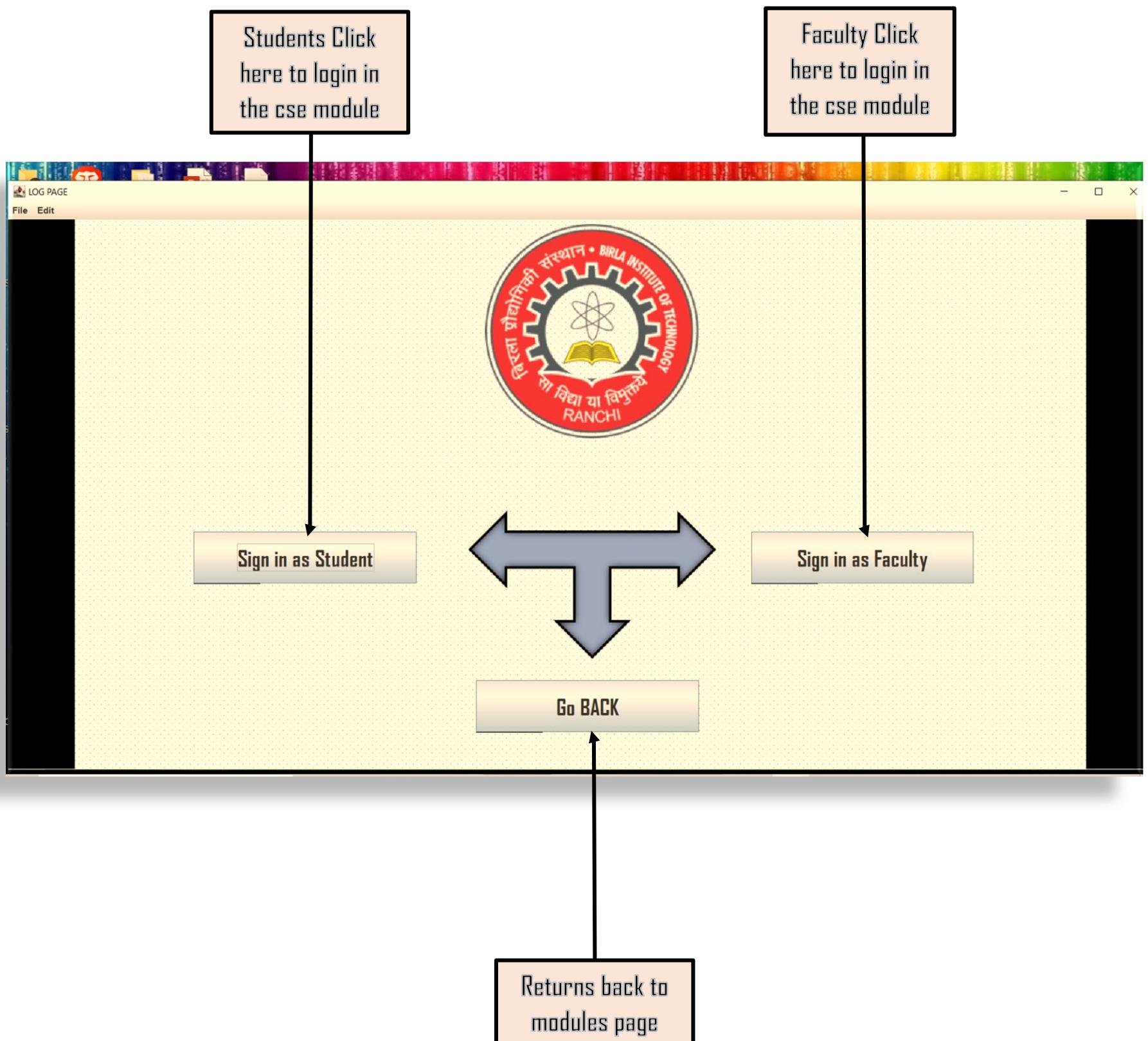
}
}

```

**Click the "Computer Science Module" Button to enter the computerization of Computer Science Module.**

## CSE LOG PAGE

This is the CSE Log Page Where the user can be a student or a faculty according to which my data base is created so that every functionality shown and mentioned in my project is fulfilled.



## Code For LOG Page

```
package maincodes;
import javax.swing.*;
import java.awt.event.*;
import java.awt.*;
class cselog extends JFrame{
    public static Container h;
    public static JButton std,fac,goback;
    public cselog(){
        setTitle("LOG PAGE");
        setSize(1590,800);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        h=getContentPane();
        setLayout(new BorderLayout());
        h.setBackground(Color.BLACK);
        JLabel c=new JLabel(new ImageIcon("maincodes/images/cselog.png"));
        h.add(c);
        Font font2=new Font("Agency FB",Font.BOLD,30);
        std=new JButton("Sign in as Student");
        std.setBounds(250,420,300,70);
        std.setFont(font2);
        fac=new JButton("Sign in as Faculty");
        fac.setBounds(1000,420,300,70);
        fac.setFont(font2);
        goback=new JButton("Go BACK");
        goback.setBounds(630,620,300,70);
        goback.setFont(font2);
        Cursor cur=new Cursor(Cursor.HAND_CURSOR);
        goback.setCursor(cur);
        std.setCursor(cur);
        c.add(goback);
        c.add(fac);
        c.add(std);
        JMenuBar menubar1=new JMenuBar();
        JMenu file=new JMenu("File");
        JMenuItem item1=new JMenuItem("new");
        JMenuItem item2=new JMenuItem("open");
        JMenuItem item3=new JMenuItem("save");
        file.add(item1);
        file.add(item2);
        file.add(item3);
        menubar1.add(file);
        JMenu Edit=new JMenu("Edit");
        JMenuItem tem1=new JMenuItem("undo");
        JMenuItem tem2=new JMenuItem("redu");
        JMenuItem tem3=new JMenuItem("cut");
        Edit.add(tem1);
        Edit.add(tem2);
        Edit.add(tem3);
        menubar1.add(Edit);

        setJMenuBar(menubar1);
        setVisible(true);
        goback.addActionListener(new ActionListener(){

            @Override
            public void actionPerformed(ActionEvent e) {
                modules mg=new modules();
                setVisible(false);
                mg.setVisible(true);

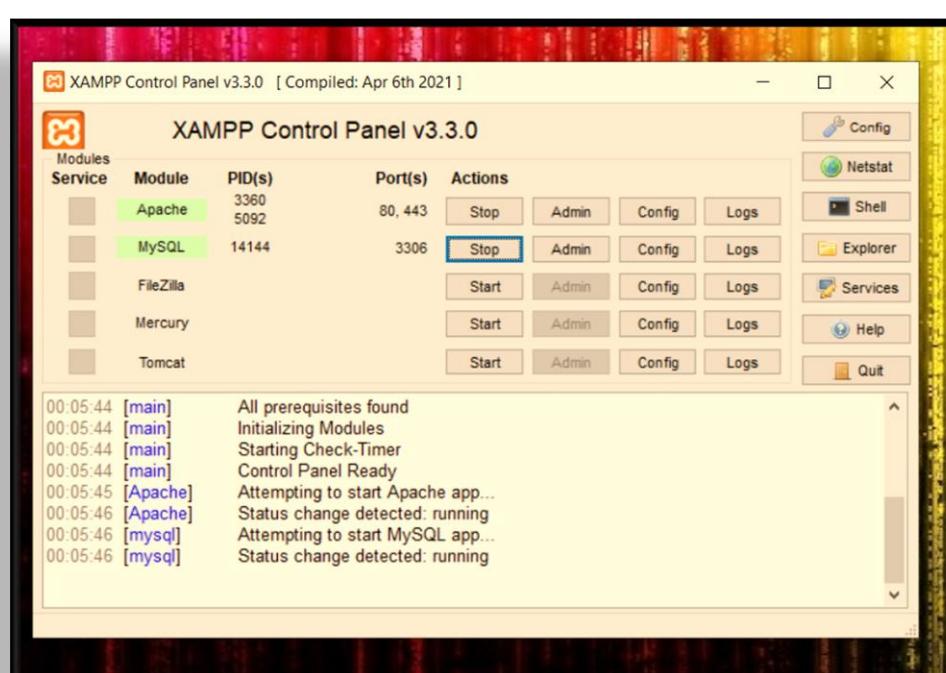
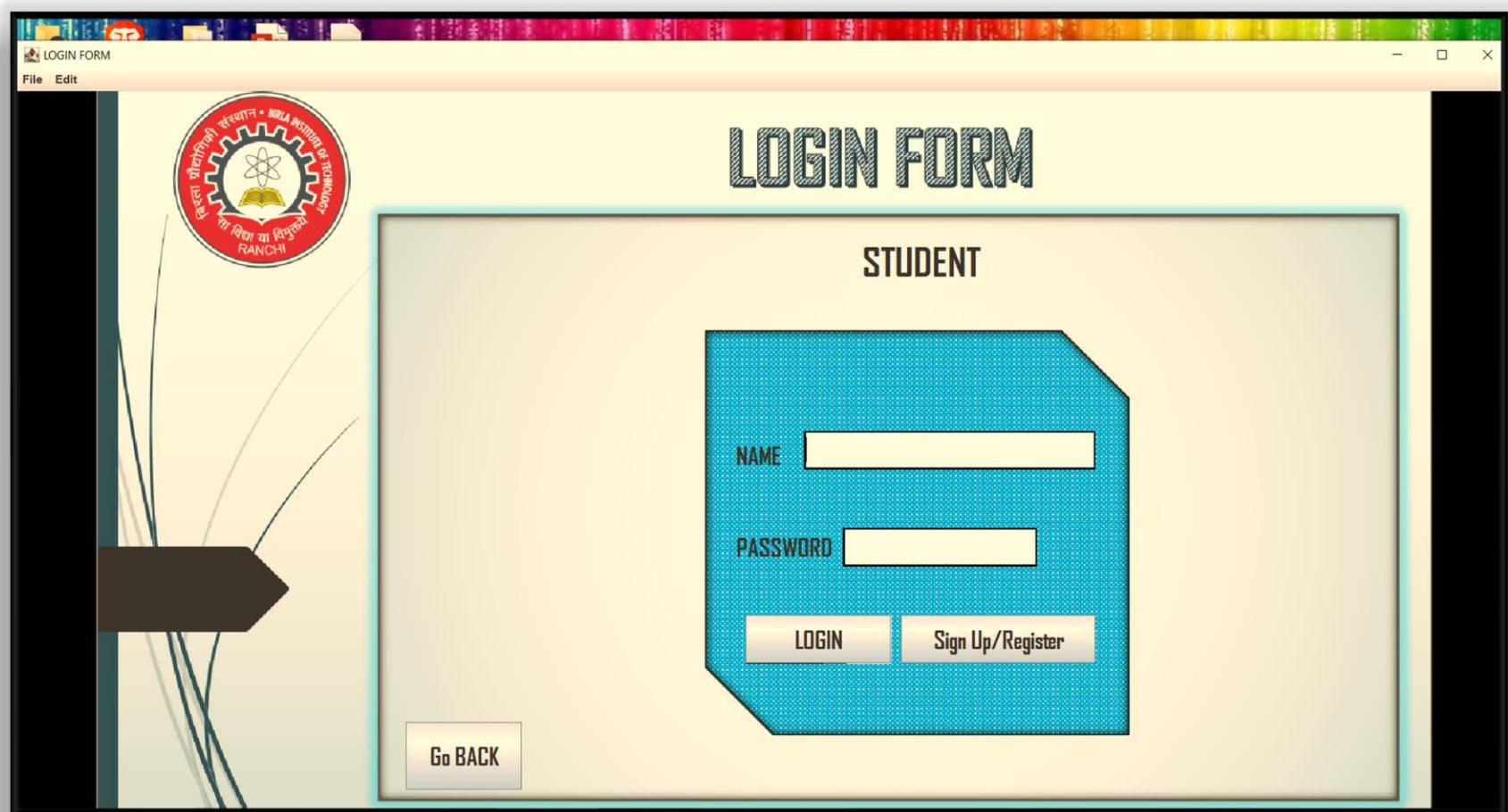
            }
        });
    }
}
```

```
});  
std.addActionListener(new ActionListener(){  
  
    @Override  
    public void actionPerformed(ActionEvent e) {  
        StudentLoginForm stg=new StudentLoginForm("STUDENT");  
        setVisible(false);  
        stg.setVisible(true);  
  
    }  
});  
fac.addActionListener(new ActionListener(){  
  
    @Override  
    public void actionPerformed(ActionEvent e) {  
        FacultyLoginForm stg=new FacultyLoginForm("FACULTY");  
        setVisible(false);  
        stg.setVisible(true);  
  
    }  
});  
}  
public static void main(String[] args) {  
    new cselog();  
}  
}
```

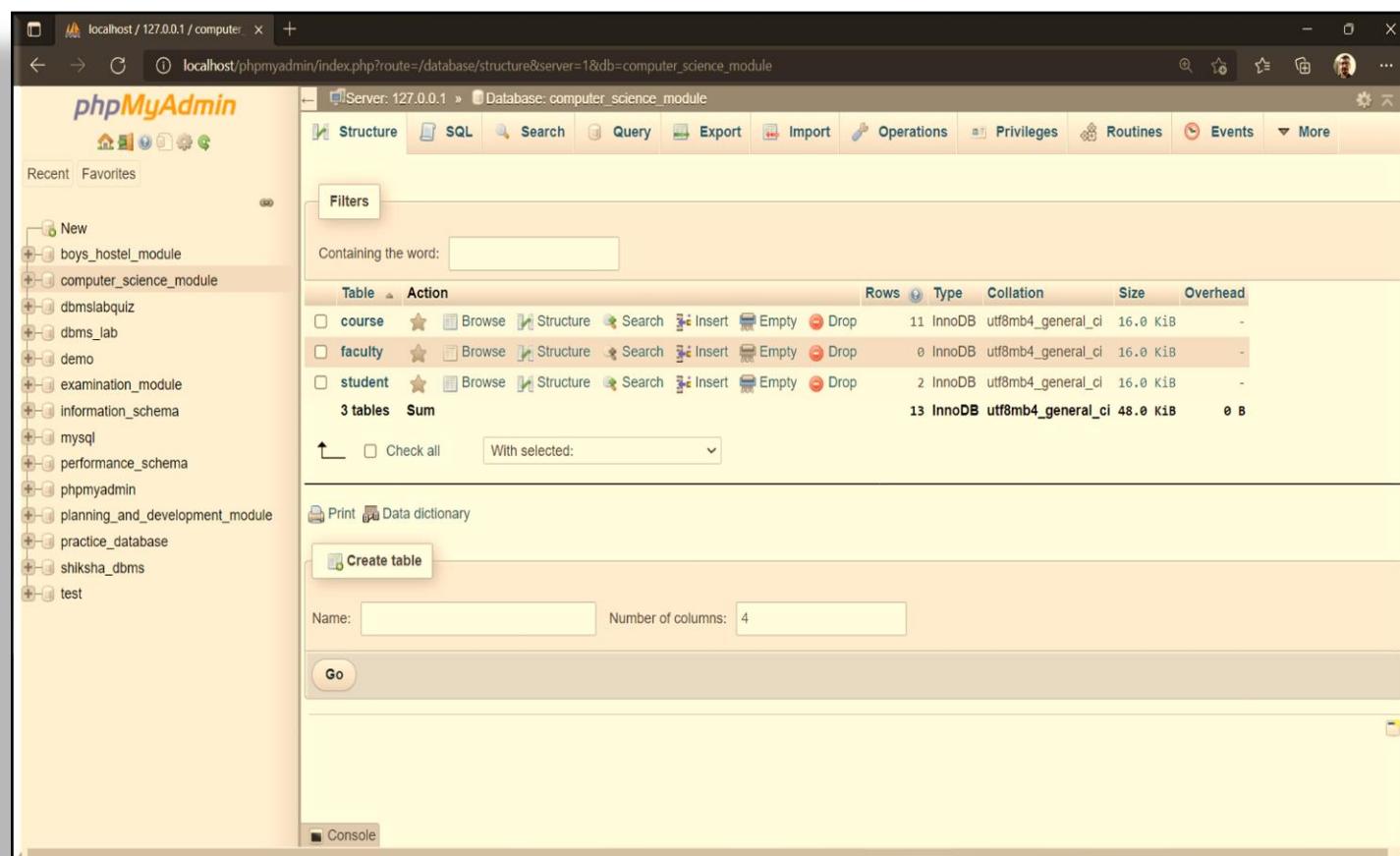
## Lets get started with sign in as Student

### Student LOGIN Page

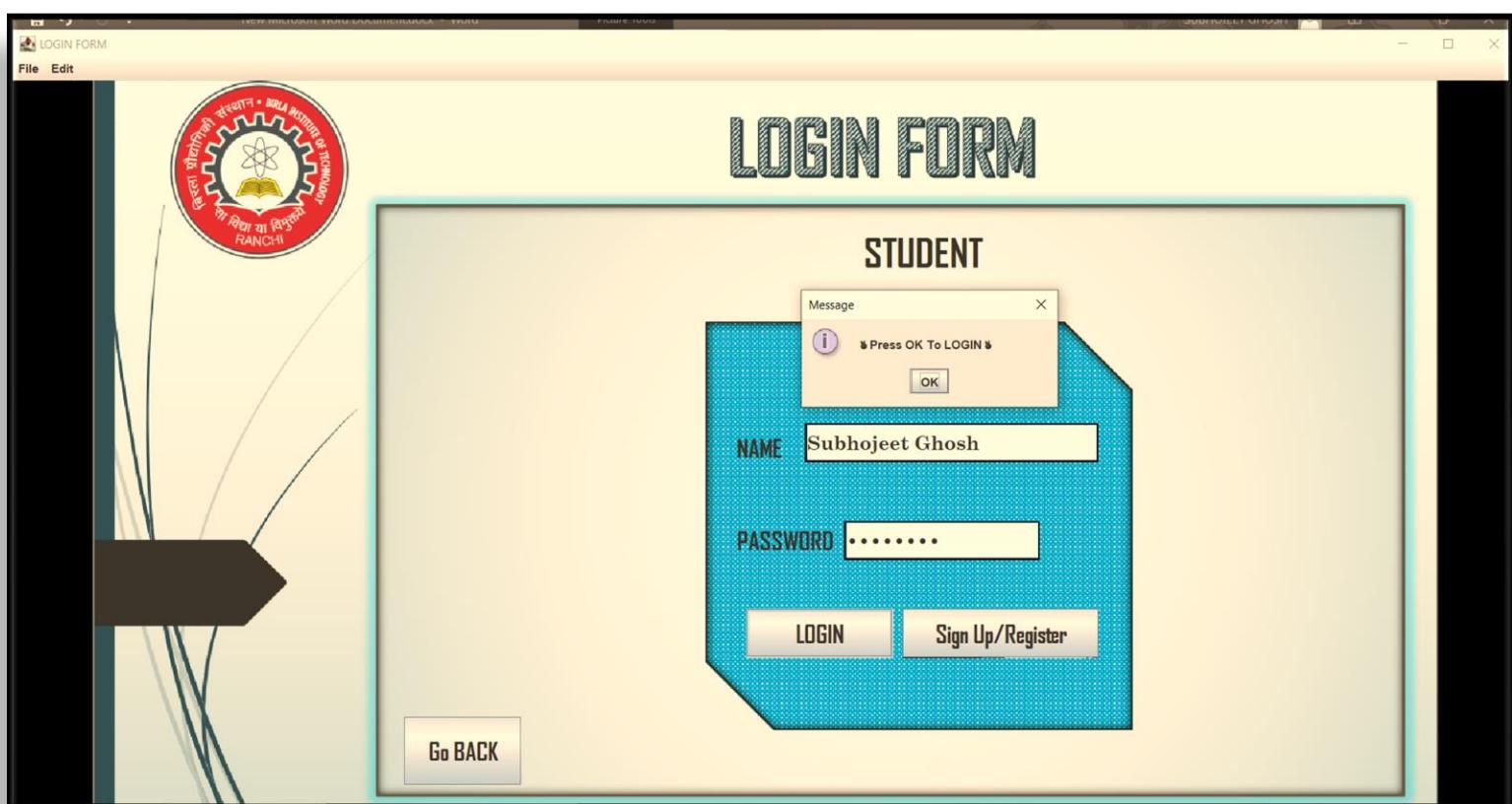
This is the login page .Here comes the best part of my project where I level up myself and decided to connect my java front end project with my own created database in local host .For this I downloaded Xampp control panel where I need to start the mysql and apache server and then in the browser search for local host phpMyAdmin. Below are some of my screenshots about the explaination in did earlier.



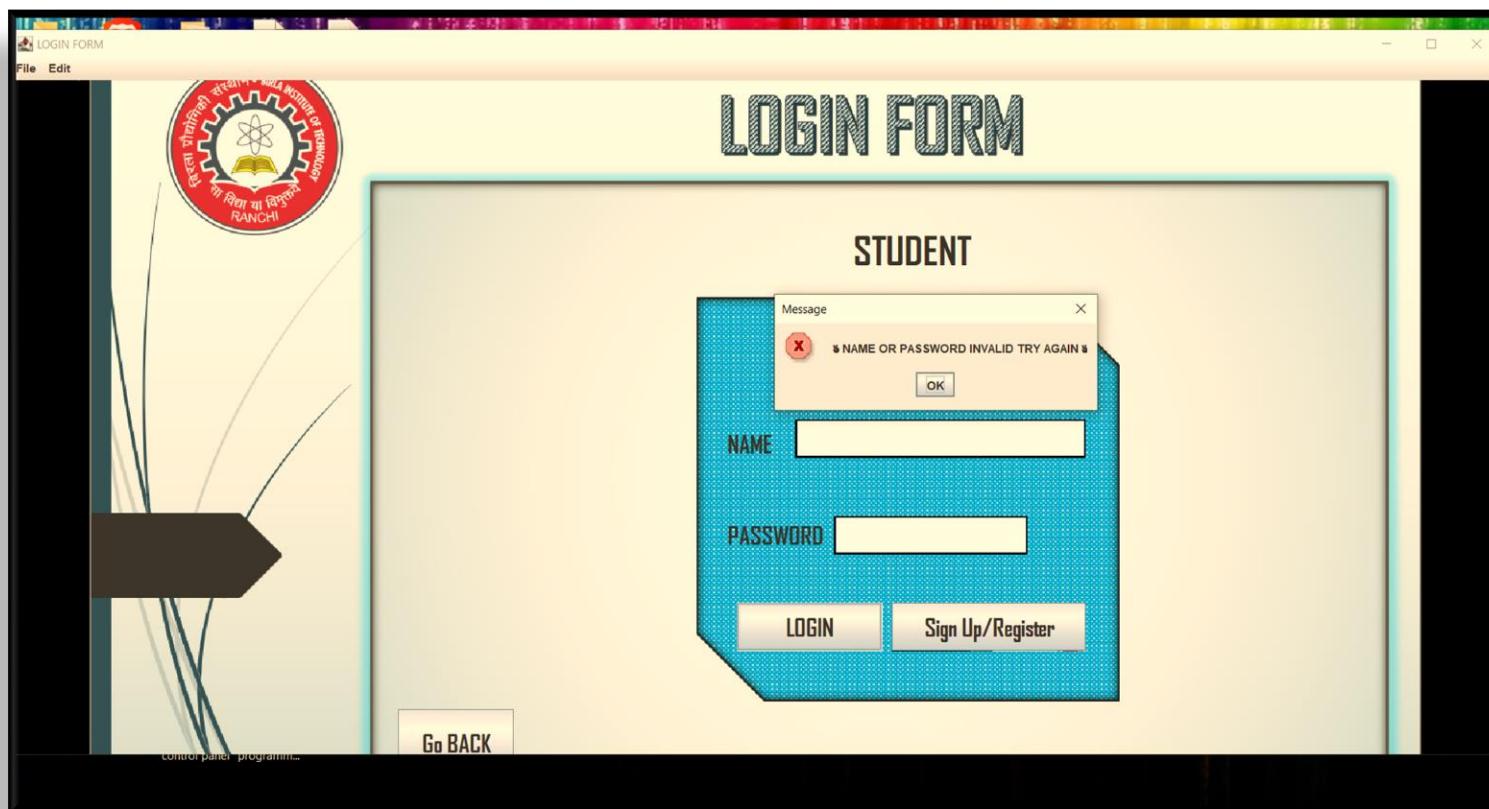
XAMPP CONTROL PANEL



localhost PhpMyAdmin



If the login is successful i.e if the login details entered is correct then a panel pops up saying 'press ok to login'.



If the login is unsuccessful or the data field given is empty or not filled with the correct details then a pop up panel opens displaying a warning message .

## Code for Student Login Page

```

package maincodes;
import javax.swing.*;
import javax.swing.border.*;
import java.awt.event.*;
import java.sql.*;
import java.awt.*;
class StudentLoginForm extends JFrame{
    public static Container h;
    public static JLabel Name,Password,label;
    public static JTextField name;
    public static JButton login,signup,goback;
    public static JPasswordField pswd;
    static final String DB_URL = "jdbc:mysql://localhost:3306/computer_science_module";
    static final String USER = "root";
    static final String PASS = "";
    Connection conn;
    Statement st;
    public StudentLoginForm(String x) {
        setTitle("LOGIN FORM");
        setSize(1590,800);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        h=getContentPane();
        setLayout(new BorderLayout());
        h.setBackground(Color.BLACK);

        JLabel c=new JLabel(new ImageIcon("maincodes/images/login.png"));
        h.add(c);
        Font font=new Font("Century Schoolbook",Font.BOLD,20);
        Font font2=new Font("Agency FB",Font.BOLD,25);
        Border br=BorderFactory.createLineBorder(Color.BLACK,2);
        label=new JLabel(x);
        label.setFont(new Font("Agency FB",Font.BOLD,40));
        label.setBounds(870,150,300,50);
        Name=new JLabel("NAME");
        name=new JTextField("");
    }
}

```

```

Name.setBounds(740,350,120,50);
Name.setFont(font2);
name.setBounds(810,350,300,40);
name.setFont(font);
Password=new JLabel("PASSWORD");
pswd=new JPasswordField("");
Password.setFont(font2);
pswd.setFont(font);
Password.setBounds(740,450,100,40);
pswd.setBounds(850,450,200,40);
name.setBorder(br);
pswd.setBorder(br);
login =new JButton("LOGIN");
login.setFont(font2);
login.setBounds(750,540,150,50);
signup =new JButton("Sign Up/Register");
signup.setFont(font2);
signup.setBounds(910,540,200,50);
goback=new JButton("Go BACK");
goback.setBounds(400,650,120,70);
goback.setFont(font2);
Cursor cur=new Cursor(Cursor.HAND_CURSOR);
goback.setCursor(cur);
signup.setCursor(cur);
login.setCursor(cur);
c.add(goback);
c.add(signup);
c.add(login);
c.add(label);
c.add(Password);
c.add(pswd);
c.add(Name);
c.add(name);
JMenuBar menubar1=new JMenuBar();
JMenu file=new JMenu("File");
JMenuItem item1=new JMenuItem("new");
JMenuItem item2=new JMenuItem("open");
JMenuItem item3=new JMenuItem("save");
file.add(item1);
file.add(item2);
file.add(item3);
menubar1.add(file);
JMenu Edit=new JMenu("Edit");
JMenuItem tem1=new JMenuItem("undo");
JMenuItem tem2=new JMenuItem("redu");
JMenuItem tem3=new JMenuItem("cut");
Edit.add(tem1);
Edit.add(tem2);
Edit.add(tem3);
menubar1.add(Edit);
setJMenuBar(menubar1);
setVisible(true);
try {
    conn = DriverManager.getConnection(DB_URL, USER, PASS);
    st = conn.createStatement();
} catch (SQLException e) {

    e.printStackTrace();
}
goback.addActionListener(new ActionListener(){

    @Override
    public void actionPerformed(ActionEvent e) {
        cselog mg=new cselog();
        setVisible(false);
        mg.setVisible(true);

    }
});

```

```

signup.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e) {
        StudentRegister rg=new StudentRegister();
        setVisible(false);
        rg.setVisible(true);
    }
});

login.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e) {
        try{
            String NAME=name.getText();
            char ch[]=pswd.getPassword();
            String PASSWORD="";
            for(int i=0;i<ch.length;i++){PASSWORD=PASSWORD+ch[i];}
            String query="Select name,password,rollno from student where
name='"+NAME+"' and password='"+PASSWORD+"'";
            ResultSet res=st.executeQuery(query);
            if(res.next()==true){
                JOptionPane.showMessageDialog(null," ✍ Press OK To LOGIN
", "Message", JOptionPane.INFORMATION_MESSAGE);
                Studentdashboard oh=new Studentdashboard(NAME);
                setVisible(false);
                oh.setVisible(true);
            }
            else{
                JOptionPane.showMessageDialog(null," ✋ NAME OR PASSWORD INVALID TRY
AGAIN ✋", "Message", JOptionPane.ERROR_MESSAGE);
            }
            name.setText("");
            pswd.setText("");
        }
        catch(SQLException h){
            h.printStackTrace();
        }
    }
});

}

public static void main(String[] args) {
    new StudentLoginForm("STUDENT");
}
}

```

If a Student can't login then it might be possible that the student is not registered in the college data Base So Lets get to the Student Registration Page.

## Student Registration Page

This is the registration page. Student who have not registered in the college database need to fill in their details here

REGISTRATION FORM

STUDENT

NAME

EMAIL ID

ROLL NO.

CONTACT

GPA

ADDRESS

GENDER

PASSWORD

If the Filling of details is successful then it will show this window. And the data will be stored in the database.

REGISTRATION FORM

STUDENT

NAME

EMAIL ID

ROLL NO.

CONTACT

GPA

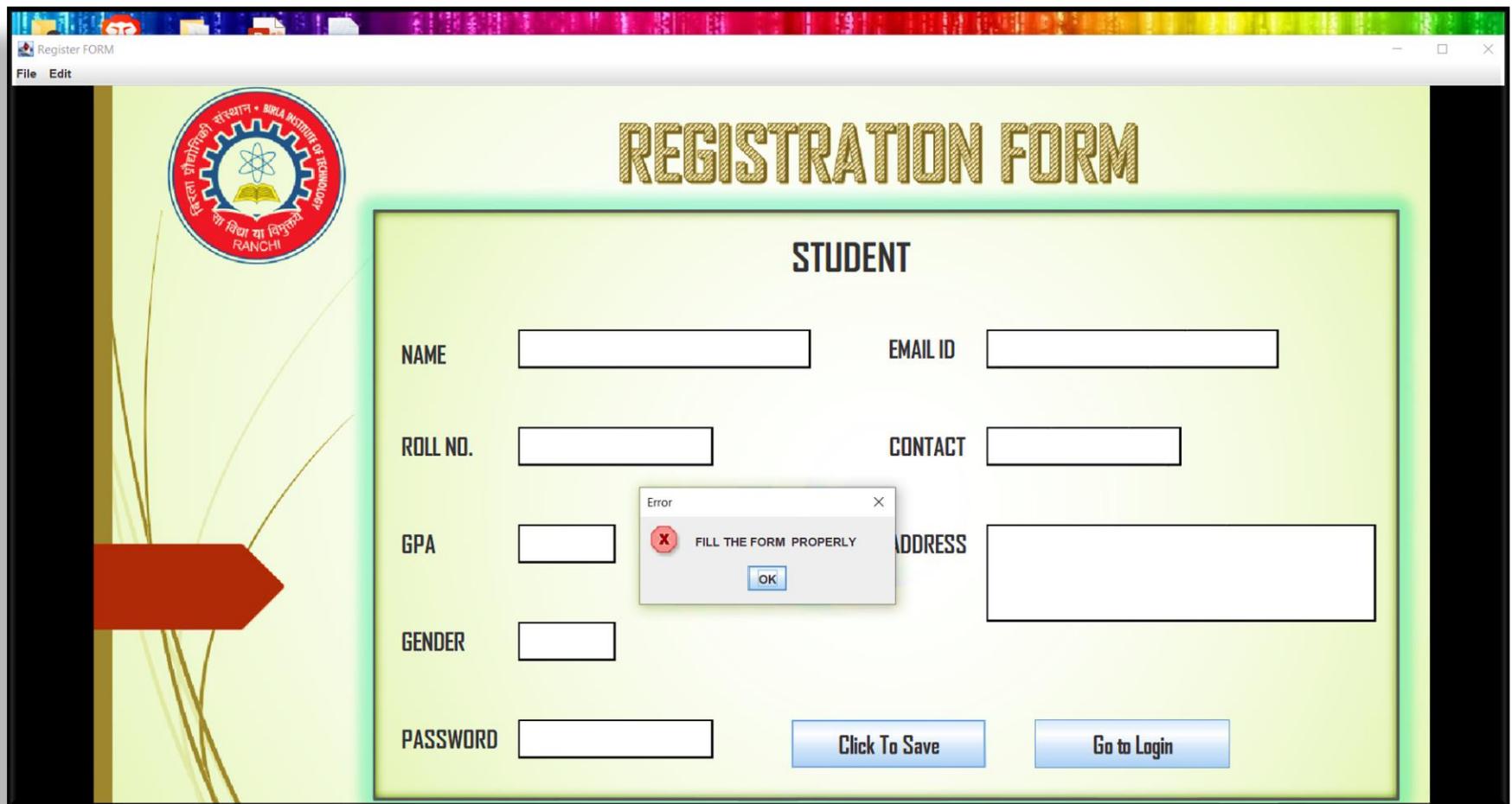
ADDRESS

GENDER

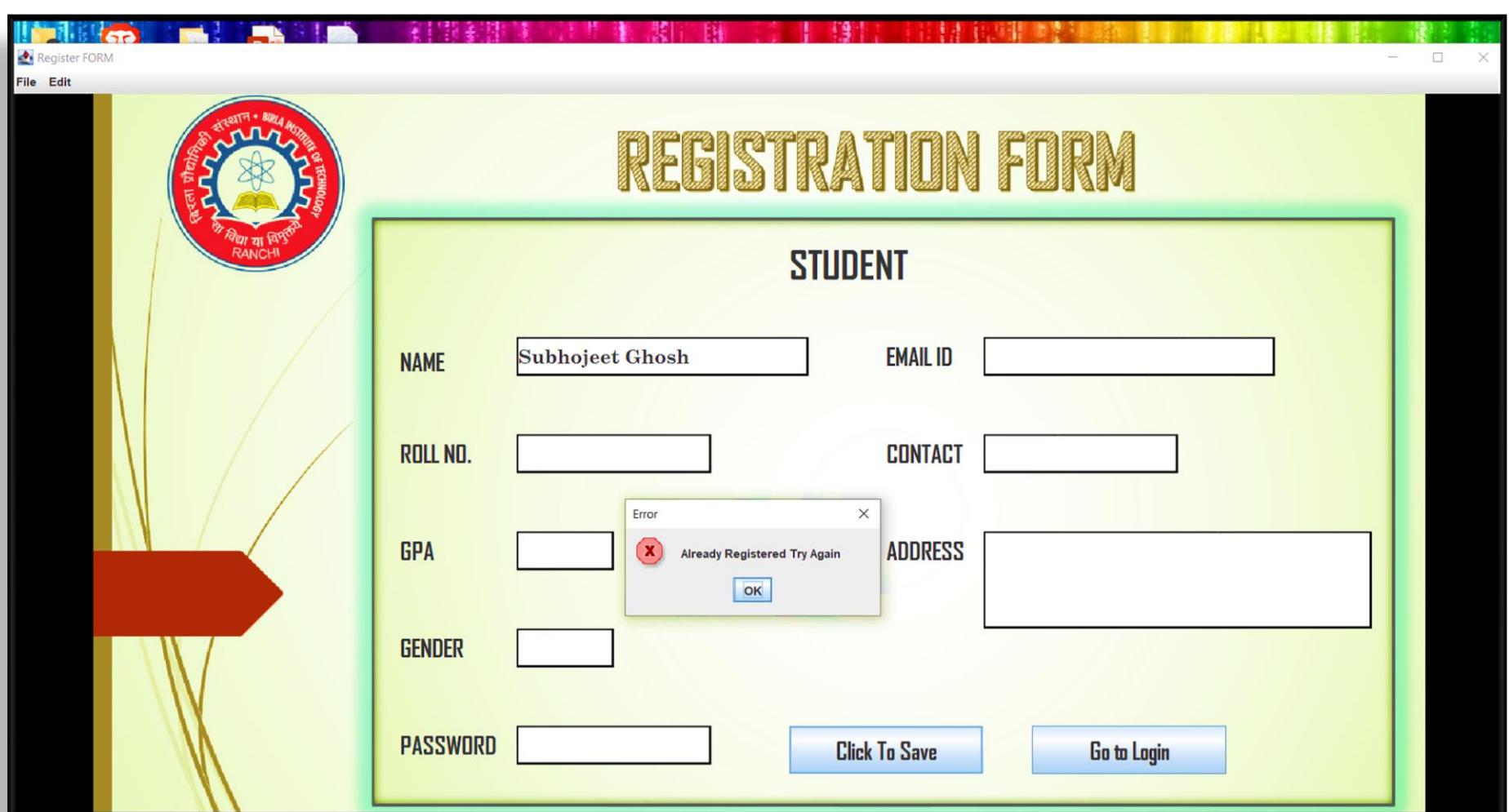
PASSWORD

Message  
User Registered  
OK

If the form is not filled properly that is any field is left empty then it will show this window.



If name , roll number , email id is repeated twice in the database then it will show this window.  
For eg. the name Subhojeet Ghosh is already registered in the database so if I again try to register with the name then it will show the message as shown below.



This was the whole functionality of this registration form. After clicking the button Click to save , the database takes the information related to the students and stores it . Then the Go to login button is clicked so that the student can login who has registered .

# Code for Student Student Registration Page

```
package maincodes;
import javax.swing.*;
import javax.swing.border.Border;
import java.awt.event.*;
import java.awt.*;
import java.sql.*;
class StudentRegister extends JFrame{

public static Container h;
public static JLabel Name,Email,Rno,Contact,Gpa,Gender,label,Address,Password;
public static JTextField name,email,rno,contact,gpa,gender;
public static JTextArea address;
public static JButton register,gotologin;
public static JPasswordField pswd;
static final String DB_URL = "jdbc:mysql://localhost:3306/computer_science_module";
static final String USER = "root";
static final String PASS = "";
Connection conn;
Statement st;
public StudentRegister() {
    setTitle("Register FORM");
    setSize(1590,800);
    setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    h=getContentPane();
    setLayout(new BorderLayout());
    h.setBackground(Color.BLACK);

    JLabel c=new JLabel(new ImageIcon("maincodes/images/final.png"));
    h.add(c);
    Font font=new Font("Century Schoolbook",Font.BOLD,20);
    Font font2=new Font("Agency FB",Font.BOLD,25);
    Border br=BorderFactory.createLineBorder(Color.BLACK,2);
    label=new JLabel("STUDENT");
    label.setFont(new Font("Agency FB",Font.BOLD,40));
    label.setBounds(800,150,300,50);
    Name=new JLabel("NAME");
    name=new JTextField("");
    Name.setBounds(400,250,120,50);
    Name.setFont(font2);
    name.setBounds(520,250,300,40);
    name.setFont(font);
    Email=new JLabel("EMAIL ID");
    email=new JTextField("");
    Email.setBounds(900,250,200,40);
    Email.setFont(font2);
    email.setBounds(1000,250,300,40);
    email.setFont(font);
    Rno=new JLabel("ROLL NO.");
    rno=new JTextField("");
    Rno.setBounds(400,350,200,40);
    Rno.setFont(font2);
    rno.setBounds(520,350,200,40);
    rno.setFont(font);
    Contact=new JLabel("CONTACT");
    contact=new JTextField("");
    Contact.setBounds(900,350,200,40);
    Contact.setFont(font2);
    contact.setBounds(1000,350,200,40);
    contact.setFont(font);
    Address=new JLabel("ADDRESS");
    address=new JTextArea("");
    Address.setBounds(900,450,200,40);
    Address.setFont(font2);
    address.setBounds(1000,450,400,100);
    address.setFont(font);
    Gpa=new JLabel("GPA");
    gpa=new JTextField("");
    Gpa.setBounds(400,450,100,40);
    Gpa.setFont(font2);
    gpa.setBounds(520,450,100,40);
    gpa.setFont(font);
    Gender=new JLabel("GENDER");
    gender=new JTextField("");
    Gender.setBounds(400,550,100,40);
    Gender.setFont(font2);
    gender.setBounds(520,550,100,40);
    Gender.setFont(font);
}
```

```
gender=new JTextField("");
Gender.setFont(font2);
Gender.setBounds(400,550,100,40);
gender.setBounds(520,550,100,40);
gender.setFont(font);
Password=new JLabel("PASSWORD");
pswd=new JPasswordField("");
Password.setFont(font2);
pswd.setFont(font);
Password.setBounds(400,650,100,40);
pswd.setBounds(520,650,200,40);
register =new JButton("Click To Save");
register.setFont(font2);
register.setBounds(800,650,200,50);
gotologin =new JButton("Go to Login");
gotologin.setFont(font2);
gotologin.setBounds(1050,650,200,50);
pswd.setBorder(br);
address.setBorder(br);
contact.setBorder(br);
name.setBorder(br);
gpa.setBorder(br);
rno.setBorder(br);
email.setBorder(br);
gender.setBorder(br);
Cursor cur=new Cursor(Cursor.HAND_CURSOR);
register.setCursor(cur);
gotologin.setCursor(cur);
c.add(label);
c.add(gotologin);
c.add(register);
c.add(Password);
c.add(pswd);
c.add(Gender);
c.add(gender);
c.add(Gpa);
c.add(gpa);
c.add(Address);
c.add(address);
c.add(Contact);
c.add(contact);
c.add(Rno);
c.add(rno);
c.add(email);
c.add>Email;
c.add(Name);
c.add(name);
JMenuBar menubar1=new JMenuBar();
JMenu file=new JMenu("File");
JMenuItem item1=new JMenuItem("new");
JMenuItem item2=new JMenuItem("open");
JMenuItem item3=new JMenuItem("save");
file.add(item1);
file.add(item2);
file.add(item3);
menubar1.add(file);
JMenu Edit=new JMenu("Edit");
JMenuItem tem1=new JMenuItem("undo");
JMenuItem tem2=new JMenuItem("redu");
JMenuItem tem3=new JMenuItem("cut");
Edit.add(tem1);
Edit.add(tem2);
Edit.add(tem3);
menubar1.add(Edit);
setJMenuBar(menubar1);
setVisible(true);
try {
    conn = DriverManager.getConnection(DB_URL, USER, PASS);
    st = conn.createStatement();
} catch (SQLException e) {
    e.printStackTrace();
}

register.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e) {
        try{
            int count=0;
            String NAME=name.getText();
```

```

        String EMAIL=email.getText();
        String RNO=rno.getText();
        String GENDER=gender.getText();
        char ch[]=pswd.getPassword();
        String PASSWORD="";
        for(int i=0;i<ch.length;i++){PASSWORD=PASSWORD+ch[i];}
        String ADDRESS=address.getText();
        String CONTACT=contact.getText();
        String GPA=(gpa.getText());
        count=(NAME.length()==0)?count+1:count;
        count=(RNO.length()==0)?count+1:count;
        count=(EMAIL.length()==0)?count+1:count;
        count=(ADDRESS.length()==0)?count+1:count;
        count=(GENDER.length()==0)?count+1:count;
        count=(ch.length==0)?count+1:count;
        count=(CONTACT.length()==0)?count+1:count;
        count=(GPA.length()==0)?count+1:count;
        ResultSet res=st.executeQuery("Select name,rollno from student where name='"+NAME+"' or
rollno='"+RNO+"' or email='"+EMAIL+"'");
        if(res.next()==true){
            JOptionPane.showMessageDialog(null,"Already Registered Try
Again","Error",JOptionPane.ERROR_MESSAGE);

        }
        else if(count>0){
            JOptionPane.showMessageDialog(null,"FILL THE
FORM PROPERLY","Error",JOptionPane.ERROR_MESSAGE);
        }
        else{
            String x="Insert into
student(rollno,name,email,address,contact,gender,gpa,image,password)
values('"+RNO+"','"+NAME+"','"+EMAIL+"','"+ADDRESS+"','"+CONTACT+"','"+GENDER.toLowerCase()+"','"+GPA+"','"+R
NO+"','"+PASSWORD+"')";
            st.executeUpdate(x);
            JOptionPane.showMessageDialog(null," User Registered
","Message",JOptionPane.INFORMATION_MESSAGE);
        }
        name.setText("");
        rno.setText("");
        email.setText("");
        gpa.setText("");
        address.setText("");
        contact.setText("");
        pswd.setText("");
        gender.setText("");

    }
    catch(SQLException h){
        h.printStackTrace();
    }
}

});

gotologin.addActionListener(new ActionListener(){

@Override
public void actionPerformed(ActionEvent e) {
    StudentLoginForm lg=new StudentLoginForm("STUDENT");
    setVisible(false);
    lg.setVisible(true);

}

});

}

public static void main(String[] args) {
    new StudentRegister();
}
}

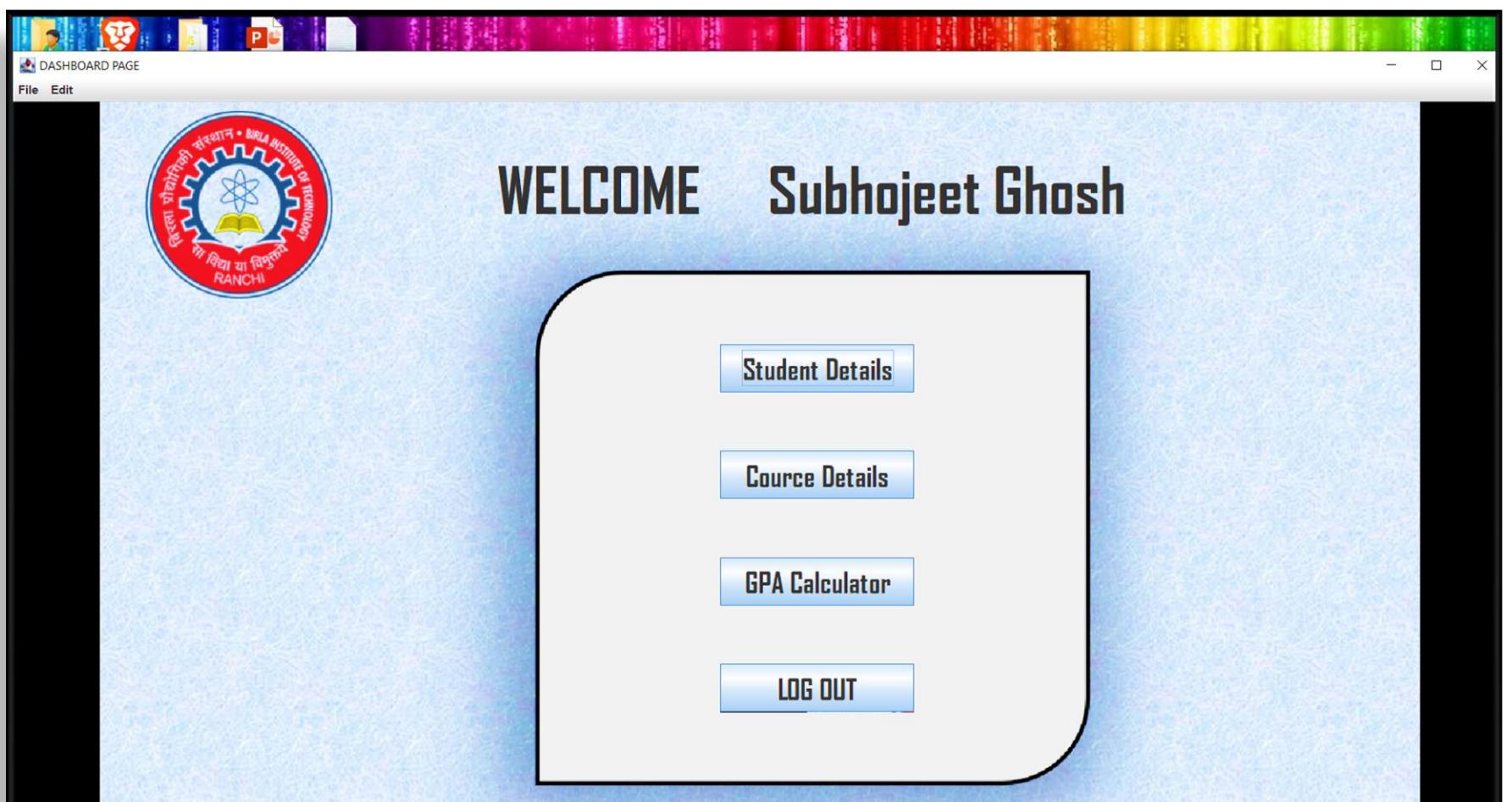
```

Lets get the login process correct and enter with the name Subhojeet Ghosh as Student

The Dashboard for the student Subhojeet Ghosh Appears.

## Student Dashboard Page

Given below is the Dashboard of Student, there are 3 more functionalities inside this dashboard section



## Code for Student Dashboard Page

```
package maincodes;
import javax.swing.*;
import java.awt.event.*;
import java.awt.event.ActionEvent;
import java.awt.*;
class Studentdashboard extends JFrame{
    public static Container h;
    public static JButton std,gpa,cd,logout;
    public static JLabel wel;
    static String nn,rnn;
    public Studentdashboard(String NAME){
        nn=NAME;

        setTitle("DASHBOARD PAGE");
        setSize(1590,800);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        h=getContentPane();
       .setLayout(new BorderLayout());
        h.setBackground(Color.BLACK);
        JLabel c=new JLabel(new ImageIcon("maincodes/images/Studentdashboard.PNG"));
        h.add(c);
        Font font2=new Font("Agency FB",Font.BOLD,30);
        Font font3=new Font("Agency FB",Font.BOLD,65);
        wel =new JLabel("WELCOME      "+NAME);
        wel.setBounds(500,50,800,80);
        wel.setFont(font3);
        std=new JButton("Student Details");
        std.setBounds(730,250,200,50);
        std.setFont(font2);
```

```

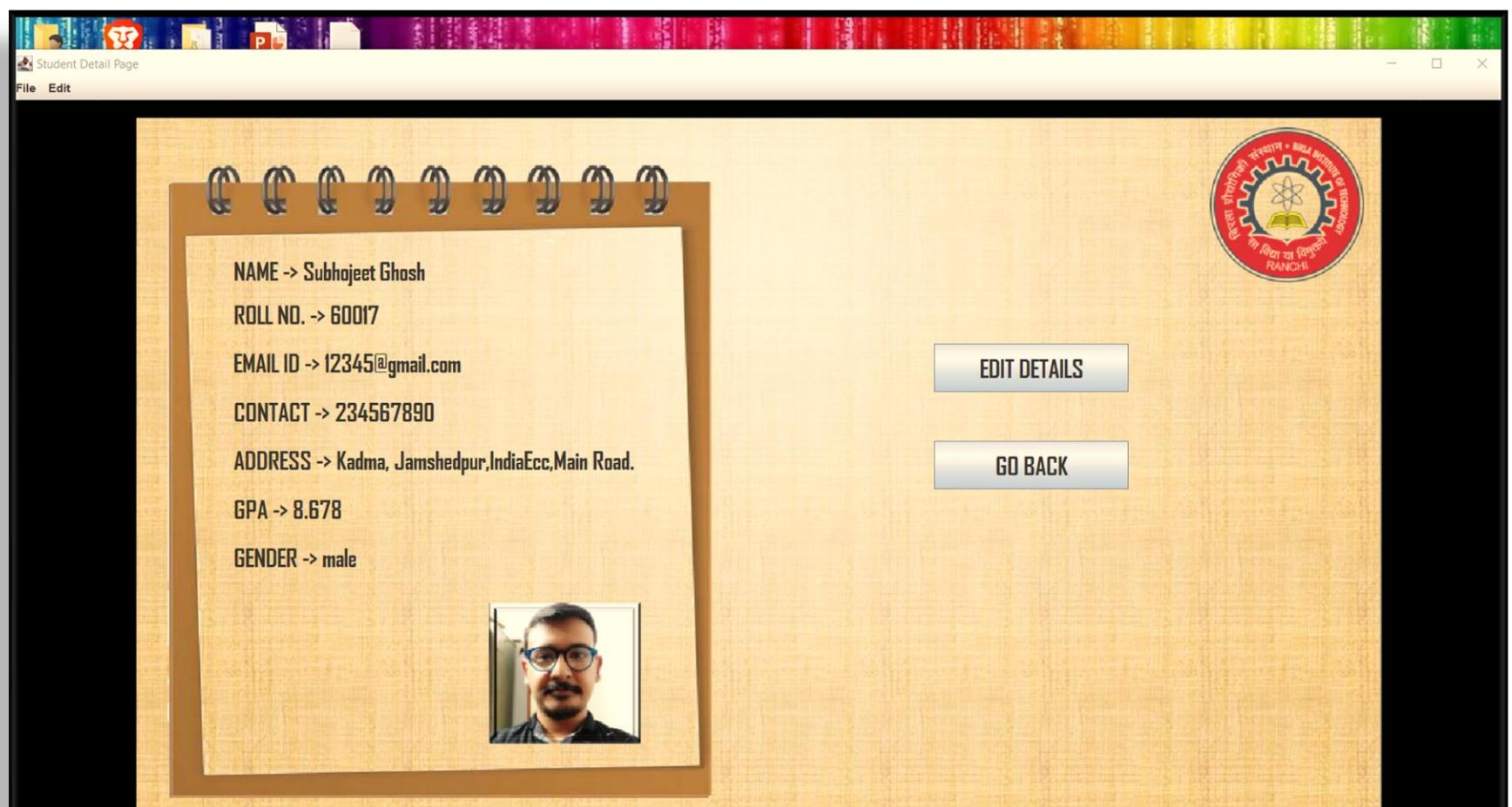
cd=new JButton("Course Details");
cd.setBounds(730,360,200,50);
cd.setFont(font2);
gpa=new JButton("GPA Calculator");
gpa.setBounds(730,470,200,50);
gpa.setFont(font2);
logout=new JButton("LOG OUT");
logout.setBounds(730,580,200,50);
logout.setFont(font2);
Cursor cur=new Cursor(Cursor.HAND_CURSOR);
std.setCursor(cur);
cd.setCursor(cur);
gpa.setCursor(cur);
logout.setCursor(cur);
c.add(std);
c.add(cd);
c.add(gpa);
c.add(logout);
c.add(wel);
JMenuBar menubar1=new JMenuBar();
JMenu file=new JMenu("File");
JMenuItem item1=new JMenuItem("new");
JMenuItem item2=new JMenuItem("open");
JMenuItem item3=new JMenuItem("save");
file.add(item1);
file.add(item2);
file.add(item3);
menubar1.add(file);
JMenu Edit=new JMenu("Edit");
JMenuItem tem1=new JMenuItem("undo");
JMenuItem tem2=new JMenuItem("redu");
JMenuItem tem3=new JMenuItem("cut");
Edit.add(tem1);
Edit.add(tem2);
Edit.add(tem3);
menubar1.add(Edit);
setJMenuBar(menubar1);
setVisible(true);
logout.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e) {
        StudentLoginForm oj=new StudentLoginForm("STUDENT");
        setVisible(false);
        oj.setVisible(true);
    }
});
std.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e) {
        StudentDetails sl=new StudentDetails(NAME);
        sl.setVisible(true);
        setVisible(false);
    }
});
cd.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e) {
        CourseDetails sl=new CourseDetails(NAME);
        setVisible(false);
        sl.setVisible(true);
    }
});
}
public static void main(String[] args) {
    new Studentdashboard();
}
}

```

There are in total of 3 functionalities, namely Student Details, Course Details, GPA Calculator. Let's See Further into it starting off with the Student Details.

## Student Details Page

This is the Student Details page where student who registered in Bit Deoghar Campus can go through the details they entered and check whether it is correct or not.



There is also a option for changing the details if the student feels that the data he or she entered is incorrect. For that Edit Details Button is given

## Code for Student Details Page

```
package maincodes;
import javax.swing.*;
import java.awt.event.*;
import java.sql.*;
import java.awt.*;
class StudentDetails extends JFrame{
    public static Container h;
    public static JLabel name,rno,email,gpa,gender,address,contact;
    public static JButton EditDetails,goback;
    static final String DB_URL = "jdbc:mysql://localhost:3306/computer_science_module";
    static final String USER = "root";
    static final String PASS = "";
    Connection conn;
    Statement st;
    static String nn,rnn;
```

```

public StudentDetails(String NAME) {
    nn=NAME;

    setTitle("Student Detail Page");
    setSize(1590,800);
    setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    h=getContentPane();
    setLayout(new BorderLayout());
    h.setBackground(Color.BLACK);

    JLabel c=new JLabel(new ImageIcon("maincodes/images/studentDetail.png"));
    h.add(c);

    Font font2=new Font("Agency FB",Font.BOLD,25);

    JMenuBar menubar1=new JMenuBar();
    JMenu file=new JMenu("File");
    JMenuItem item1=new JMenuItem("new");
    JMenuItem item2=new JMenuItem("open");
    JMenuItem item3=new JMenuItem("save");
    file.add(item1);
    file.add(item2);
    file.add(item3);
    menubar1.add(file);
    JMenu Edit=new JMenu("Edit");
    JMenuItem tem1=new JMenuItem("undo");
    JMenuItem tem2=new JMenuItem("redu");
    JMenuItem tem3=new JMenuItem("cut");
    Edit.add(tem1);
    Edit.add(tem2);
    Edit.add(tem3);
    menubar1.add(Edit);
    setJMenuBar(menubar1);
    goback =new JButton("GO BACK");
    EditDetails=new JButton("EDIT DETAILS");
    Cursor cur=new Cursor(Cursor.HAND_CURSOR);
    goback.setCursor(cur);
    EditDetails.setCursor(cur);
    goback.setFont(font2);
    EditDetails.setFont(font2);
    EditDetails.setBounds(950,250,200,50);
    goback.setBounds(950,350,200,50);
    c.add(EditDetails);
    c.add(goback);

    String Name="",Rno="",Address="",Contact="",Gpa="",Email="",Gender="",image="";
    try {
        conn = DriverManager.getConnection(DB_URL, USER, PASS);
        st = conn.createStatement();
        String query="Select * from student where name='"+NAME+"'";
        ResultSet res=st.executeQuery(query);
        if(res.next()){
            Name=res.getString("name");
            Rno=res.getString("rollno");
            Address=res.getString("address");
            Contact=res.getString("contact");
            Gpa=res.getString("gpa");
            Email=res.getString("email");
            Gender=res.getString("gender");
            image=res.getString("image");
        }
        ImageIcon icon=new ImageIcon("maincodes/images/"+image+".png");
        JLabel label=new JLabel("",icon,JLabel.CENTER);
        label.setBounds(320,340, 500, 500);
        c.add(label);
        name=new JLabel("NAME -> "+Name);
        name.setBounds(230,150,400,50);
        name.setFont(font2);
        email=new JLabel("EMAIL ID -> "+Email);

```

```

email.setBounds(230,250,400,40);
email.setFont(font2);
rno=new JLabel("ROLL NO. -> "+Rno);
rno.setBounds(230,200,400,40);
rno.setFont(font2);
contact=new JLabel("CONTACT -> "+Contact);
contact.setBounds(230,300,400,40);
contact.setFont(font2);
address=new JLabel("ADDRESS -> "+Address);
address.setBounds(230,350,500,40);
address.setFont(font2);
gpa=new JLabel("GPA -> "+Gpa);
gpa.setBounds(230,400,250,40);
gpa.setFont(font2);
gender=new JLabel("GENDER -> "+Gender);
gender.setFont(font2);
gender.setBounds(230,450,250,40);
c.add(name);
c.add(email);
c.add(rno);
c.add(contact);
c.add(address);
c.add(gpa);
c.add(gender);

} catch (SQLException e) {

    e.printStackTrace();
}
setVisible(true);
EditDetails.addActionListener(new ActionListener(){

    @Override
    public void actionPerformed(ActionEvent e) {
        EditDetails obj=new EditDetails(NAME);
        setVisible(false);
        obj.setVisible(true);

    }

});;
goback.addActionListener(new ActionListener(){

    @Override
    public void actionPerformed(ActionEvent e) {
        Studentdashboard mg=new Studentdashboard(nn);
        setVisible(false);
        mg.setVisible(true);

    }

});;

}

public static void main(String[] args) {
    new StudentDetails("");
}
}

```

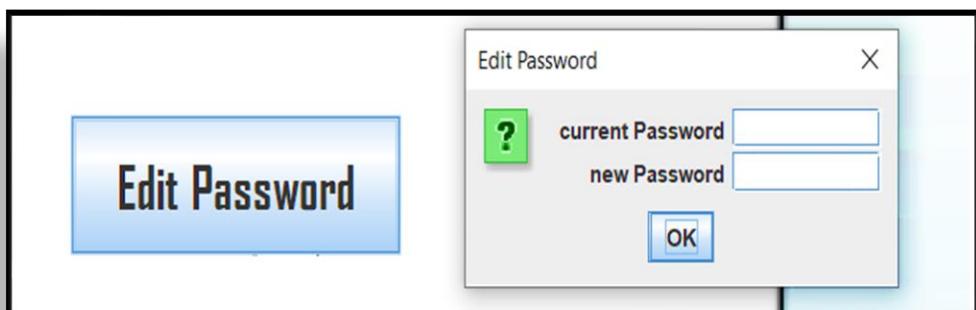
**Next we See the Edit Details Option where we will be given the liberty to change the password , email, contact an GPA.**

## **Edit Profile Page**

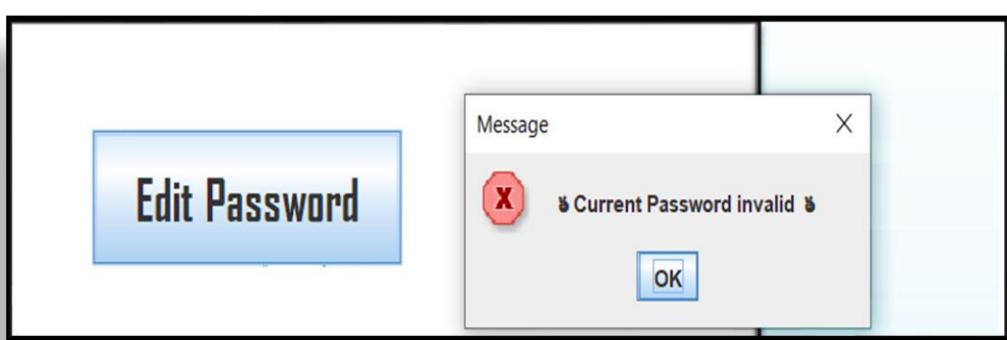


**Now We Can Edit the password, Contact, GPA and Email and it will be shown dynamically in the student details page**

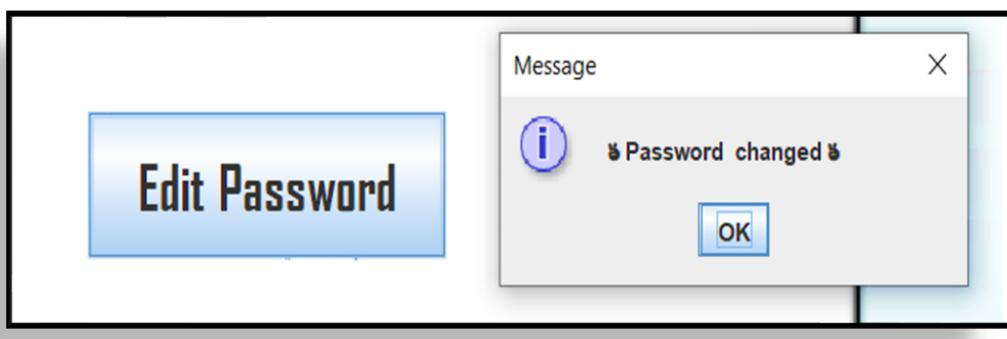
### **PASSWORD**



If the current password of the student profile is incorrect then it will show this message

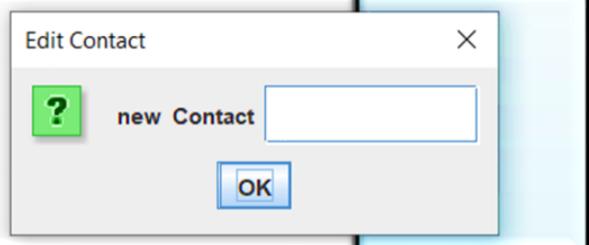


If all this are correct then password change notification pops up.



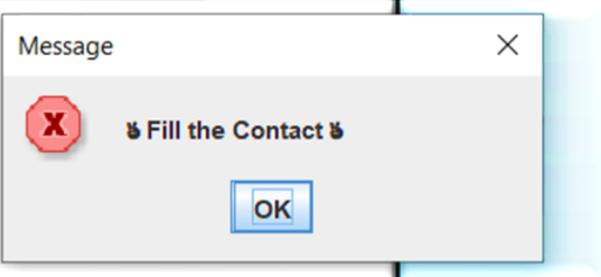
## CONTACT

Edit Contact



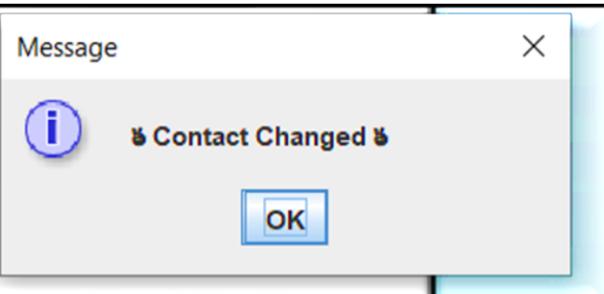
If the Contact is left blank then current contact will not change but it will pop up a message (Warning) of fill the contact.

Edit Contact



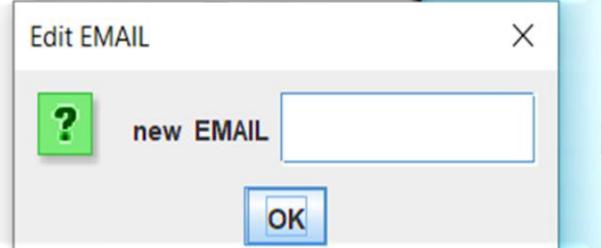
If the contact is filled properly, it will be get updated in the student details section

Edit Contact



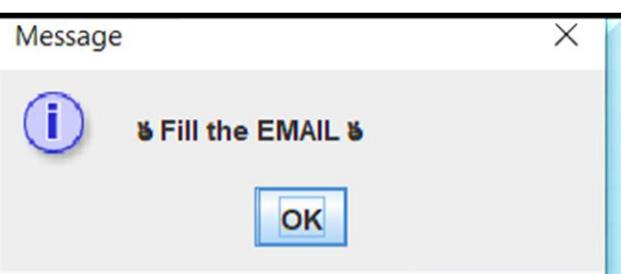
## EMAIL ID

Edit EMAIL

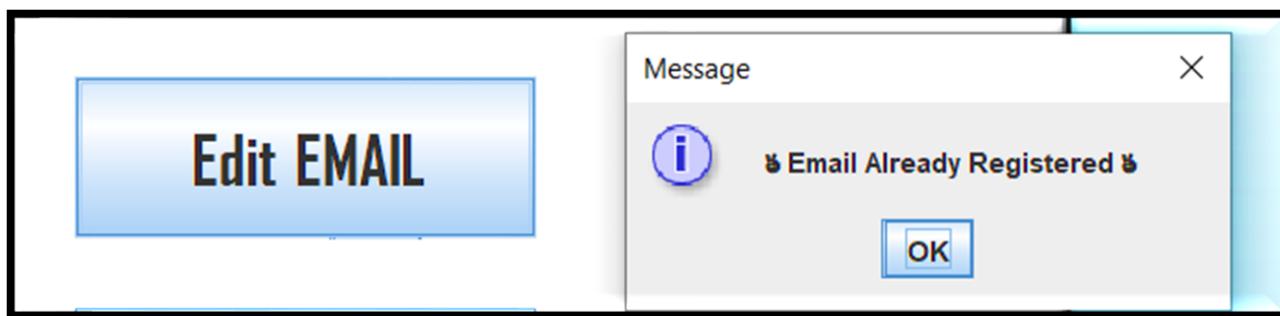


If the Email is left blank then current contact will not change but it will pop up a message (Warning) of fill the Email.

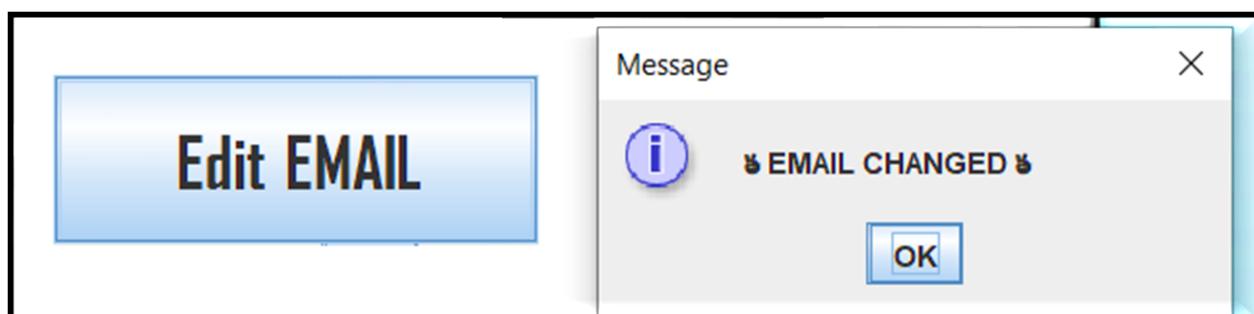
Edit EMAIL



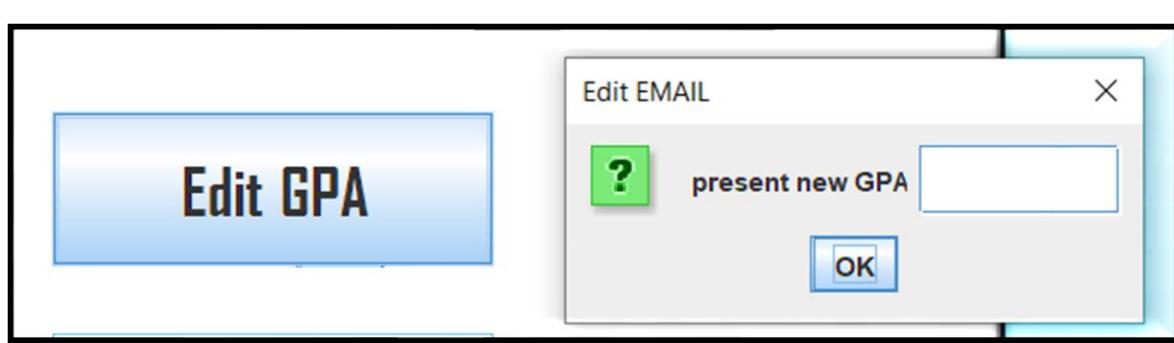
If the Email is already present in the database then will show a error message:



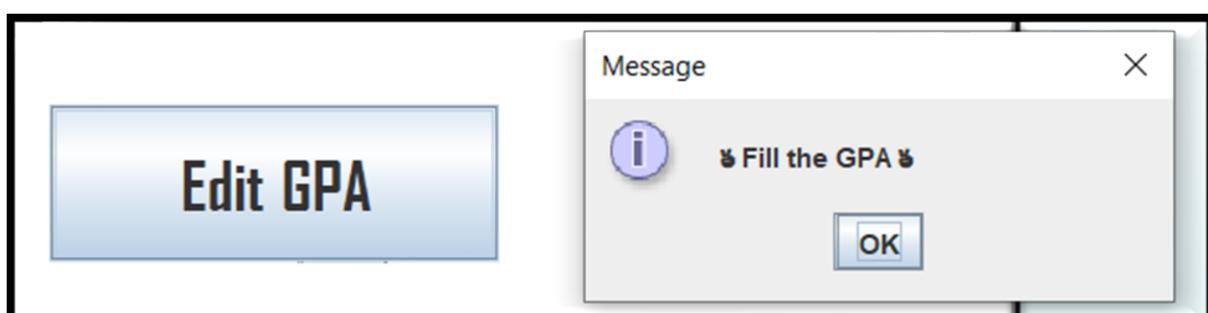
If the Email is filled properly, it will be get updated in the student details section



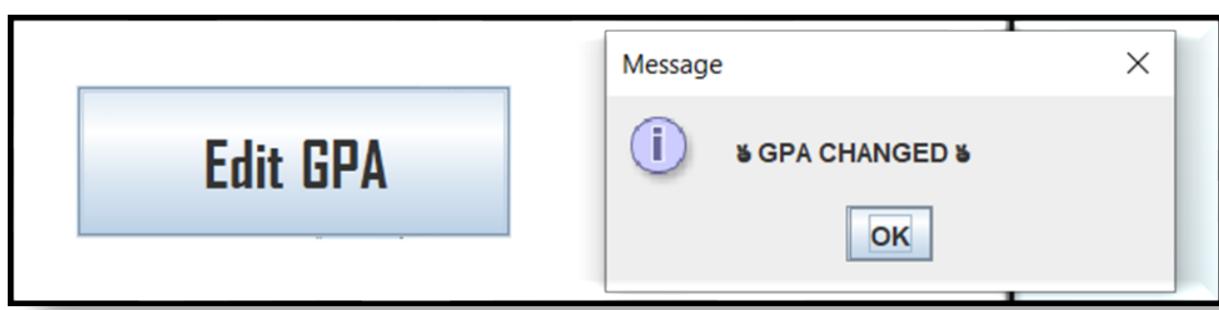
## GPA



If the GPA is left blank then current contact will not change but it will pop up a message (Warning) of fill the contact.



If the GPA is filled properly, it will be get updated in the student details section



## Code for Student Edit Details Page

```
package maincodes;
import java.sql.*;
import javax.swing.*;
import java.awt.event.*;
import java.awt.*;
class EditDetails extends JFrame{
    public static Container h;
    public static JButton pswd,GPA,Contact,EMAIL,goback;
    static final String DB_URL = "jdbc:mysql://localhost:3306/computer_science_module";
    static final String USER = "root";
    static final String PASS = "";
    Connection conn;
    Statement st;
    public EditDetails(String N){
        setTitle("MODULE PAGE");
        setSize(1590,800);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        h=getContentPane();
        setLayout(new BorderLayout());
        h.setBackground(Color.BLACK);
        JLabel c=new JLabel(new ImageIcon("maincodes/images/editprofile.png"));
        h.add(c);
        Font font2=new Font("Agency FB",Font.BOLD,30);
        pswd=new JButton("Edit Password");
        pswd.setBounds(750,200,200,70);
        pswd.setFont(font2);
        Contact=new JButton("Edit Contact");
        Contact.setBounds(750,310,200,70);
        Contact.setFont(font2);
        GPA=new JButton("Edit GPA");
        GPA.setBounds(750,420,200,70);
        GPA.setFont(font2);
        EMAIL=new JButton("Edit EMAIL");
        EMAIL.setBounds(750,520,200,70);
        EMAIL.setFont(font2);
        goback=new JButton("Go Back");
        goback.setBounds(750,620,200,70);
        goback.setFont(font2);

        Cursor cur=new Cursor(Cursor.HAND_CURSOR);
        pswd.setCursor(cur);
        Contact.setCursor(cur);
        GPA.setCursor(cur);
        EMAIL.setCursor(cur);
        c.add(pswd);
        c.add(Contact);
        c.add(GPA);
        c.add(EMAIL);
        c.add(goback);
        JMenuBar menubar1=new JMenuBar();
        JMenu file=new JMenu("File");
        JMenuItem item1=new JMenuItem("new");
        JMenuItem item2=new JMenuItem("open");
        JMenuItem item3=new JMenuItem("save");
        file.add(item1);
        file.add(item2);
        file.add(item3);
        menubar1.add(file);
        JMenu Edit=new JMenu("Edit");
        JMenuItem tem1=new JMenuItem("undo");
        JMenuItem tem2=new JMenuItem("redu");
        JMenuItem tem3=new JMenuItem("cut");
```

```

Edit.add(item1);
Edit.add(item2);
Edit.add(item3);
menuBar1.add(Edit);
setJMenuBar(menuBar1);
setVisible(true);
try {
    conn = DriverManager.getConnection(DB_URL, USER, PASS);
    st = conn.createStatement();
} catch (SQLException e) {
    e.printStackTrace();
}

pswd.addActionListener(new ActionListener(){
    public void actionPerformed(ActionEvent e) {
        try{
            JFrame frame=new JFrame();
            String query1="Select * from student where name='"+N+"'";
            ResultSet res=st.executeQuery(query1);
            String pass="";
            if(res.next()){
                pass=res.getString("password");
            }
            JPanel panel = new JPanel(new BorderLayout(5, 5));
            JPanel label = new JPanel(new GridLayout(0, 1, 2, 2));
            label.add(new JLabel("current Password", SwingConstants.RIGHT));
            label.add(new JLabel("new Password", SwingConstants.RIGHT));
            panel.add(label, BorderLayout.WEST);
            JPanel controls = new JPanel(new GridLayout(0, 1, 2, 2));
            JPasswordField currentpassword = new JPasswordField();
            controls.add(currentpassword);
            JPasswordField newpassword = new JPasswordField();
            controls.add(newpassword);
            panel.add(controls, BorderLayout.CENTER);
            JOptionPane.showMessageDialog(frame, panel, "Edit Password",
JOptionPane.QUESTION_MESSAGE);
                char ch[]=currentpassword.getPassword();
                String PASSWORD="";
                for(int i=0;i<ch.length;i++){PASSWORD=PASSWORD+ch[i];}
                if(pass.equals(PASSWORD)==true){
                    char ch1[]=newpassword.getPassword();
                    String PASSWORD1="";
                    for(int i=0;i<ch1.length;i++){PASSWORD1=PASSWORD1+ch1[i];}
                    String query2="Update student set password='"+PASSWORD1+"' where
name='"+N+"'";
                    st.executeUpdate(query2);
                    JOptionPane.showMessageDialog(null," ✎ Password changed
✎","Message",JOptionPane.INFORMATION_MESSAGE);
                }
            else{
                JOptionPane.showMessageDialog(null," ✎ Current Password
invalid ✎","Message",JOptionPane.ERROR_MESSAGE);
            }
        } catch(SQLException h){
            h.printStackTrace();
        }
    }
});

}); Contact.addActionListener(new ActionListener(){

```

```

@Override
public void actionPerformed(ActionEvent e) {
    try{
        JFrame frame=new JFrame();

        JPanel panel = new JPanel(new BorderLayout(5, 5));
        JPanel label = new JPanel(new GridLayout(0, 1, 2, 2));
        label.add(new JLabel("new Contact", SwingConstants.RIGHT));
        panel.add(label, BorderLayout.WEST);
        JPanel controls = new JPanel(new GridLayout(0, 1, 2, 2));
        JTextField newContact = new JTextField();
        controls.add(newContact);
        panel.add(controls, BorderLayout.CENTER);
        JOptionPane.showMessageDialog(frame, panel, "Edit Contact",
JOptionPane.QUESTION_MESSAGE);
        ResultSet res=st.executeQuery("Select * from student where
contact='"++newContact.getText()+"'");
        if(res.next()==true){
            JOptionPane.showMessageDialog(null," ✎ Contact Already Registered
✎","Message",JOptionPane.INFORMATION_MESSAGE);
        }
        else if(newContact.getText().length()==0){
            JOptionPane.showMessageDialog(null," ✎ Fill the Contact
✎","Message",JOptionPane.ERROR_MESSAGE);
        }
        else{
            String query2="Update student set contact='"++newContact.getText()+"'
where name='"++N+"'";
            st.executeUpdate(query2);
            JOptionPane.showMessageDialog(null," ✎ Contact Changed
✎","Message",JOptionPane.INFORMATION_MESSAGE);
        }
    }

    catch(SQLException h){
        h.printStackTrace();
    }
}

});

EMAIL.addActionListener(new ActionListener(){

@Override
public void actionPerformed(ActionEvent e) {
    try{
        JFrame frame=new JFrame();

        JPanel panel = new JPanel(new BorderLayout(5, 5));
        JPanel label = new JPanel(new GridLayout(0, 1, 2, 2));
        label.add(new JLabel("new EMAIL", SwingConstants.RIGHT));
        panel.add(label, BorderLayout.WEST);
        JPanel controls = new JPanel(new GridLayout(0, 1, 2, 2));
        JTextField newEMAIL = new JTextField();
        controls.add(newEMAIL);
        panel.add(controls, BorderLayout.CENTER);
        JOptionPane.showMessageDialog(frame, panel, "Edit EMAIL",
JOptionPane.QUESTION_MESSAGE);
        ResultSet res=st.executeQuery("Select * from student where
email='"++newEMAIL.getText()+"'");
        if(res.next()==true){
            JOptionPane.showMessageDialog(null," ✎ Email Already Registered
✎","Message",JOptionPane.INFORMATION_MESSAGE);
        }
        else if(newEMAIL.getText().length()==0){

```

```

        JOptionPane.showMessageDialog(null, " ✎ Fill the EMAIL
✎", "Message", JOptionPane.INFORMATION_MESSAGE);
    }
    else{
        String query2="Update student set email='"+newEMAIL.getText()+"'
where name='"+N+"'";
        st.executeUpdate(query2);
        JOptionPane.showMessageDialog(null, " ✎ EMAIL CHANGED
✎", "Message", JOptionPane.INFORMATION_MESSAGE);
    }
}

}
catch(SQLException h){
    h.printStackTrace();
}

});

GPA.addActionListener(new ActionListener(){

@Override
public void actionPerformed(ActionEvent e) {
    try{
        JFrame frame=new JFrame();

        JPanel panel = new JPanel(new BorderLayout(5, 5));
        JPanel label = new JPanel(new GridLayout(0, 1, 2, 2));
        label.add(new JLabel("present new GPA", SwingConstants.RIGHT));
        panel.add(label, BorderLayout.WEST);
        JPanel controls = new JPanel(new GridLayout(0, 1, 2, 2));
        JTextField newGPA = new JTextField();
        controls.add(newGPA);
        panel.add(controls, BorderLayout.CENTER);
        JOptionPane.showMessageDialog(frame, panel, "Edit EMAIL",
JOptionPane.QUESTION_MESSAGE);
        ResultSet res=st.executeQuery("Select * from student where
gpa='"+newGPA.getText()+"'");
        if(res.next()==true){
            JOptionPane.showMessageDialog(null, " ✎ Contact Already Registered
✎", "Message", JOptionPane.INFORMATION_MESSAGE);
        }
        else if(newGPA.getText().length()==0){
            JOptionPane.showMessageDialog(null, " ✎ Fill the GPA
✎", "Message", JOptionPane.INFORMATION_MESSAGE);
        }
        else{
            String query2="Update student set gpa='"+newGPA.getText()+"' where
name='"+N+"'";
            st.executeUpdate(query2);
            JOptionPane.showMessageDialog(null, " ✎ GPA CHANGED
✎", "Message", JOptionPane.INFORMATION_MESSAGE);
        }
    }

}
catch(SQLException h){
    h.printStackTrace();
}

});

goback.addActionListener(new ActionListener(){


```

```

        public void actionPerformed(ActionEvent e) {
            StudentDetails obb=new StudentDetails(N);
            setVisible(false);
            obb.setVisible(true);
        }
    });

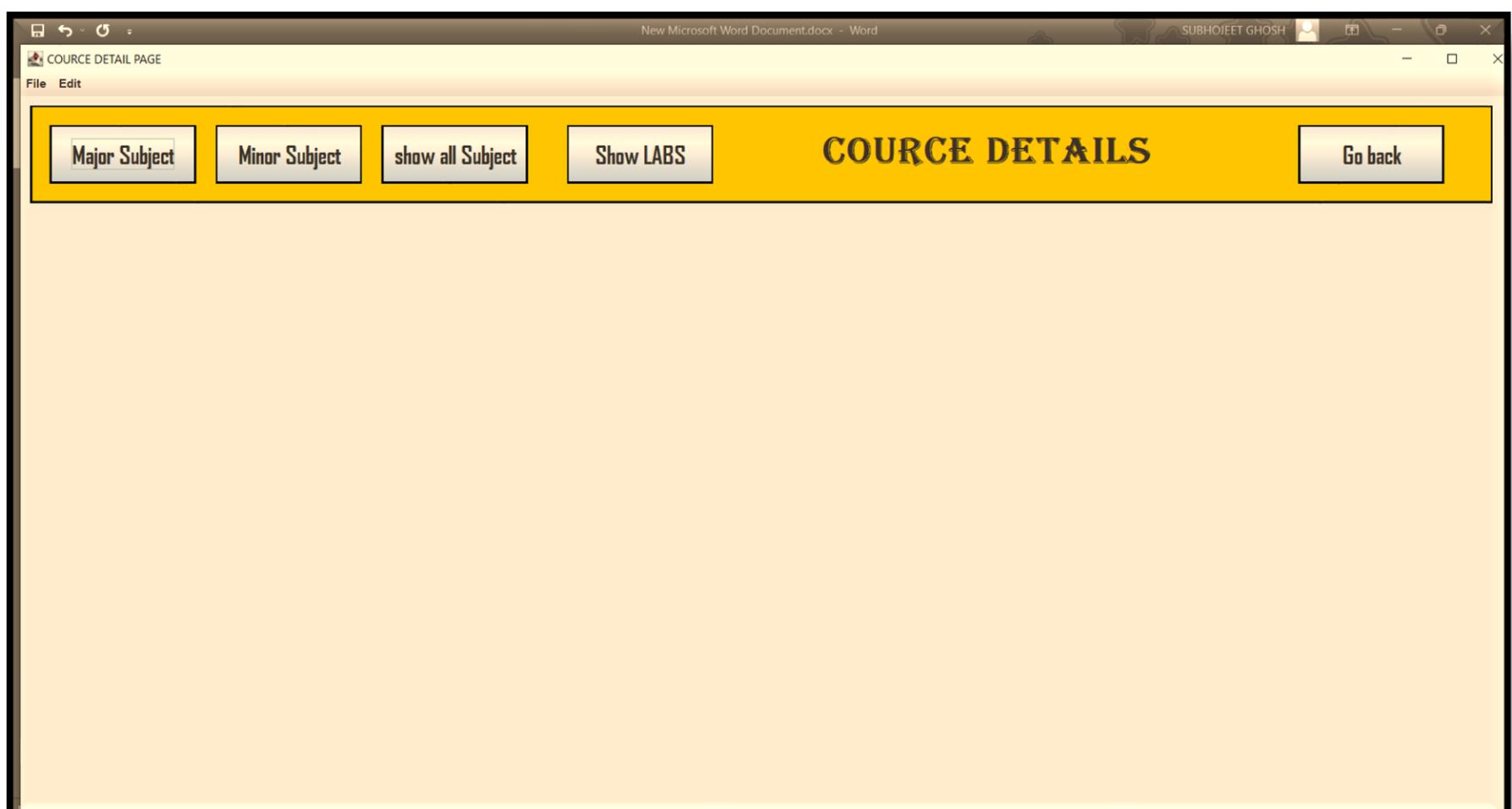
}

public static void main(String[] args) {
    new EditDetails("");
}

```

**Let go back to the Student Dashboard and go through the course details page which shows the course structure of the 5<sup>th</sup> semester.**

## Course Detail Page



**Lets Click show All Subjects we get a table :**

The screenshot shows a Windows application window titled "COURSE DETAILS". At the top left, there are four buttons: "Major Subject", "Minor Subject", "show all Subject", and "Show LABS". On the right side, there is a "Go back" button. The main area contains a table with the following data:

COURSE NAME	COURSE ID	COURSE TYPE	COURSE CREDIT	BOOK 1	BOOK 2	SYLLABUS
Formal Language And Automata Theory	CS208	Theory	3	Peter Linz	Martin John C.	MODULE1MODULE2MODUL...
Database Management System	CS301	Theory	3	Silberschatz A. Databas...	Elmasri R.,Fundamentals of	MODULE1MODULE2MODUL...
DBMS LAB	CS302	Practical	1.5	nill	nill	same as DBMS Syllabus
Soft Computing	CS321	Theory	3	Jang jsr Neuro-Fuzzy an...	Ray K S Soft Computing an...	MODULE1MODULE2MODUL...
System Programming	CS324	Theory	3	Dhamdhere DM	Donovon J.J System progra...	MODULE1MODULE2MODUL...
Shell Programming	CS326	Practical	1.5	nill	nill	nill
Data Communication and Design Pattern	IT301	Theory	4	William Stallings DCC 1...	Forouzan B.A.	MODULE1MODULE2MODUL...
DCCN LAB	IT302	Practical	1.5	nill	nill	same as DCCN THEORY
Software Engineering	IT305	Theory	3	Sommerville , Software ...	Mall Rajib ,Fundamental of S.	MODULE1MODULE2MODUL...
SE LAB	IT306	Practical	1.5	nill	nill	same as SE syllabus
Cloud Computing	IT322	Theory	3	Buyya Raj Kumar,Maste...	Velte T Cloud Computing , A	MODULE1MODULE2MODUL...

**Lets Click Minor Subjects we get a table :**

The screenshot shows a Windows application window titled "COURSE DETAILS". At the top left, there are four buttons: "Major Subject", "Minor Subject", "show all Subject", and "Show LABS". On the right side, there is a "Go back" button. The main area contains a table with the following data:

COURSE NAME	COURSE ID	COURSE TYPE	COURSE CREDIT	BOOK 1	BOOK 2	SYLLABUS
Soft Computing	CS321	Theory	3	Jang jsr Neuro-Fuzzy an...	Ray K S Soft Computing an...	MODULE1MODULE2MODUL...
System Programming	CS324	Theory	3	Dhamdhere DM	Donovon J.J System progra...	MODULE1MODULE2MODUL...
Cloud Computing	IT322	Theory	3	Buyya Raj Kumar,Maste...	Velte T Cloud Computing , A	MODULE1MODULE2MODUL...

**Lets Click Major Subjects we get a table :**

The screenshot shows a Java Swing application window titled "COURSE DETAILS". At the top, there are four buttons: "Major Subject", "Minor Subject", "show all Subject", and "Show LABS". To the right of these buttons is the title "COURSE DETAILS". On the far right, there is a "Go back" button. The main content area contains a table with the following data:

COURSE NAME	COURSE ID	COURSE TYPE	COURSE CREDIT	BOOK 1	BOOK 2	SYLLABUS
Formal Language And Automata Theory	CS208	Theory	3	Peter Linz	Martin John C.	MODULE1MODULE2MODUL...
Database Management System	CS301	Theory	3	Silberschatz A. Databas...	Elmasri R.,Fundamentals of	MODULE1MODULE2MODUL...
Data Communication and Design Pattern	IT301	Theory	4	William Stallings DCC 1...	Forouzan B.A.	MODULE1MODULE2MODUL...
Software Engineering	IT305	Theory	3	Sommerville , Software ...	Mall Rajib ,Fundamental of S.	MODULE1MODULE2MODUL...

**Lets Click show Labs we get a table :**

The screenshot shows a Java Swing application window titled "COURSE DETAILS". At the top, there are four buttons: "Major Subject", "Minor Subject", "show all Subject", and "Show LABS". To the right of these buttons is the title "COURSE DETAILS". On the far right, there is a "Go back" button. The main content area contains a table with the following data:

COURSE NAME	COURSE ID	COURSE TYPE	COURSE CREDIT	BOOK 1	BOOK 2	SYLLABUS
DBMS LAB	CS302	Practical	1.5	nill	nill	same as DBMS Syllabus
Shell Programming	CS326	Practical	1.5	nill	nill	nill
DCCN LAB	IT302	Practical	1.5	nill	nill	same as DCCN THEORY
SE LAB	IT306	Practical	1.5	nill	nill	same as SE syllabus

**These screens are not different but the same screen there are a total of 4 queries that retrieves the data according to major ,minor, labs and all subjects and the technology used is JTable.**

## Code for Course Detail Page

```
package maincodes;
import javax.swing.*;
import javax.swing.border.Border;
import javax.swing.table.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
class CourseDetails extends JFrame{
    public static JLabel c;
    public static JTable table;
    public static JScrollPane scrollPane;
    public static DefaultTableModel model;
    public static DefaultTableCellRenderer cellRenderer;
    public static Container h;
    public static JButton showmajor,showminor,showall,goback,showlab;
    public static JLabel label;
    static final String DB_URL = "jdbc:mysql://localhost:3306/computer_science_module";
    static final String USER = "root";
    static final String PASS = "";
    static public Object[][][]data;
    public static boolean status;
    Connection conn;
    Statement st;
    public static String nn;
    public CourseDetails(String NAME){
        nn=NAME;
        setTitle("COURSE DETAIL PAGE");
        setSize(1590,800);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        Font font2=new Font("Agency FB",Font.BOLD,25);
        Font font=new Font("Algerian",Font.BOLD,40);
        h=getContentPane();

        setBackground(Color.CYAN);
        JMenuBar menubar1=new JMenuBar();
        JMenu file=new JMenu("File");
        JMenuItem item1=new JMenuItem("new");
        JMenuItem item2=new JMenuItem("open");
        JMenuItem item3=new JMenuItem("save");
        file.add(item1);
        file.add(item2);
        file.add(item3);
        menubar1.add(file);
        JMenu Edit=new JMenu("Edit");
        JMenuItem tem1=new JMenuItem("undo");
        JMenuItem tem2=new JMenuItem("redo");
        JMenuItem tem3=new JMenuItem("cut");
        Edit.add(tem1);
        Edit.add(tem2);
        Edit.add(tem3);
        menubar1.add(Edit);
        setJMenuBar(menubar1);
        setLayout(null);

        try {
            conn = DriverManager.getConnection(DB_URL, USER, PASS);
            st = conn.createStatement();
        } catch (SQLException e) {
            e.printStackTrace();
        }
    }
}
```

```

JPanel panel=new JPanel();
panel.setLayout(null);
panel.setBounds(10,10,1500,100);
panel.setBackground(Color.ORANGE);
Border br=BorderFactory.createLineBorder(Color.BLACK,2);
panel.setBorder(br);
showmajor=new JButton("Major Subject");
showmajor.setBounds(20,20,150,60);
showmajor.setBorder(br);
showmajor.setFont(font2);
panel.add(showmajor);
showminor=new JButton("Minor Subject");
showminor.setBounds(190,20,150,60);
showminor.setBorder(br);
showminor.setFont(font2);
panel.add(showminor);
showall=new JButton("show all Subject");
showall.setBounds(360,20,150,60);
showall.setBorder(br);
showall.setFont(font2);
panel.add(showall);
showlab=new JButton("Show LABS");
showlab.setBounds(550,20,150,60);
showlab.setBorder(br);
showlab.setFont(font2);
panel.add(showlab);
label=new JLabel(" COURCE DETAILS ");
label.setBounds(800,20,500,60);
label.setFont(font);
panel.add(label);
goback=new JButton("Go back");
goback.setBounds(1300,20,150,60);
goback.setBorder(br);
goback.setFont(font2);
panel.add(goback);
h.add(panel);
setVisible(true);

showall.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e) {
        data=getEmployeeDetails(1);
        makeTable();
        setVisible(true);
    }
});

showmajor.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e) {
        data=getEmployeeDetails(2);
        makeTable();
        setVisible(true);
    }
});

showminor.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e) {
        data=getEmployeeDetails(3);
        makeTable();
        setVisible(true);
    }
});

```

```

        }

    });

showlab.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e) {
        data=getEmployeeDetails(4);
        makeTable();
        setVisible(true);

    }
});

goback.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e) {
        Studentdashboard obb=new Studentdashboard(NAME);
        setVisible(false);
        obb.setVisible(true);

    }
});
}

public Object[][] getEmployeeDetails(int x) {
    Object[][] data = null;
    try {

        String QUERY="";
        int r=0,c=7;
        switch(x){
            case 1: QUERY="select c_name,c_id,c_type,c_credit,book1,book2,syllabus from course";
                      r=11;
                      break;
            case 2: QUERY="select c_name,c_id,c_type,c_credit,book1,book2,syllabus from course where major_minor='major'";
                      r=4;
                      break;
            case 3: QUERY="select c_name,c_id,c_type,c_credit,book1,book2,syllabus from course where major_minor='PE'";
                      r=3;
                      break;
            case 4: QUERY="select c_name,c_id,c_type,c_credit,book1,book2,syllabus from course where major_minor='LAB'";
                      r=4;
        }
        ResultSet res=st.executeQuery(QUERY);

        data = new Object[r][c];

        int i = 0;

        while (res.next()) {

            int j = 0;

            data[i][j++] = res.getString("c_name");
            data[i][j++] = res.getString("c_id");
            data[i][j++] = res.getString("c_type");
            data[i][j++] = res.getString("c_credit");
        }
    }
}

```

```

        data[i][j++] = res.getString("book1");
        data[i][j++] = res.getString("book2");
        data[i][j++] = res.getString("Syllabus");

        i++;
    }

    status = true;
}

} catch (Exception e) {
    e.printStackTrace();
}

return data;
}

@Override
public String toString() {

    return (status) ? "Data Listed Successfully" : "Application Error Occured";
}

static public void makeTable(){
    JPanel panel2=new JPanel();
    panel2.setBounds(300,130,1000,600);
    panel2.setBackground(Color.white);
    String columnnames[]={ "COURSE NAME", "COURSE ID", "COURSE TYPE", "COURSE CREDIT", "BOOK
1", "BOOK 2", "SYLLABUS"};
    h.add(panel2);
    DefaultTableModel model=new DefaultTableModel(data,columnnames);
    table=new JTable(model);
    TableColumn column = table.getColumnModel().getColumn(0);
    TableColumn column1 = table.getColumnModel().getColumn(1);
    TableColumn column2 = table.getColumnModel().getColumn(2);
    TableColumn column3 = table.getColumnModel().getColumn(3);
    TableColumn column4 = table.getColumnModel().getColumn(4);
    TableColumn column5 = table.getColumnModel().getColumn(5);
    TableColumn column6 = table.getColumnModel().getColumn(6);
    table.setRowHeight(30);
    column.setPreferredWidth(600);
    column1.setPreferredWidth(200);
    column2.setPreferredWidth(250);
    column3.setPreferredWidth(300);
    column4.setPreferredWidth(350);
    column5.setPreferredWidth(400);
    column6.setPreferredWidth(450);
    table.setEnabled(false);

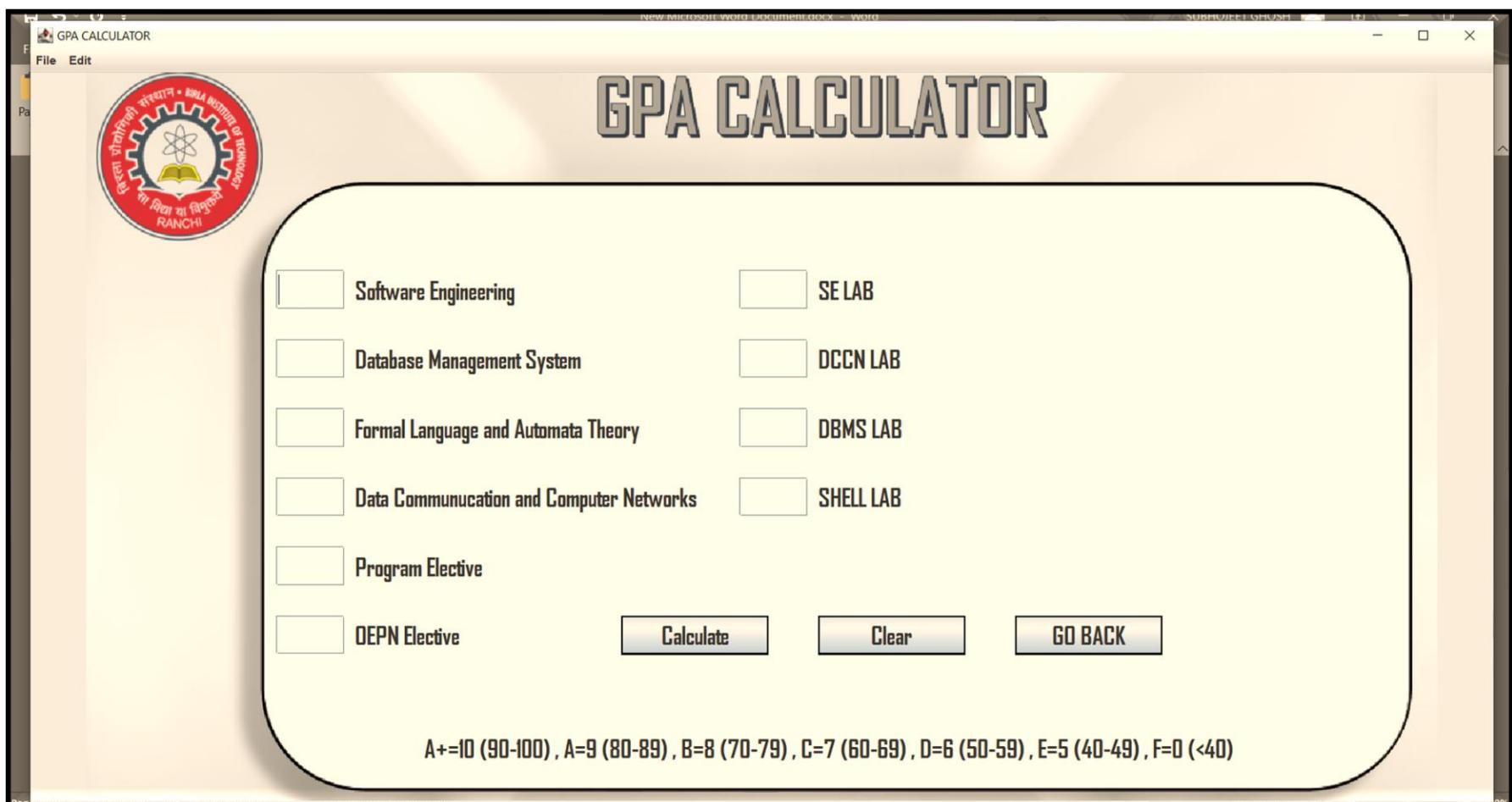
    JScrollPane scrollpane = new JScrollPane(table);
    scrollpane.setPreferredSize(new Dimension(1000, 590));
    panel2.add(new JScrollPane(scrollpane));
}

public static void main(String[] args) {
    CourseDetails cc=new CourseDetails(nn);
    cc.setVisible(true);
}
}

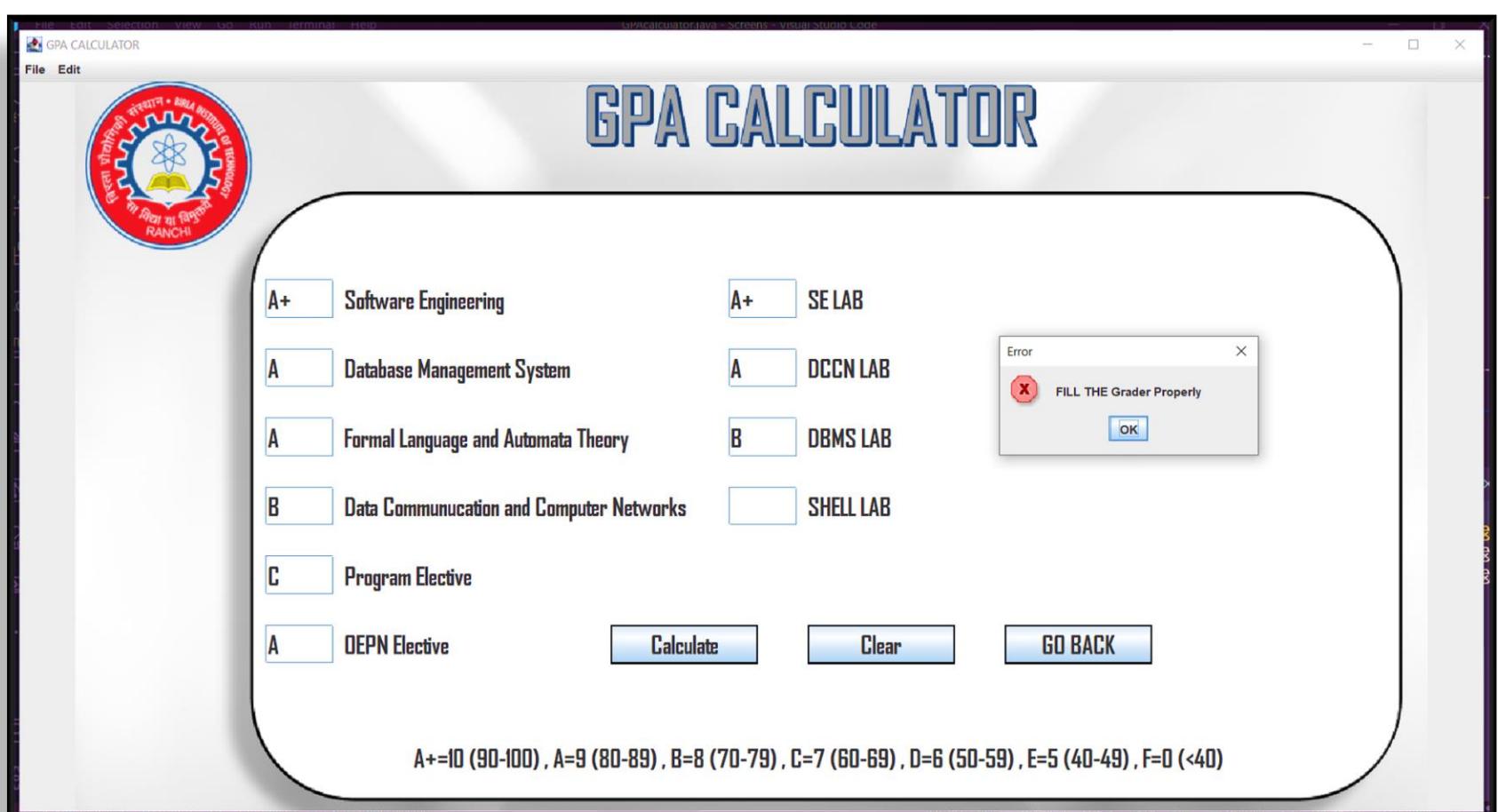
```

Its time now for the introducing the GPA Calculator

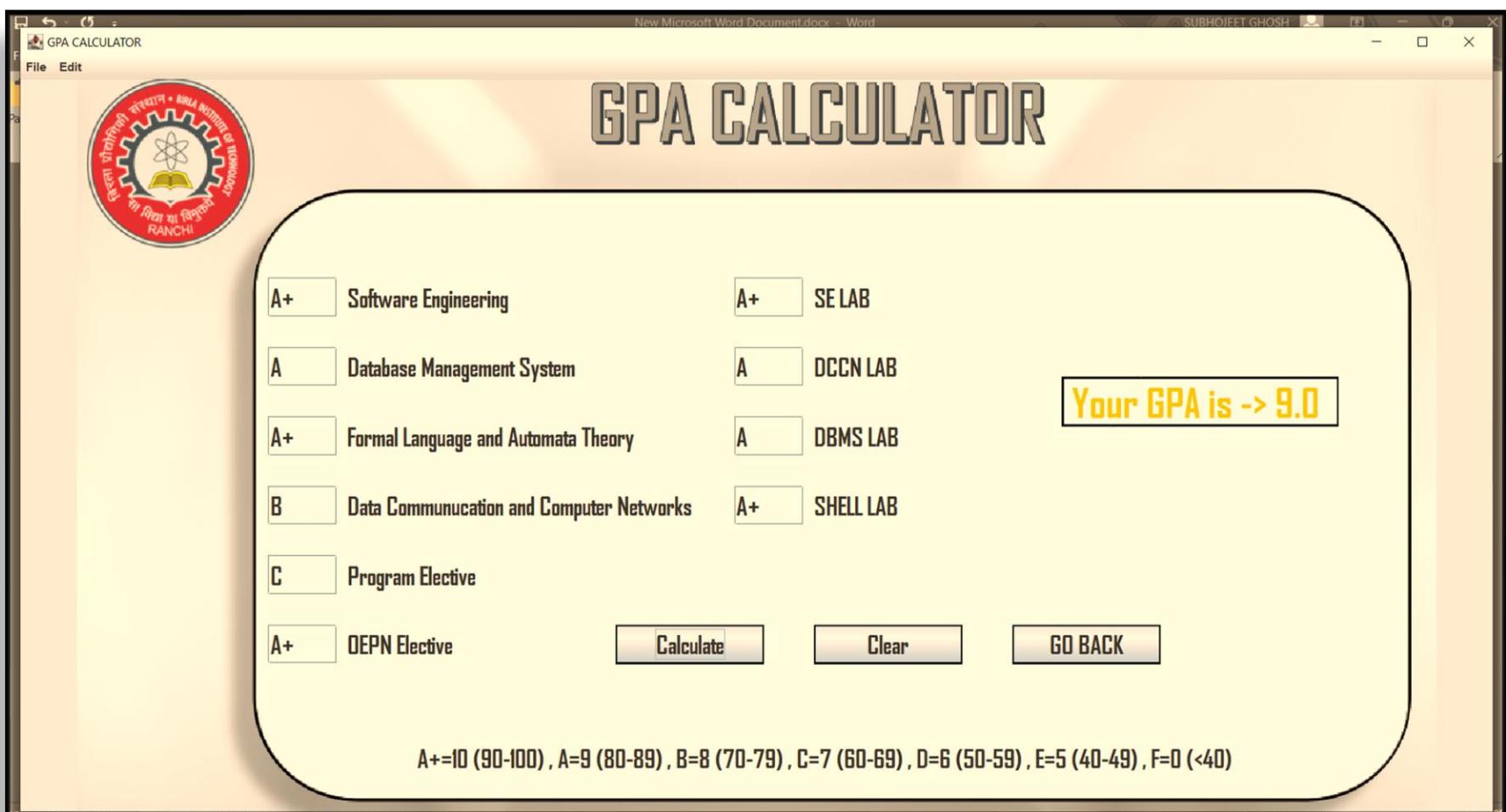
## GPA Calculator Page



If a single text field in not filled with data the this error will show:



If all field are filled properly then the Windows Show Like this gives you the calculation of GPA of 5<sup>th</sup> semester.



## Code for GPA Calculator Page

```

package maincodes;
import javax.swing.*;
import javax.swing.border.*;
import java.awt.event.*;
import java.sql.*;
import java.util.*;
import java.awt.*;
class GPAcalculator extends JFrame{
    public static Container h;
    public static JLabel marks,label,se,flat,dccn,oe,pe,dbms,selab,dccnlab,dbmslab,shelllab;
    public static JTextField t1,t2,t3,t4,t5,t6,t7,t8,t9,t10;
    public static JButton cal,goback,clear;
    static final String DB_URL = "jdbc:mysql://localhost:3306/computer_science_module";
    static final String USER = "root";
    static final String PASS = "";
    Connection conn;
    Statement st;
    public GPAcalculator(String x) {
        setTitle("GPA CALCULATOR");
        setSize(1500,800);
        setLocation(20, 20);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        h=getContentPane();
        setLayout(new BorderLayout());
        JLabel c=new JLabel(new ImageIcon("maincodes/images/gpa.png"));
        h.add(c);
        Font font2=new Font("Agency FB",Font.BOLD,25);
        Border br=BorderFactory.createLineBorder(Color.BLACK,2);
        JMenuBar menubar1=new JMenuBar();
        JMenu file=new JMenu("File");
        JMenuItem item1=new JMenuItem("new");
        JMenuItem item2=new JMenuItem("open");
        JMenuItem item3=new JMenuItem("save");
        file.add(item1);
        file.add(item2);
        file.add(item3);
        menubar1.add(file);
        menubar1.add(cal);
        menubar1.add(goback);
        menubar1.add(clear);
        add(menubar1,BorderLayout.NORTH);
        add(h,BorderLayout.CENTER);
    }
}

```

```

file.add(item2);
file.add(item3);
menubar1.add(file);
JMenu Edit=new JMenu("Edit");
JMenuItem tem1=new JMenuItem("undo");
JMenuItem tem2=new JMenuItem("redu");
JMenuItem tem3=new JMenuItem("cut");
Edit.add(tem1);
Edit.add(tem2);
Edit.add(tem3);
menubar1.add(Edit);
setJMenuBar(menubar1);
se=new JLabel("Software Engineering ");
se.setBounds(330,200,400,40);
se.setFont(font2);
t1=new JTextField();
t1.setBounds(250,200,70,40);
t1.setFont(font2);
dbms=new JLabel("Database Management System ");
dbms.setBounds(330,270,400,40);
dbms.setFont(font2);
t2=new JTextField();
t2.setBounds(250,270,70,40);
t2.setFont(font2);
flat=new JLabel("Formal Language and Automata Theory ");
flat.setBounds(330,340,400,40);
flat.setFont(font2);
t3=new JTextField();
t3.setBounds(250,340,70,40);
t3.setFont(font2);
dccn=new JLabel("Data Communication and Computer Networks ");
dccn.setBounds(330,410,400,40);
dccn.setFont(font2);
t4=new JTextField();
t4.setBounds(250,410,70,40);
t4.setFont(font2);
pe=new JLabel("Program Elective ");
pe.setBounds(330,480,400,40);
pe.setFont(font2);
t5=new JTextField();
t5.setBounds(250,480,70,40);
t5.setFont(font2);
oe=new JLabel("OEPN Elective ");
oe.setBounds(330,550,400,40);
oe.setFont(font2);
t6=new JTextField();
t6.setBounds(250,550,70,40);
t6.setFont(font2);
selab=new JLabel("SE LAB ");
selab.setBounds(800,200,400,40);
selab.setFont(font2);
t7=new JTextField();
t7.setBounds(720,200,70,40);
t7.setFont(font2);
dccnlab=new JLabel("DCCN LAB ");
dccnlab.setBounds(800,270,400,40);
dccnlab.setFont(font2);
t8=new JTextField();
t8.setBounds(720,270,70,40);
t8.setFont(font2);
dbmslab=new JLabel("DBMS LAB ");
dbmslab.setBounds(800,340,400,40);
dbmslab.setFont(font2);
t9=new JTextField();
t9.setBounds(720,340,70,40);
t9.setFont(font2);
shelllab=new JLabel("SHELL LAB ");
shelllab.setBounds(800,410,400,40);
shelllab.setFont(font2);
t10=new JTextField();
t10.setBounds(720,410,70,40);
t10.setFont(font2);
label=new JLabel("A+=10(90-100),A=9(80-89),B=8(70-79),C=7 (60-69),D=6(50-59),E=5(40-49),F=0 (<40)");
label.setBounds(400,660,900,50);
label.setFont(font2);
goback=new JButton("GO BACK");
clear=new JButton("Clear");
cal=new JButton("Calculate");
cal.setBounds(600,550,150,40);
cal.setFont(font2);

```

```

clear.setBounds(800,550,150,40);
clear.setFont(font2);
goback.setBounds(1000,550,150,40);
goback.setFont(font2);
marks=new JLabel(" Your GPA IS -> 9.3");
marks.setBounds(1050,300,280,50);
marks.setFont(new Font("Agency FB",Font.BOLD,40));
marks.setBorder(br);
goback.setBorder(br);
cal.setBorder(br);
clear.setBorder(br);
marks.setForeground(Color.ORANGE);
marks.setVisible(false);
c.add(marks);

c.add(se);
c.add(t1);
c.add(dbms);
c.add(t2);
c.add(flat);
c.add(t3);
c.add(dccn);
c.add(t4);
c.add(pe);
c.add(t5);
c.add(oe);
c.add(t6);
c.add(selab);
c.add(t7);
c.add(dccnlab);
c.add(t8);
c.add(dbmslab);
c.add(t9);
c.add(shelllab);
c.add(t10);
c.add(label);
c.add(cal);
c.add(goback);
c.add(clear);
setVisible(true);
int grade[]={10,9,8,7,6,5,0};
String[] gr={"A+","A","B","C","D","E","F"};
ArrayList<String> grd= new ArrayList<String>(Arrays.asList(gr));
goback.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e) {
        Studentdashboard ff=new Studentdashboard(x);
        setVisible(false);
        ff.setVisible(true);

    }
});

clear.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e) {

        t1.setText("");
        t2.setText("");
        t3.setText("");
        t4.setText("");
        t5.setText("");
        t6.setText("");
        t7.setText("");
        t8.setText("");
        t9.setText("");
        t10.setText("");
        marks.setVisible(false);
    }
});

cal.addActionListener(new ActionListener(){

    @Override
    public void actionPerformed(ActionEvent e) {
        int count=0;
        String tt1=t1.getText();

```

```

        String tt2=t2.getText();
        String tt3=t3.getText();
        String tt4=t4.getText();
        String tt5=t5.getText();
        String tt6=t6.getText();
        String tt7=t7.getText();
        String tt8=t8.getText();
        String tt9=t9.getText();
        String tt10=t10.getText();
        count=(tt1.length()==0)?count+1:count;
        count=(tt2.length()==0)?count+1:count;
        count=(tt3.length()==0)?count+1:count;
        count=(tt4.length()==0)?count+1:count;
        count=(tt5.length()==0)?count+1:count;
        count=(tt6.length()==0)?count+1:count;
        count=(tt7.length()==0)?count+1:count;
        count=(tt8.length()==0)?count+1:count;
        count=(tt9.length()==0)?count+1:count;
        count=(tt10.length()==0)?count+1:count;
        if(count>0){
            JOptionPane.showMessageDialog(null,"FILL THE Grader
Properly","Error",JOptionPane.ERROR_MESSAGE);
        }
        else{
            double sum=0;
            int index=grd.indexOf(tt4);
            sum=sum+grade[index]*4;
            index=grd.indexOf(tt7);
            sum=sum+grade[index]*1.5;
            index=grd.indexOf(tt8);
            sum=sum+grade[index]*1.5;
            index=grd.indexOf(tt9);
            sum=sum+grade[index]*1.5;
            index=grd.indexOf(tt10);
            sum=sum+grade[index]*1.5;
            index=grd.indexOf(tt1);
            sum=sum+grade[index]*3;
            index=grd.indexOf(tt2);
            sum=sum+grade[index]*3;
            index=grd.indexOf(tt3);
            sum=sum+grade[index]*3;
            index=grd.indexOf(tt5);
            sum=sum+grade[index]*3;
            index=grd.indexOf(tt6);
            sum=sum+grade[index]*3;
            sum=sum/25.0;
            String ans=Double.toString(sum);
            ans=ans.substring(0,3);
            marks.setText(" Your GPA is -> "+ans);
            marks.setVisible(true);
        }
    }
});

}

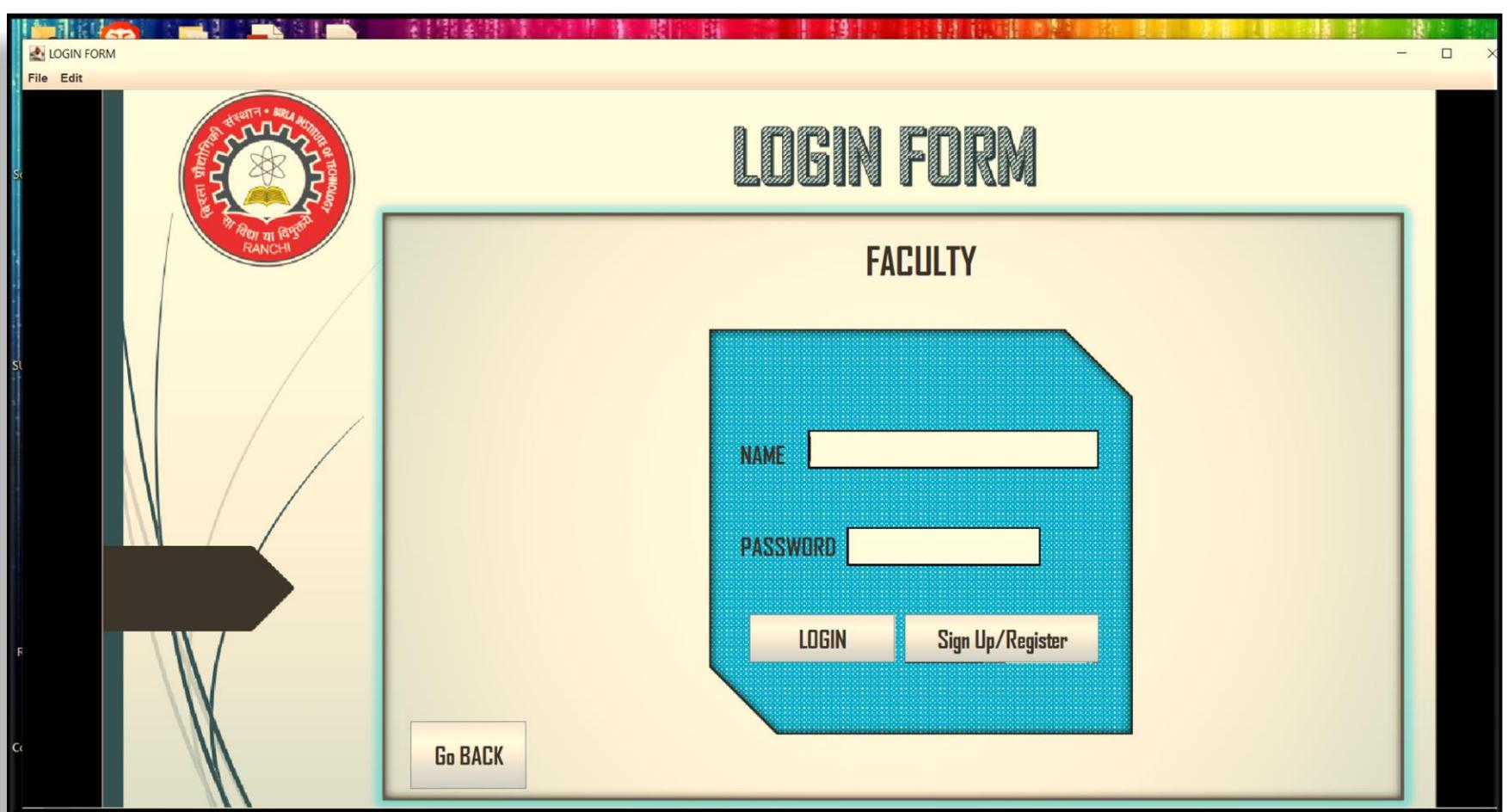
public static void main(String[] args) {
    new GPAcalculator("");
}
}

```

## LETS Logout from Student and Sign in As Faculty

### Faculty Login Page

Functionality of this page is as same student login form which we saw Earlier.



### Code for Faculty Login Page

```
package maincodes;
import java.sql.*;
import javax.swing.*;
import javax.swing.border.Border;
import java.awt.event.*;
import java.awt.*;
class FacultyLoginForm extends JFrame{
    public static Container h;
    public static JLabel Name,Password,label;
    public static JTextField name;
    public static JButton login,signup,goback;
    public static JPasswordField pswd;
    static final String DB_URL = "jdbc:mysql://localhost:3306/computer_science_module";
    static final String USER = "root";
    static final String PASS = "";
    Connection conn;
    Statement st;
    public FacultyLoginForm(String x) {
        setTitle("LOGIN FORM");
        setSize(1590,800);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        h=getContentPane();
        setLayout(new BorderLayout());
        h.setBackground(Color.BLACK);

        JLabel c=new JLabel(new ImageIcon("maincodes/images/login.png"));
```

```
h.add(c);
Font font=new Font("Century Schoolbook",Font.BOLD,20);
Font font2=new Font("Agency FB",Font.BOLD,25);
Border br=BorderFactory.createLineBorder(Color.BLACK,2);
label=new JLabel(x);
label.setFont(new Font("Agency FB",Font.BOLD,40));
label.setBounds(870,150,300,50);
Name=new JLabel("NAME");
name=new JTextField("");
Name.setBounds(740,350,120,50);
Name.setFont(font2);
name.setBounds(810,350,300,40);
name.setFont(font);
Password=new JLabel("PASSWORD");
pswd=new JPasswordField("");
Password.setFont(font2);
pswd.setFont(font);
Password.setBounds(740,450,100,40);
pswd.setBounds(850,450,200,40);
name.setBorder(br);
pswd.setBorder(br);
login =new JButton("LOGIN");
login.setFont(font2);
login.setBounds(750,540,150,50);
signup =new JButton("Sign Up/Register");
signup.setFont(font2);
signup.setBounds(910,540,200,50);
goback=new JButton("Go BACK");
goback.setBounds(400,650,120,70);
goback.setFont(font2);
Cursor cur=new Cursor(Cursor.HAND_CURSOR);
goback.setCursor(cur);
signup.setCursor(cur);
login.setCursor(cur);
c.add(goback);
c.add(signup);
c.add(login);
c.add(label);
c.add(Password);
c.add(pswd);
c.add(Name);
c.add(name);
JMenuBar menubar1=new JMenuBar();
JMenu file=new JMenu("File");
JMenuItem item1=new JMenuItem("new");
JMenuItem item2=new JMenuItem("open");
JMenuItem item3=new JMenuItem("save");
file.add(item1);
file.add(item2);
file.add(item3);
menubar1.add(file);
JMenu Edit=new JMenu("Edit");
JMenuItem tem1=new JMenuItem("undo");
JMenuItem tem2=new JMenuItem("redu");
JMenuItem tem3=new JMenuItem("cut");
Edit.add(tem1);
Edit.add(tem2);
Edit.add(tem3);
menubar1.add(Edit);
setJMenuBar(menubar1);
setVisible(true);
try {
    conn = DriverManager.getConnection(DB_URL, USER, PASS);
    st = conn.createStatement();
} catch (SQLException e) {

    e.printStackTrace();
}
goback.addActionListener(new ActionListener(){

```

```

@Override
public void actionPerformed(ActionEvent e) {
    cselog mg=new cselog();
    setVisible(false);
    mg.setVisible(true);

}

});

signup.addActionListener(new ActionListener(){

@Override
public void actionPerformed(ActionEvent e) {
    FacultyRegister rg=new FacultyRegister("FACULTY");
    setVisible(false);
    rg.setVisible(true);

}

});

login.addActionListener(new ActionListener(){

@Override
public void actionPerformed(ActionEvent e) {
    try{
        String NAME=name.getText();
        char ch[ ]=pswd.getPassword();
        String PASSWORD="";
        for(int i=0;i<ch.length;i++){PASSWORD=PASSWORD+ch[i];}
        String query="Select name,password from faculty where name='"+NAME+"' and
password='"+PASSWORD+"'";
        ResultSet res=st.executeQuery(query);
        if(res.next()==true){
            JOptionPane.showMessageDialog(null," ⚡ Press OK To LOGIN
⚡","Message",JOptionPane.INFORMATION_MESSAGE);
            Facultydashboard oh=new Facultydashboard(NAME);
            setVisible(false);
            oh.setVisible(true);
        }
        else{
            JOptionPane.showMessageDialog(null," ⚡ NAME OR PASSWORD INVALID TRY
AGAIN ⚡","Message",JOptionPane.ERROR_MESSAGE);
        }
        name.setText("");
        pswd.setText("");
    }
    catch(SQLException h){
        h.printStackTrace();
    }
}

}

});

}

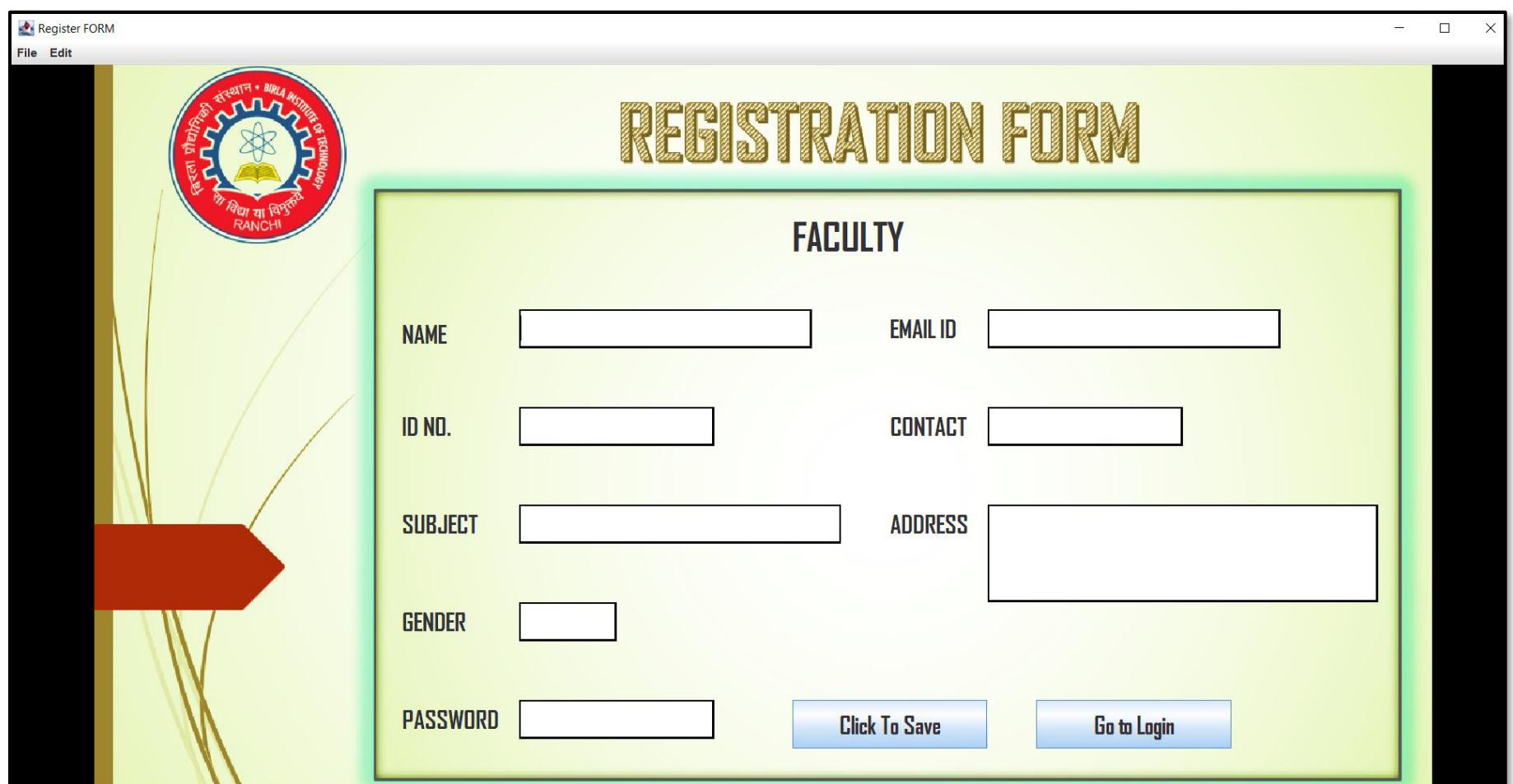
public static void main(String[] args) {
new FacultyLoginForm("FACULTY");
}

}

```

## Faculty Register Page

This is also similar to the student register but one thing is different in here instead of roll number and GPA, id Number and Subject is taken as registration field other remains the same.



## Code for Faculty Register Page

```
package maincodes;
import java.sql.*;
import javax.swing.*;
import javax.swing.border.Border;
import java.awt.event.*;
import java.awt.*;
class FacultyRegister extends JFrame{

    public static Container h;
    public static JLabel Name,Email,Idno,Contact,Subject,Gender,label,Address,Password;
    public static JTextField name,email,idno,contact,subject,gender;
    public static JTextArea address;
    public static JButton register,gotologin;
    public static JPasswordField pswd;
    static final String DB_URL = "jdbc:mysql://localhost:3306/computer_science_module";
    static final String USER = "root";
    static final String PASS = "";
    Connection conn;
    Statement st;
    public FacultyRegister(String x) {
```

```
setTitle("Register FORM");
setSize(1590,800);
setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
h=getContentPane();
setLayout(new BorderLayout());
h.setBackground(Color.BLACK);

JLabel c=new JLabel(new ImageIcon("maincodes/images/final.png"));
h.add(c);
Font font=new Font("Century Schoolbook",Font.BOLD,20);
Font font2=new Font("Agency FB",Font.BOLD,25);
Border br=BorderFactory.createLineBorder(Color.BLACK,2);
label=new JLabel(x);
label.setFont(new Font("Agency FB",Font.BOLD,40));
label.setBounds(800,150,300,50);
Name=new JLabel("NAME");
name=new JTextField("");
Name.setBounds(400,250,120,50);
Name.setFont(font2);
name.setBounds(520,250,300,40);
name.setFont(font);
Email=new JLabel("EMAIL ID");
email=new JTextField("");
Email.setBounds(900,250,200,40);
Email.setFont(font2);
email.setBounds(1000,250,300,40);
email.setFont(font);
Idno=new JLabel("ID NO.");
idno=new JTextField("");
Idno.setBounds(400,350,200,40);
Idno.setFont(font2);
idno.setBounds(520,350,200,40);
idno.setFont(font);
Contact=new JLabel("CONTACT");
contact=new JTextField("");
Contact.setBounds(900,350,200,40);
Contact.setFont(font2);
contact.setBounds(1000,350,200,40);
contact.setFont(font);
Address=new JLabel("ADDRESS");
address=new JTextArea("");
Address.setBounds(900,450,200,40);
Address.setFont(font2);
address.setBounds(1000,450,400,100);
address.setFont(font);
Subject=new JLabel("SUBJECT");
subject=new JTextField("");
Subject.setBounds(400,450,100,40);
Subject.setFont(font2);
subject.setBounds(520,450,330,40);
subject.setFont(font);
Gender=new JLabel("GENDER");
gender=new JTextField("");
Gender.setFont(font2);
Gender.setBounds(400,550,100,40);
gender.setBounds(520,550,100,40);
gender.setFont(font);
Password=new JLabel("PASSWORD");
pswd=new JPasswordField("");
Password.setFont(font2);
pswd.setFont(font);
Password.setBounds(400,650,100,40);
pswd.setBounds(520,650,200,40);
register =new JButton("Click To Save");
register.setFont(font2);
register.setBounds(800,650,200,50);
gotologin =new JButton("Go to Login");
gotologin.setFont(font2);
gotologin.setBounds(1050,650,200,50);
pswd.setBorder(br);
```

```

address.setBorder(br);
contact.setBorder(br);
name.setBorder(br);
subject.setBorder(br);
idno.setBorder(br);
email.setBorder(br);
gender.setBorder(br);
Cursor cur=new Cursor(Cursor.HAND_CURSOR);
register.setCursor(cur);
gotologin.setCursor(cur);
c.add(label);
c.add(gotologin);
c.add(register);
c.add(Password);
c.add(pswd);
c.add(Gender);
c.add(gender);
c.add(Subject);
c.add(subject);
c.add(Address);
c.add(address);
c.add(Contact);
c.add(contact);
c.add(Idno);
c.add(idno);
c.add(email);
c.add(Email);
c.add(Name);
c.add(name);
JMenuBar menubar1=new JMenuBar();
JMenu file=new JMenu("File");
JMenuItem item1=new JMenuItem("new");
JMenuItem item2=new JMenuItem("open");
JMenuItem item3=new JMenuItem("save");
file.add(item1);
file.add(item2);
file.add(item3);
menubar1.add(file);
JMenu Edit=new JMenu("Edit");
JMenuItem tem1=new JMenuItem("undo");
JMenuItem tem2=new JMenuItem("redu");
JMenuItem tem3=new JMenuItem("cut");
Edit.add(tem1);
Edit.add(tem2);
Edit.add(tem3);
menubar1.add(Edit);
setJMenuBar(menubar1);
setVisible(true);
try {
    conn = DriverManager.getConnection(DB_URL, USER, PASS);
    st = conn.createStatement();
} catch (SQLException e) {
    e.printStackTrace();
}
register.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e)
    {
        try{
            int count=0;
            String NAME=name.getText();
            String EMAIL=email.getText();
            String INO=idno.getText();
            String GENDER=gender.getText();
            char ch[] = pswd.getPassword();
            String PASSWORD="";
            for(int i=0;i<ch.length;i++){PASSWORD=PASSWORD+ch[i];}
            String ADDRESS=address.getText();
        }
    }
}

```

```

        String CONTACT=contact.getText();
        String SUBJECT=(subject.getText());
        count=(NAME.length()==0)?count+1:count;
        count=(INO.length()==0)?count+1:count;
        count=(EMAIL.length()==0)?count+1:count;
        count=(ADDRESS.length()==0)?count+1:count;
        count=(GENDER.length()==0)?count+1:count;
        count=(ch.length==0)?count+1:count;
        count=(CONTACT.length()==0)?count+1:count;
        count=(SUBJECT.length()==0)?count+1:count;
        ResultSet res=st.executeQuery("Select name,idno from faculty where
name='"+NAME+"' or idno='"+INO+"' or email='"+EMAIL+"'");
        if(res.next()==true){
            JOptionPane.showMessageDialog(null,"Already Registered Try
Again","Error",JOptionPane.ERROR_MESSAGE);

        }
        else if(count>0){
            JOptionPane.showMessageDialog(null,"FILL THE
FORM PROPERLY","Error",JOptionPane.ERROR_MESSAGE);
        }
        else{
            String x="Insert into
faculty(idno,name,contact,address,subject,password,image,email,gender)
values('"+INO+"','"+NAME+"','"+CONTACT+"','"+ADDRESS+"','"+SUBJECT+"','"+PASSWORD+"','"+INO+"'
','"+EMAIL+"','"+GENDER+"')";
            st.executeUpdate(x);
            JOptionPane.showMessageDialog(null," User Registered
","Message",JOptionPane.INFORMATION_MESSAGE);
        }
        name.setText("");
        idno.setText("");
        email.setText("");
        subject.setText("");
        address.setText("");
        contact.setText("");
        pswd.setText("");
        gender.setText("");

    }
    catch(SQLException h){
        h.printStackTrace();
    }
}

});;
gotologin.addActionListener(new ActionListener(){

    @Override
    public void actionPerformed(ActionEvent e) {
        FacultyLoginForm lg=new FacultyLoginForm("FACULTY");
        setVisible(false);
        lg.setVisible(true);

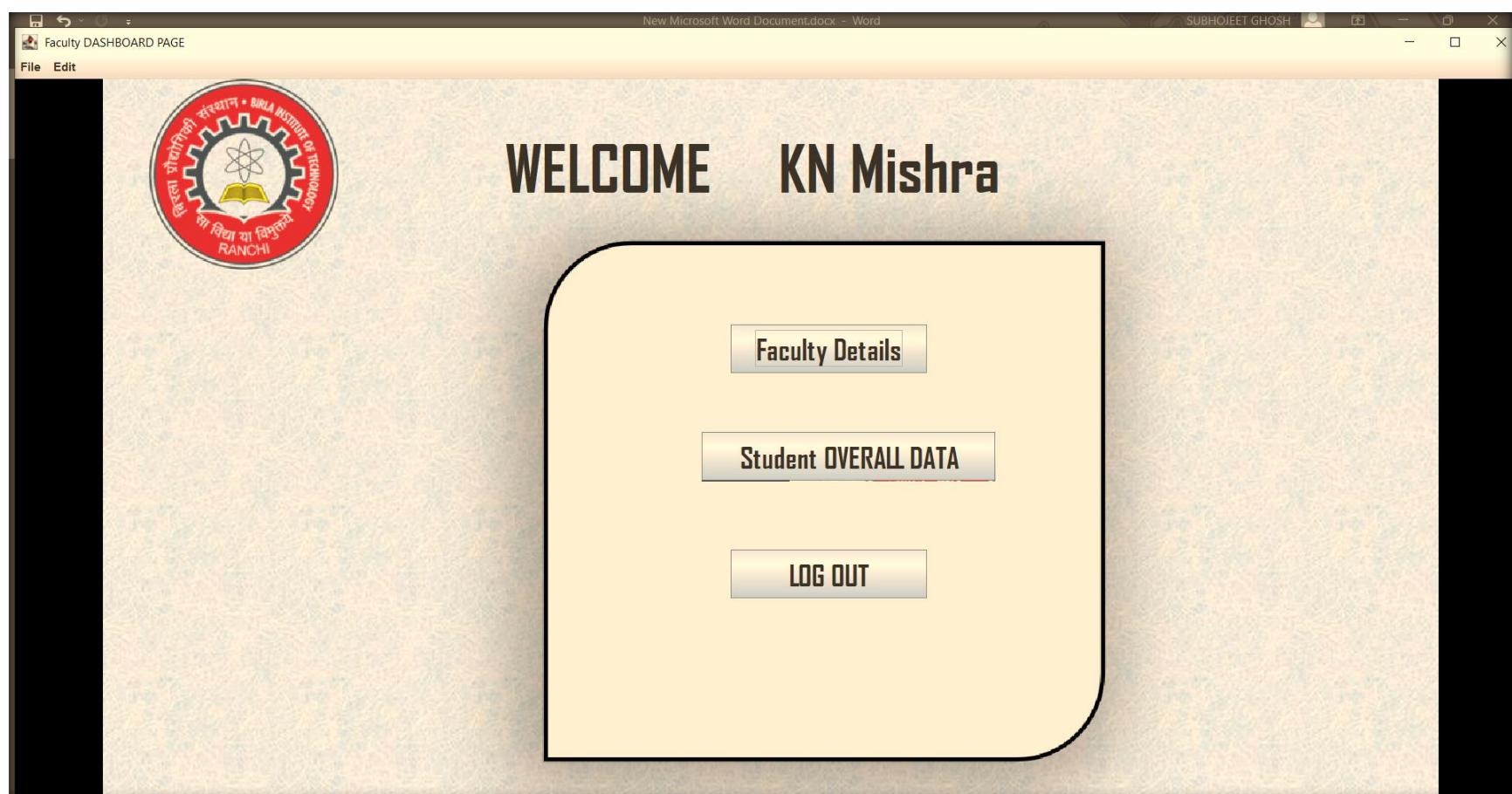
    }
});

}

public static void main(String[] args) {
    new FacultyRegister("FACULTY");
}
}

```

# Faculty Dashboard Page



## Code for Faculty Dashboard Page

```
package maincodes;
import javax.swing.*;
import java.awt.event.*;
import java.awt.event.ActionEvent;
import java.awt.*;
class Facultydashboard extends JFrame{
    public static Container h;
    public static JButton std,cd,logout;
    public static JLabel wel;
    public static String nn,rnn;
    public Facultydashboard(String NAME){
        nn=NAME;

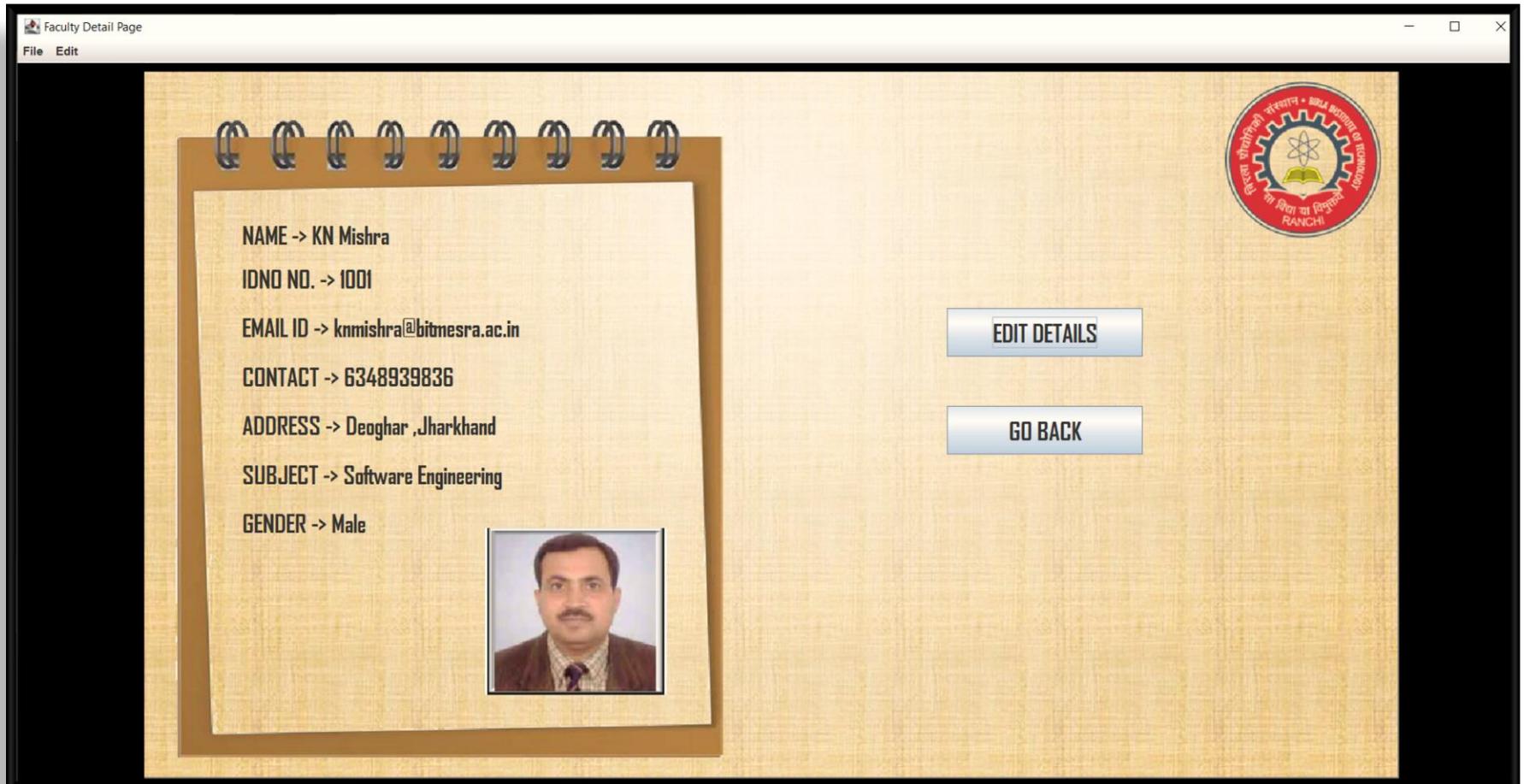
        setTitle(" Faculty DASHBOARD PAGE");
        setSize(1590,800);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        h=getContentPane();
        setLayout(new BorderLayout());
        h.setBackground(Color.BLACK);
        JLabel c=new JLabel(new ImageIcon("maincodes/images/Studentdashboard.PNG"));
        h.add(c);
        Font font2=new Font("Agency FB",Font.BOLD,30);
        Font font3=new Font("Agency FB",Font.BOLD,65);
        wel =new JLabel("WELCOME      "+NAME);
        wel.setBounds(500,50,800,80);
        wel.setFont(font3);
        std=new JButton("Faculty Details");
        std.setBounds(730,250,200,50);
        std.setFont(font2);
        cd=new JButton("Student OVERALL DATA");
        cd.setBounds(700,360,300,50);
        cd.setFont(font2);
```

```

logout=new JButton("LOG OUT");
logout.setBounds(730,480,200,50);
logout.setFont(font2);
Cursor cur=new Cursor(Cursor.HAND_CURSOR);
std.setCursor(cur);
cd.setCursor(cur);
logout.setCursor(cur);
c.add(std);
c.add(cd);
c.add(logout);
c.add(wel);
JMenuBar menubar1=new JMenuBar();
JMenu file=new JMenu("File");
JMenuItem item1=new JMenuItem("new");
JMenuItem item2=new JMenuItem("open");
JMenuItem item3=new JMenuItem("save");
file.add(item1);
file.add(item2);
file.add(item3);
menubar1.add(file);
JMenu Edit=new JMenu("Edit");
JMenuItem tem1=new JMenuItem("undo");
JMenuItem tem2=new JMenuItem("redu");
JMenuItem tem3=new JMenuItem("cut");
Edit.add(tem1);
Edit.add(tem2);
Edit.add(tem3);
menubar1.add(Edit);
setJMenuBar(menubar1);
setVisible(true);
logout.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e) {
        FacultyLoginForm ojj=new FacultyLoginForm("FACULTY");
        setVisible(false);
        ojj.setVisible(true);
    }
});
std.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e) {
        FacultyDetails sll=new FacultyDetails(NAME);
        setVisible(false);
        sll.setVisible(true);
    }
});
cd.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e) {
        StudentsData sld=new StudentsData(NAME);
        setVisible(false);
        sld.setVisible(true);
    }
});
}
public static void main(String[] args) {
    new Facultydashboard(nn);
}
}

```

# Faculty Details Page



## Code For Faculty Details Page

```
package maincodes;

import javax.swing.*;
import java.awt.event.*;
import java.sql.*;
import java.awt.*;

class FacultyDetails extends JFrame{
    public static Container h;
    public static JLabel name,rno,email,gpa,gender,address,contact;
    public static JButton EditDetails,goback;
    static final String DB_URL = "jdbc:mysql://localhost:3306/computer_science_module";
    static final String USER = "root";
    static final String PASS = "";
    Connection conn;
    Statement st;
    static String nn,rnn;
    public FacultyDetails(String NAME) {
        nn=NAME;

        setTitle("Faculty Detail Page");
        setSize(1590,800);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        h=getContentPane();
        setLayout(new BorderLayout());
        h.setBackground(Color.BLACK);
        JLabel c=new JLabel(new ImageIcon("maincodes/images/studentDetail.png"));
        h.add(c);

        Font font2=new Font("Agency FB",Font.BOLD,25);

        JMenuBar menubar1=new JMenuBar();
        JMenu file=new JMenu("File");
        JMenuItem item1=new JMenuItem("new");
        JMenuItem item2=new JMenuItem("open");
        file.add(item1);
        file.add(item2);
        menubar1.add(file);
        setJMenuBar(menubar1);
    }

    public void actionPerformed(ActionEvent ae) {
        if(ae.getSource()==EditDetails) {
            String name=rname.getText();
            String rno=rno.getText();
            String email=email.getText();
            String gpa=gpa.getText();
            String gender=gender.getText();
            String address=address.getText();
            String contact=contact.getText();
            try {
                Class.forName("com.mysql.jdbc.Driver");
                Connection conn=DriverManager.getConnection(DB_URL,USER,PASS);
                Statement st=conn.createStatement();
                String query="insert into faculty values('"+name+"','"+rno+"','"+email+"','"+gpa+"','"+gender+"','"+address+"','"+contact+"')";
                st.executeUpdate(query);
                JOptionPane.showMessageDialog(null,"Data Inserted");
            } catch (Exception e) {
                JOptionPane.showMessageDialog(null,e);
            }
        }
    }
}
```

```

JMenuItem item3=new JMenuItem("save");
file.add(item1);
file.add(item2);
file.add(item3);
menubar1.add(file);
JMenu Edit=new JMenu("Edit");
JMenuItem tem1=new JMenuItem("undo");
JMenuItem tem2=new JMenuItem("redu");
JMenuItem tem3=new JMenuItem("cut");
Edit.add(tem1);
Edit.add(tem2);
Edit.add(tem3);
menubar1.add(Edit);
setJMenuBar(menubar1);
goback =new JButton("GO BACK");
EditDetails=new JButton("EDIT DETAILS");
Cursor cur=new Cursor(Cursor.HAND_CURSOR);
goback.setCursor(cur);
EditDetails.setCursor(cur);
goback.setFont(font2);
EditDetails.setFont(font2);
EditDetails.setBounds(950,250,200,50);
goback.setBounds(950,350,200,50);
c.add(EditDetails);
c.add(goback);

String Name="",Rno="",Address="",Contact="",Gpa="",Email="",Gender="",image="";
try {
    conn = DriverManager.getConnection(DB_URL, USER, PASS);
    st = conn.createStatement();
    String query="Select * from faculty where name=' "+NAME+" '";
    ResultSet res=st.executeQuery(query);
    if(res.next()){
        Name=res.getString("name");
        Rno=res.getString("idno");
        Address=res.getString("address");
        Contact=res.getString("contact");
        Gpa=res.getString("subject");
        Email=res.getString("email");
        Gender=res.getString("gender");
        image=res.getString("image");
    }
    ImageIcon icon=new ImageIcon("maincodes/images/"+image+".png");
    JLabel label=new JLabel("",icon,JLabel.CENTER);
    label.setBounds(320,310, 500, 500);
    c.add(label);
    name=new JLabel("NAME -> "+Name);
    name.setBounds(230,150,400,50);
    name.setFont(font2);
    email=new JLabel("EMAIL ID -> "+Email);
    email.setBounds(230,250,400,40);
    email.setFont(font2);
    rno=new JLabel("IDNO NO. -> "+Rno);
    rno.setBounds(230,200,400,40);
    rno.setFont(font2);
    contact=new JLabel("CONTACT -> "+Contact);
    contact.setBounds(230,300,400,40);
    contact.setFont(font2);
    address=new JLabel("ADDRESS -> "+Address);
    address.setBounds(230,350,500,40);
    address.setFont(font2);
    gpa=new JLabel("SUBJECT -> "+Gpa);
    gpa.setBounds(230,400,350,40);
    gpa.setFont(font2);
    gender=new JLabel("GENDER -> "+Gender);
    gender.setFont(font2);
    gender.setBounds(230,450,250,40);
    c.add(name);
    c.add(email);

```

```
c.add(rno);
c.add(contact);
c.add(address);
c.add(gpa);
c.add(gender);

} catch (SQLException e) {

    e.printStackTrace();
}
setVisible(true);
EditDetails.addActionListener(new ActionListener(){

    @Override
    public void actionPerformed(ActionEvent e) {
        EditDetails2 obj=new EditDetails2(NAME);
        setVisible(false);
        obj.setVisible(true);

    }

}); goback.addActionListener(new ActionListener(){

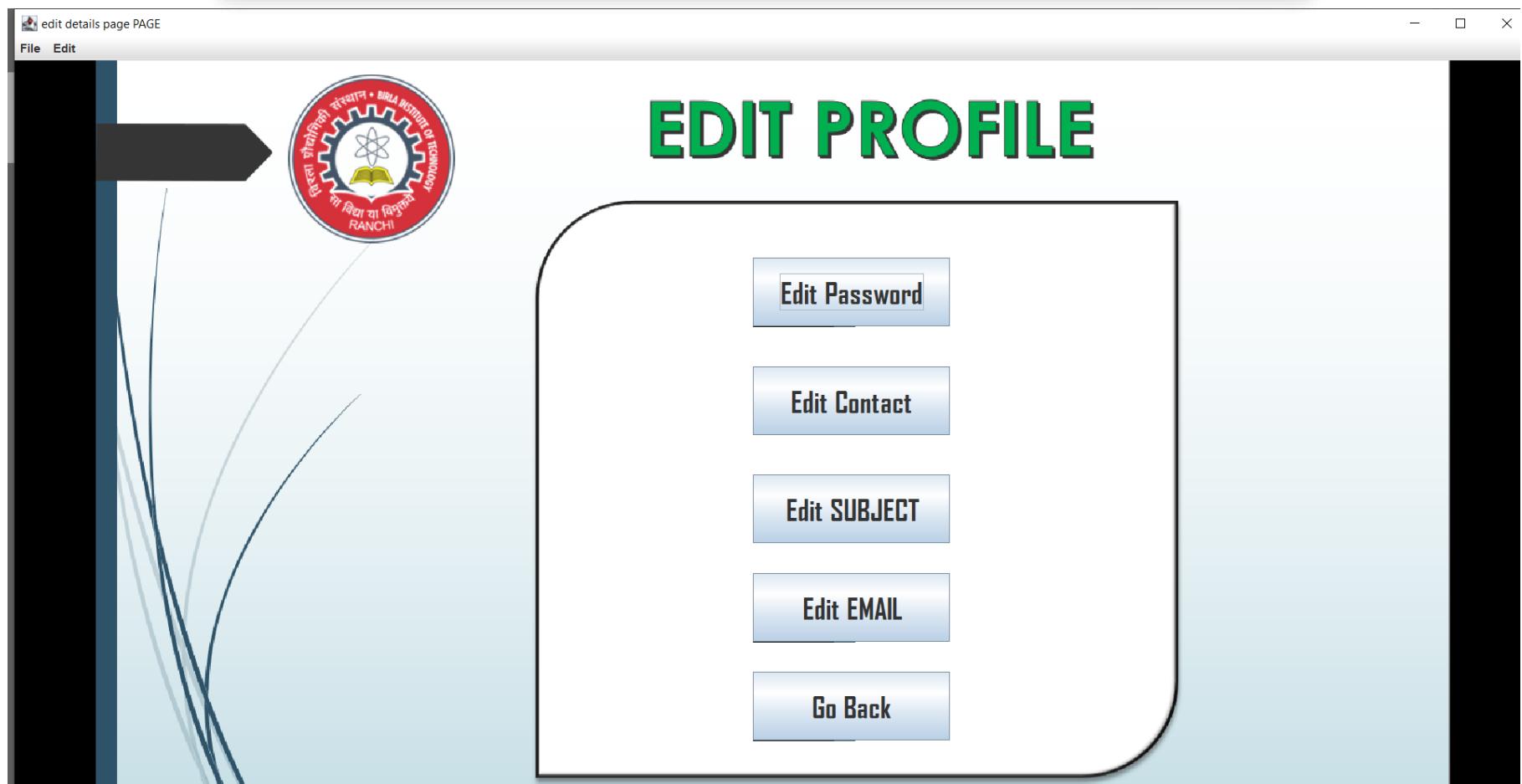
    @Override
    public void actionPerformed(ActionEvent e) {
        Facultydashboard mg=new Facultydashboard(nn);
        setVisible(false);
        mg.setVisible(true);

    }

});}

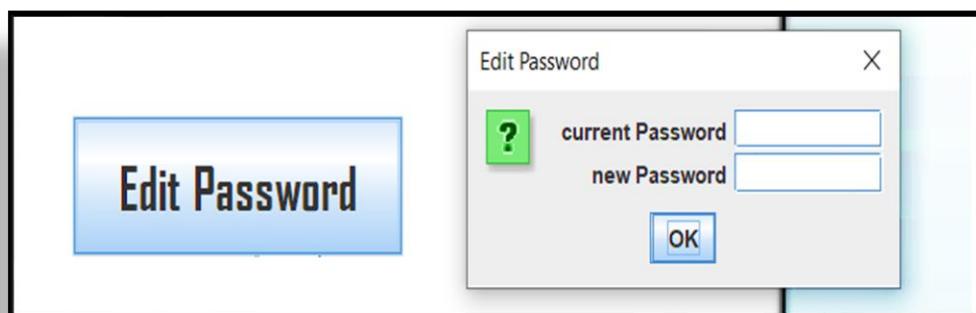
public static void main(String[] args) {
    new FacultyDetails(nn);
}
}
```

## Faculty Edit Details Page

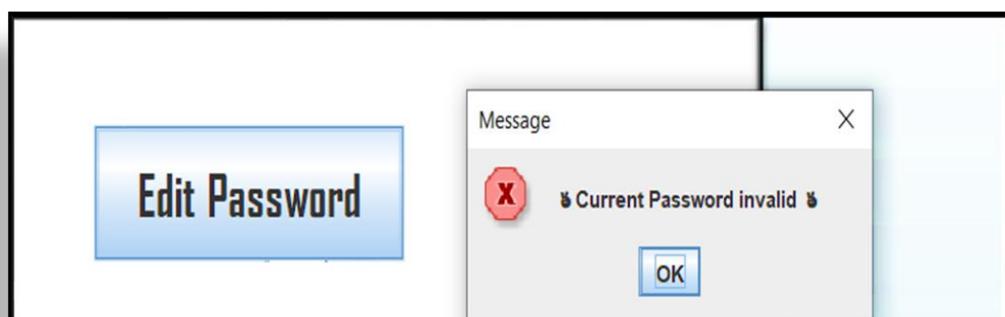


Now We Can Edit the password, Contact, Subject and Email and it will be shown dynamically in the Faculty details page

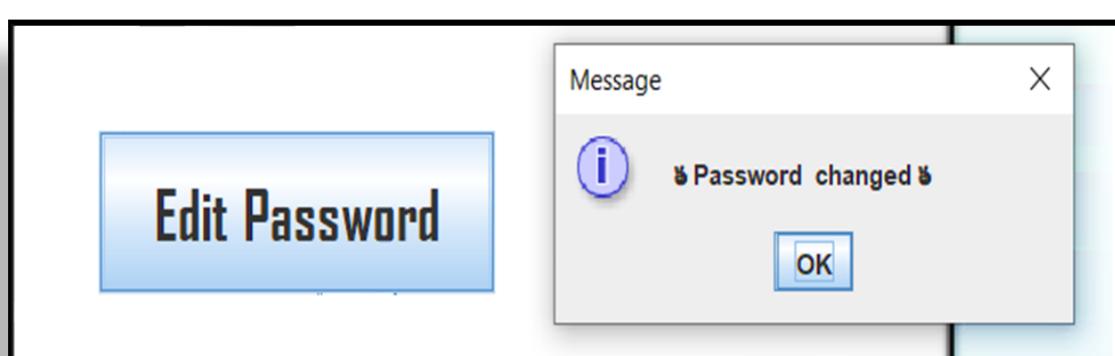
### PASSWORD



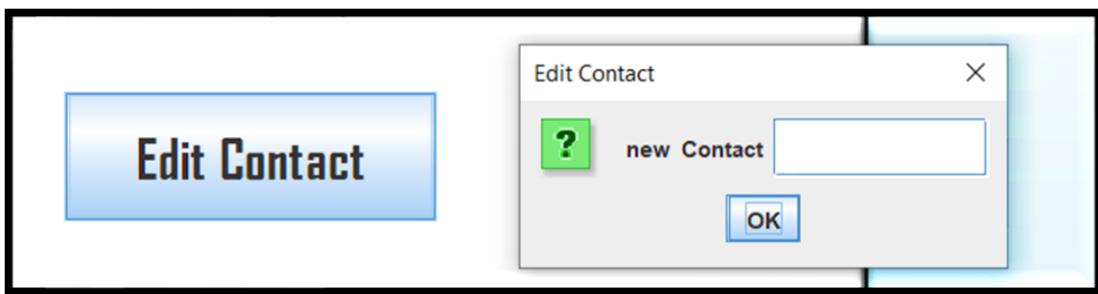
If the current password of the student profile is incorrect then it will show this message



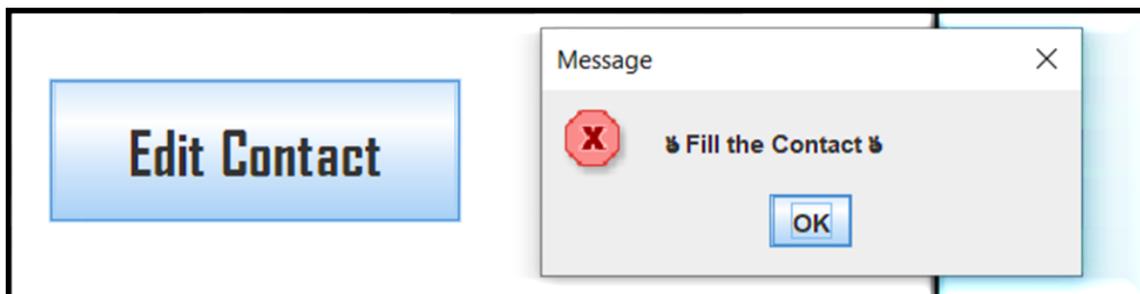
If all this are correct then password change notification pops up.



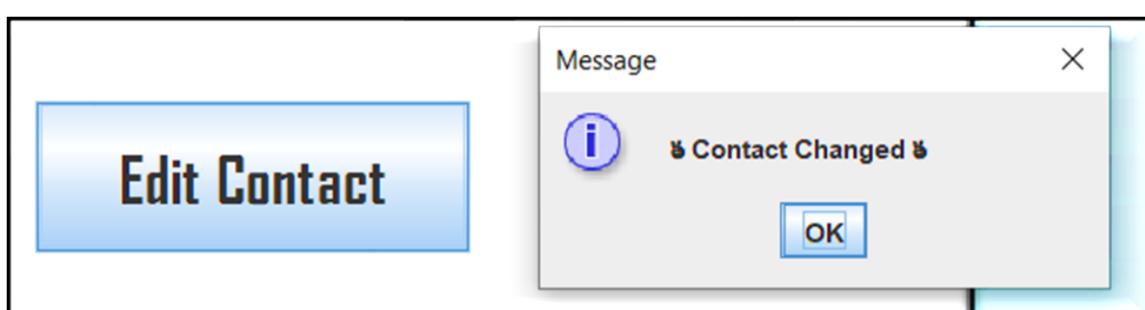
## CONTACT



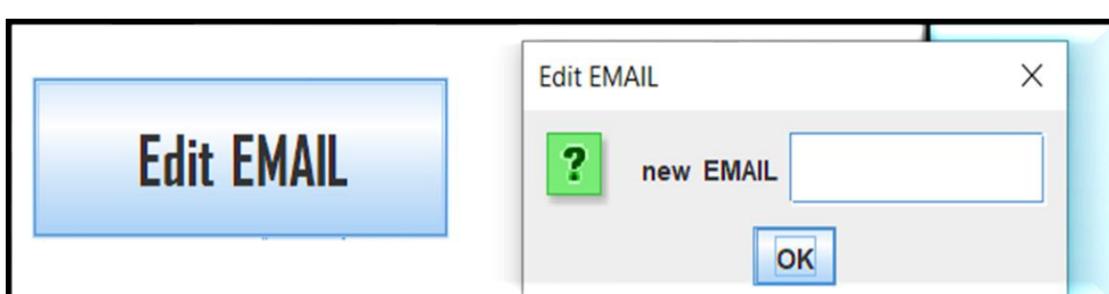
If the Contact is left blank then current contact will not change but it will pop up a message (Warning) of fill the contact.



If the contact is filled properly, it will be get updated in the student details section



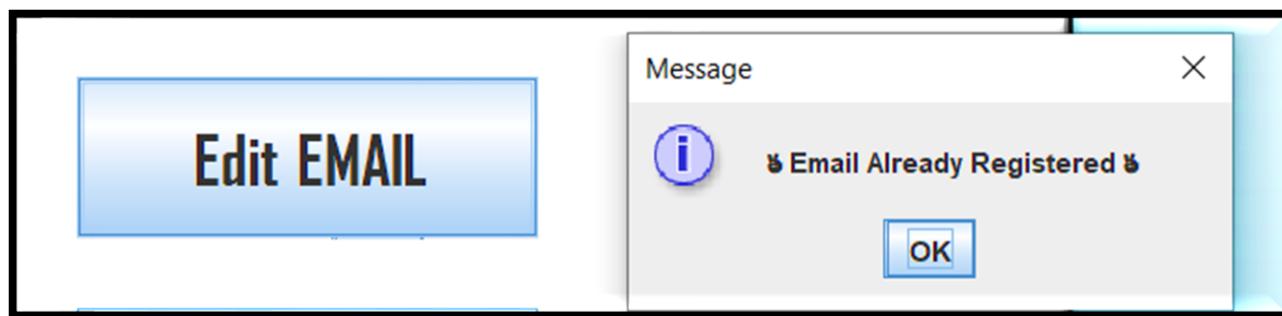
## EMAIL ID



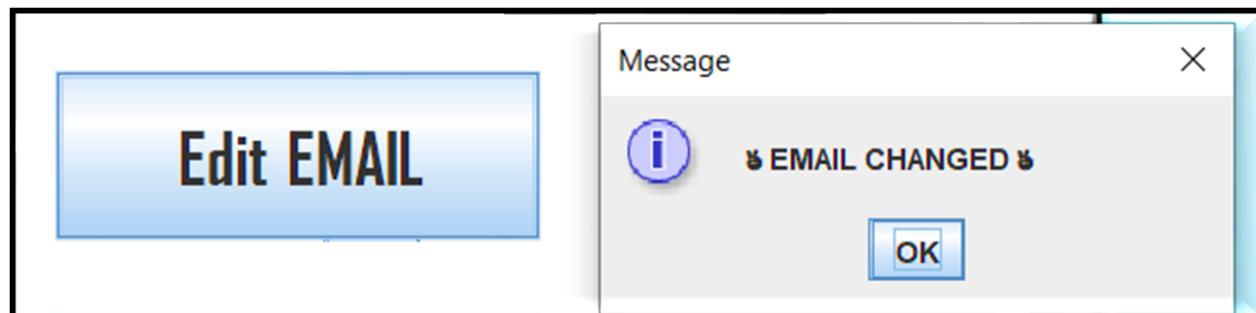
If the Email is left blank then current contact will not change but it will pop up a message (Warning) of fill the contact.



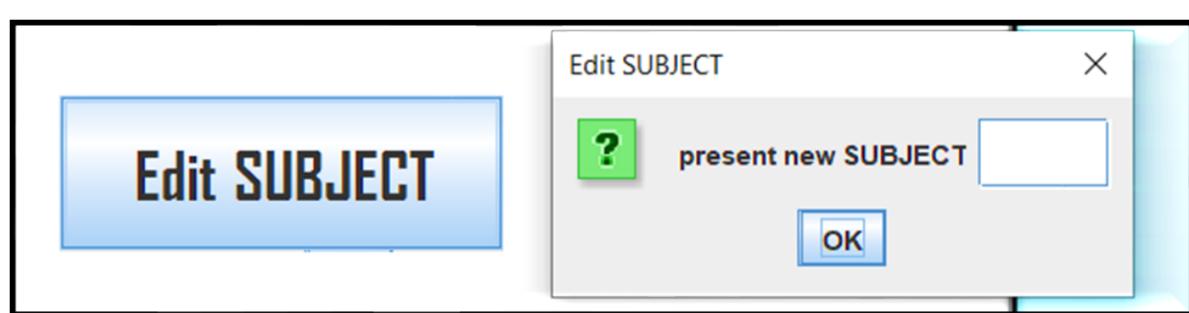
If the Email is already present in the database then will show a error message:



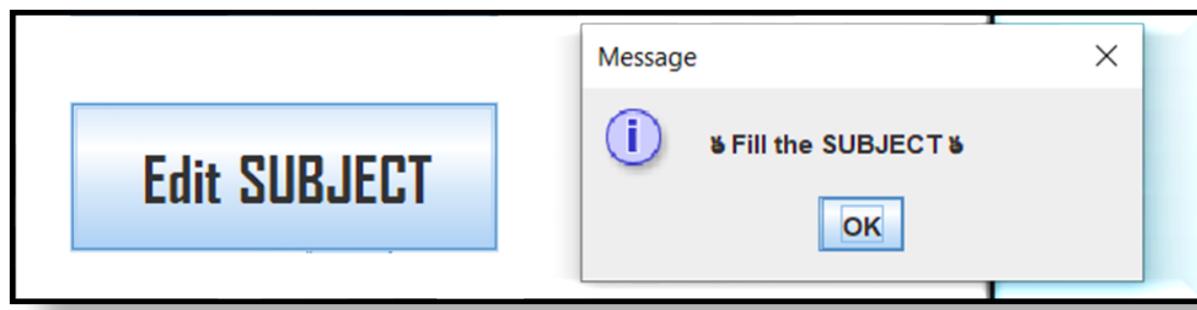
If the Email is filled properly, it will be get updated in the student details section



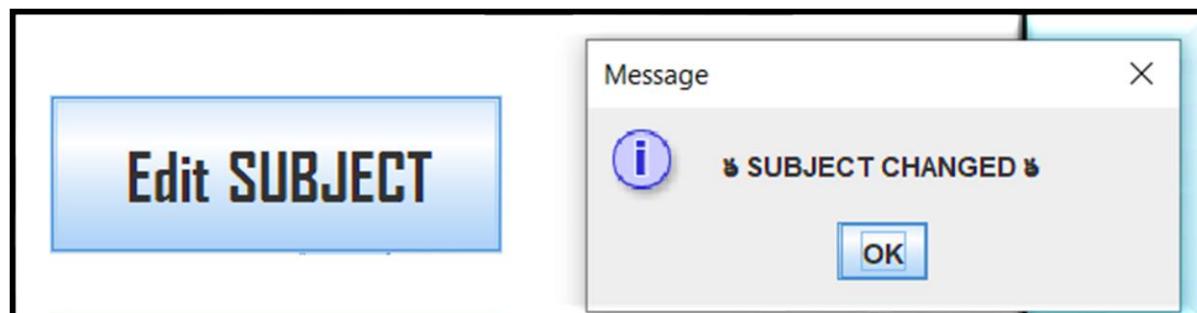
## Subject



If the subject is left blank then current contact will not change but it will pop up a message (Warning) of fill the subject.



If the Email is filled properly, it will be get updated in the student details section



## Code for Faculty Edit Details Page

```
package maincodes;
import java.sql.*;
import javax.swing.*;
import java.awt.event.*;
import java.awt.*;
class EditDetails2 extends JFrame{
    public static Container h;
    public static JButton pswd,SUBJECT,Contact,EMAIL,goback;
    static final String DB_URL = "jdbc:mysql://localhost:3306/computer_science_module";
    static final String USER = "root";
    static final String PASS = "";
    Connection conn;
    Statement st;
    public EditDetails2(String N){
        setTitle("edit details page PAGE");
        setSize(1590,800);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        h= getContentPane();
        setLayout(new BorderLayout());
        h.setBackground(Color.BLACK);
        JLabel c=new JLabel(new ImageIcon("maincodes/images/editprofile.png"));
        h.add(c);
        Font font2=new Font("Agency FB",Font.BOLD,30);
        pswd=new JButton("Edit Password");
        pswd.setBounds(750,200,200,70);
        pswd.setFont(font2);
        Contact=new JButton("Edit Contact");
        Contact.setBounds(750,310,200,70);
        Contact.setFont(font2);
        SUBJECT=new JButton("Edit SUBJECT");
        SUBJECT.setBounds(750,420,200,70);
        SUBJECT.setFont(font2);
        EMAIL=new JButton("Edit EMAIL");
        EMAIL.setBounds(750,520,200,70);
        EMAIL.setFont(font2);
        goback=new JButton("Go Back");
        goback.setBounds(750,620,200,70);
        goback.setFont(font2);

        Cursor cur=new Cursor(Cursor.HAND_CURSOR);
        pswd.setCursor(cur);
        Contact.setCursor(cur);
        SUBJECT.setCursor(cur);
        EMAIL.setCursor(cur);
        c.add(pswd);
        c.add(Contact);
        c.add(SUBJECT);
        c.add(EMAIL);
        c.add(goback);
        JMenuBar menubar1=new JMenuBar();
        JMenu file=new JMenu("File");
        JMenuItem item1=new JMenuItem("new");
        JMenuItem item2=new JMenuItem("open");
        JMenuItem item3=new JMenuItem("save");
        file.add(item1);
        file.add(item2);
        file.add(item3);
        menubar1.add(file);
        JMenu Edit=new JMenu("Edit");
        JMenuItem tem1=new JMenuItem("undo");
        JMenuItem tem2=new JMenuItem("redu");
        JMenuItem tem3=new JMenuItem("cut");
        Edit.add(tem1);
        Edit.add(tem2);
        Edit.add(tem3);
        menubar1.add(Edit);
        setJMenuBar(menubar1);
        setVisible(true);
        try {
            conn = DriverManager.getConnection(DB_URL, USER, PASS);
            st = conn.createStatement();
        } catch (SQLException e) {
```

```

        e.printStackTrace();
    }

    pswd.addActionListener(new ActionListener(){

        public void actionPerformed(ActionEvent e) {
            try{
                JFrame frame=new JFrame();
                String query1="SeLect * from student where name='"+N+"'";
                ResultSet res=st.executeQuery(query1);
                String pass="";
                if(res.next()){
                    pass=res.getString("password");
                }
                JPanel panel = new JPanel(new BorderLayout(5, 5));
                JPanel label = new JPanel(new GridLayout(0, 1, 2, 2));
                label.add(new JLabel("current Password", SwingConstants.RIGHT));
                label.add(new JLabel("new Password", SwingConstants.RIGHT));
                panel.add(label, BorderLayout.WEST);
                JPanel controls = new JPanel(new GridLayout(0, 1, 2, 2));
                JPasswordField currentpassword = new JPasswordField();
                controls.add(currentpassword);
                JPasswordField newpassword = new JPasswordField();
                controls.add(newpassword);
                panel.add(controls, BorderLayout.CENTER);
                JOptionPane.showMessageDialog(frame, panel, "Edit Password",
JOptionPane.QUESTION_MESSAGE);
                    char ch[]=currentpassword.getPassword();
                    String PASSWORD="";
                    for(int i=0;i<ch.length;i++){PASSWORD=PASSWORD+ch[i];}
                    if(pass.equals(PASSWORD)==true){
                        char ch1[]=newpassword.getPassword();
                        String PASSWORD1="";
                        for(int i=0;i<ch1.length;i++){PASSWORD1=PASSWORD1+ch1[i];}
                        String query2="Update faculty set password='"+PASSWORD1+"' where name='"+N+"'";
                        st.executeUpdate(query2);
                        JOptionPane.showMessageDialog(null," ✎ Password changed
✎","Message",JOptionPane.INFORMATION_MESSAGE);
                    }
                }
            else{
                JOptionPane.showMessageDialog(null," ✎ Current Password
invalid ✎","Message",JOptionPane.ERROR_MESSAGE);
            }
        }
        catch(SQLException h){
            h.printStackTrace();
        }
    }

});

Contact.addActionListener(new ActionListener(){

    @Override
    public void actionPerformed(ActionEvent e) {
        try{
            JFrame frame=new JFrame();

            JPanel panel = new JPanel(new BorderLayout(5, 5));
            JPanel label = new JPanel(new GridLayout(0, 1, 2, 2));
            label.add(new JLabel("new Contact", SwingConstants.RIGHT));
            panel.add(label, BorderLayout.WEST);
            JPanel controls = new JPanel(new GridLayout(0, 1, 2, 2));
            JTextField newContact = new JTextField();
            controls.add(newContact);
            panel.add(controls, BorderLayout.CENTER);
            JOptionPane.showMessageDialog(frame, panel, "Edit Contact",
JOptionPane.QUESTION_MESSAGE);
            ResultSet res=st.executeQuery("Select * from faculty where
contact='"+newContact.getText()+"'");
            if(res.next()==true){
                JOptionPane.showMessageDialog(null," ✎ Contact Already Registered
✎","Message",JOptionPane.INFORMATION_MESSAGE);
            }
        }
    }
});

```

```

        else if(newContact.getText().length()==0){
            JOptionPane.showMessageDialog(null,"  Fill the Contact
        ","Message",JOptionPane.ERROR_MESSAGE);
        }
        else{
            String query2="Update faculty set contact='"+newContact.getText()+"' where
name=' "+N+" '";
            st.executeUpdate(query2);
            JOptionPane.showMessageDialog(null,"  Contact Changed
        ","Message",JOptionPane.INFORMATION_MESSAGE);
        }

    }
    catch(SQLException h){
        h.printStackTrace();
    }
}

});

EMAIL.addActionListener(new ActionListener(){

@Override
public void actionPerformed(ActionEvent e) {
    try{
        JFrame frame=new JFrame();

        JPanel panel = new JPanel(new BorderLayout(5, 5));
        JPanel label = new JPanel(new GridLayout(0, 1, 2, 2));
        label.add(new JLabel("new EMAIL", SwingConstants.RIGHT));
        panel.add(label, BorderLayout.WEST);
        JPanel controls = new JPanel(new GridLayout(0, 1, 2, 2));
        JTextField newEMAIL = new JTextField();
        controls.add(newEMAIL);
        panel.add(controls, BorderLayout.CENTER);
        JOptionPane.showMessageDialog(frame, panel, "Edit EMAIL", JOptionPane.QUESTION_MESSAGE);
        ResultSet res=st.executeQuery("Select * from faculty where
email=' "+newEMAIL.getText()+" '");
        if(res.next()==true){
            JOptionPane.showMessageDialog(null,"  Contact Already Registered
        ","Message",JOptionPane.INFORMATION_MESSAGE);
        }
        else if(newEMAIL.getText().length()==0){
            JOptionPane.showMessageDialog(null,"  Fill the EMAIL
        ","Message",JOptionPane.INFORMATION_MESSAGE);
        }
        else{
            String query2="Update faculty set email='"+newEMAIL.getText()+"' where name=' "+N+" '";
            st.executeUpdate(query2);
            JOptionPane.showMessageDialog(null,"  EMAIL CHANGED
        ","Message",JOptionPane.INFORMATION_MESSAGE);
        }

    }
    catch(SQLException h){
        h.printStackTrace();
    }
}

});

SUBJECT.addActionListener(new ActionListener(){

@Override
public void actionPerformed(ActionEvent e) {
    try{
        JFrame frame=new JFrame();

        JPanel panel = new JPanel(new BorderLayout(5, 5));
        JPanel label = new JPanel(new GridLayout(0, 1, 10, 2));
        label.add(new JLabel("present new SUBJECT", SwingConstants.RIGHT));
        panel.add(label, BorderLayout.WEST);
        JPanel controls = new JPanel(new GridLayout(0, 1, 2, 2));
        JTextField newSUBJECT = new JTextField();
        controls.add(newSUBJECT);
        panel.add(controls, BorderLayout.CENTER);

    }
    catch(SQLException h){
        h.printStackTrace();
    }
}

});

```

```

        JOptionPane.showMessageDialog(frame, panel, "Edit SUBJECT",
JOptionPane.QUESTION_MESSAGE);
        ResultSet res=st.executeQuery("Select * from faculty where
subject=' "+newSUBJECT.getText()+" '");
        if(res.next()==true){
            JOptionPane.showMessageDialog(null," ✎ Contact Already Registered
✎","Message",JOptionPane.INFORMATION_MESSAGE);
        }
        else if(newSUBJECT.getText().length()==0){
            JOptionPane.showMessageDialog(null," ✎ Fill the SUBJECT
✎","Message",JOptionPane.INFORMATION_MESSAGE);
        }
        else{
            String query2="Update faculty set subject=' "+newSUBJECT.getText()+" ' where
name=' "+N+" '";
            st.executeUpdate(query2);
            JOptionPane.showMessageDialog(null," ✎ SUBJECT CHANGED
✎","Message",JOptionPane.INFORMATION_MESSAGE);
        }
    }
}
catch(SQLException h){
    h.printStackTrace();
}
});

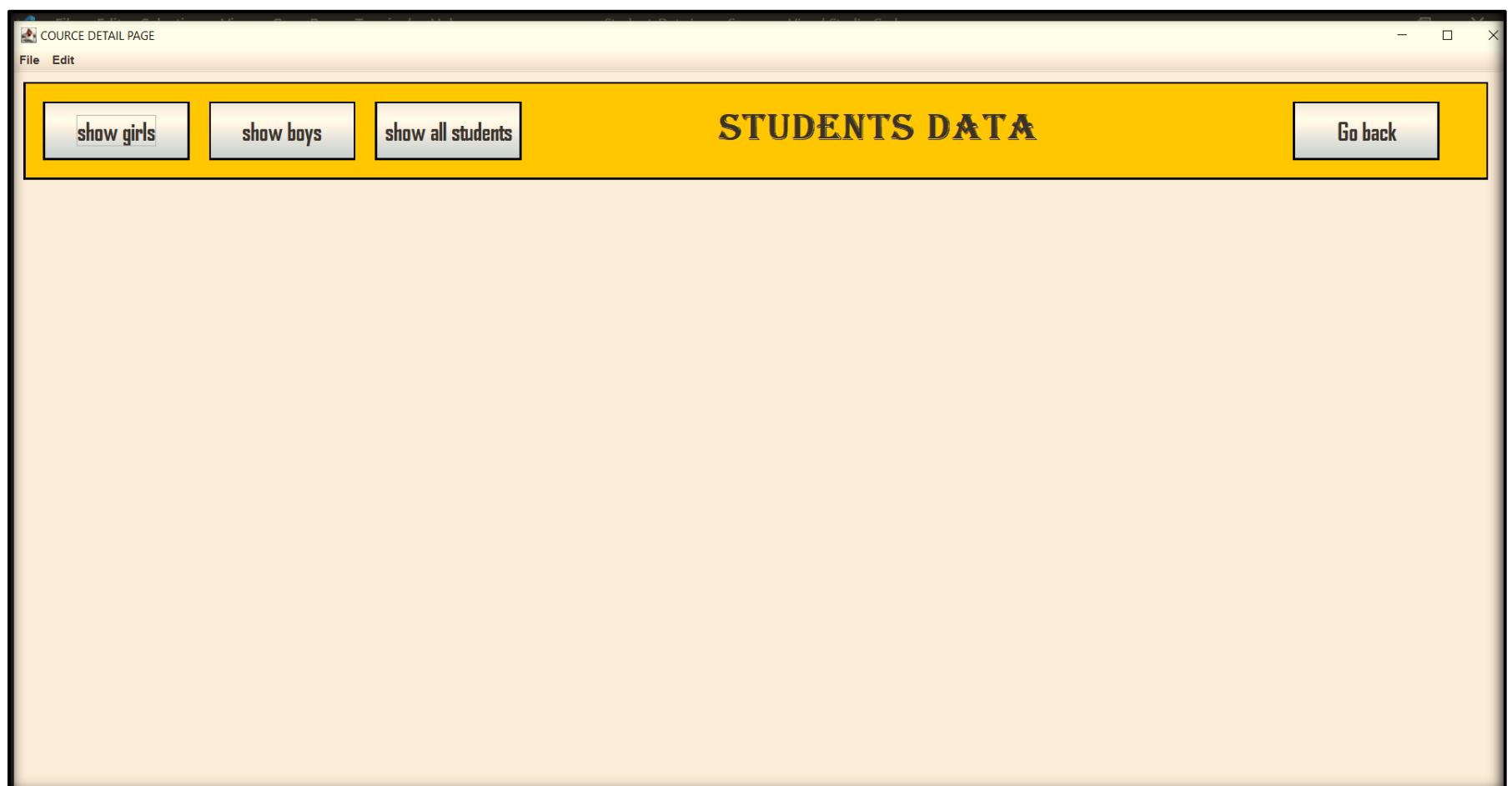
goback.addActionListener(new ActionListener(){

    public void actionPerformed(ActionEvent e) {
        FacultyDetails obb=new FacultyDetails(N);
        setVisible(false);
        obb.setVisible(true);
    }
});
}

public static void main(String[] args) {
    new EditDetails2("");
}
}

```

# Faculty Student Data Page

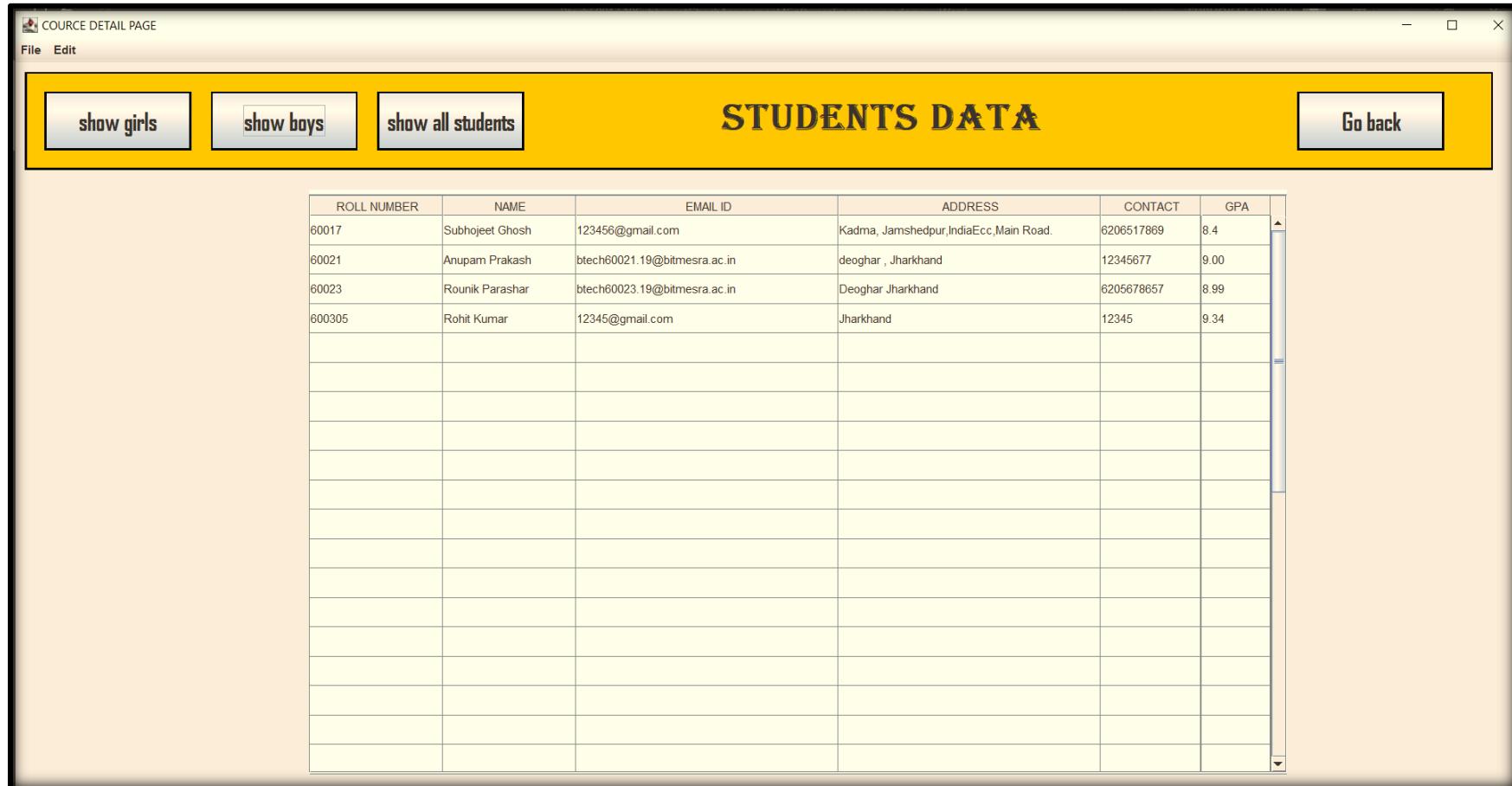


This page gives the faculty the details of the student registered in CSE Branch

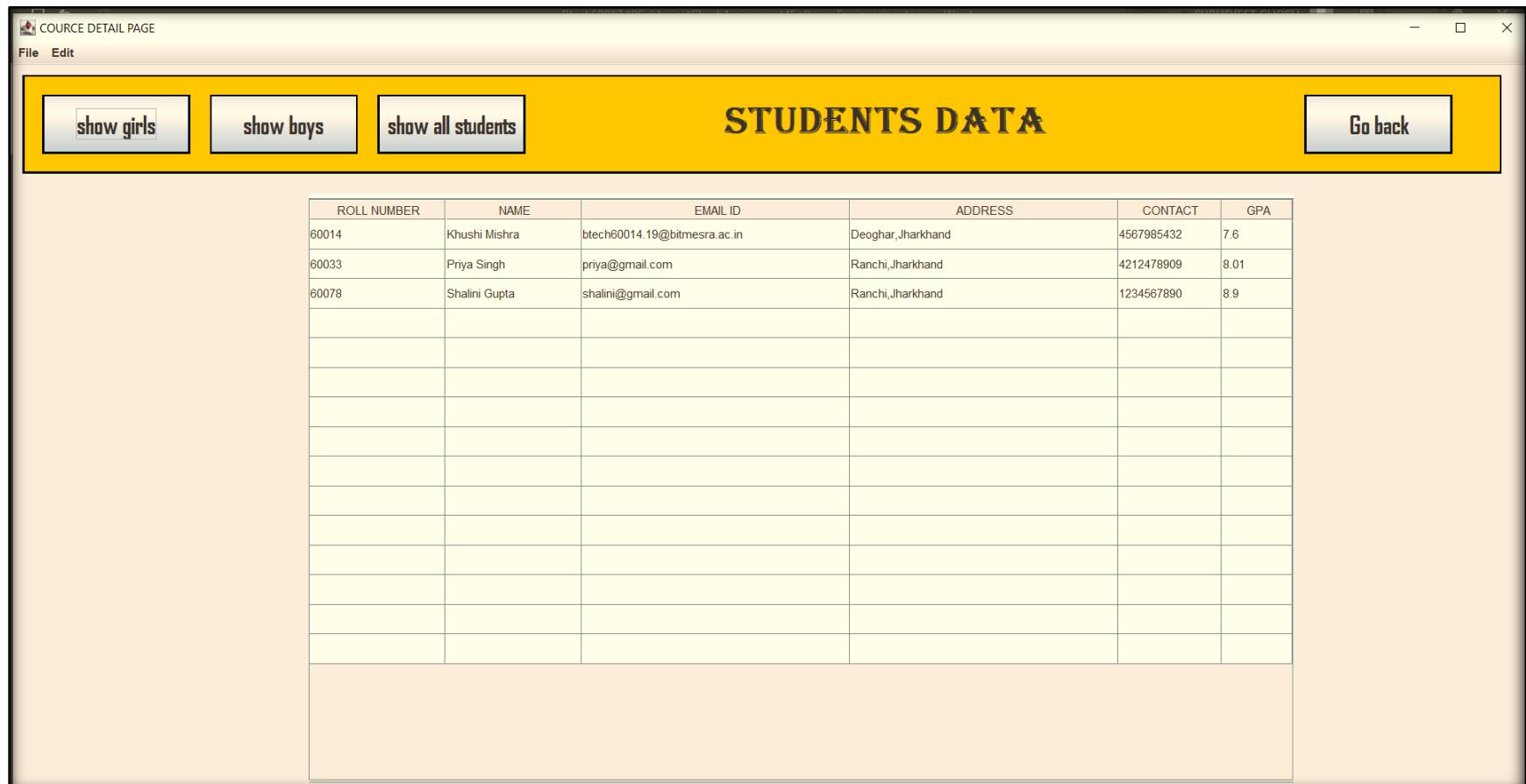
Click on show all Students will show all the students registered

A screenshot of the same application window as above, but now showing a table of student data. The table has columns for Roll Number, Name, Email ID, Address, Contact, and GPA. There are 8 rows of data, each representing a student. The last row is a blank header row.

**Click on show boys will show all the boys registered**



**Click on show girls will show all the girls registered**



## Code for Faculty Students Data Page

```
package maincodes;
import javax.swing.*;
import javax.swing.border.Border;
import javax.swing.table.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
class StudentsData extends JFrame{
    public static JLabel c;
    public static JTable table1;
    public static JScrollPane scrollPane;
    public static DefaultTableModel model;
    public static DefaultTableCellRenderer cellRenderer;
    public static Container h;
    public static JButton showgirls,showboys,showall,goback;
    public static JLabel label;
    static final String DB_URL = "jdbc:mysql://localhost:3306/computer_science_module";
    static final String USER = "root";
    static final String PASS = "";
    static public Object[][]data1;
    public static boolean status;
    Connection conn;
    Statement st;
    public static String nn;
    public StudentsData(String NAME){
        nn=NAME;
        setTitle("COURSE DETAIL PAGE");
        setSize(1590,800);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        Font font2=new Font("Agency FB",Font.BOLD,25);
        Font font=new Font("Algerian",Font.BOLD,40);
        h=getContentPane();

        setBackground(Color.CYAN);
        JMenuBar menubar1=new JMenuBar();
        JMenu file=new JMenu("File");
        JMenuItem item1=new JMenuItem("new");
        JMenuItem item2=new JMenuItem("open");
        JMenuItem item3=new JMenuItem("save");
        file.add(item1);
        file.add(item2);
        file.add(item3);
        menubar1.add(file);
        JMenu Edit=new JMenu("Edit");
        JMenuItem tem1=new JMenuItem("undo");
        JMenuItem tem2=new JMenuItem("redu");
        JMenuItem tem3=new JMenuItem("cut");
        Edit.add(tem1);
        Edit.add(tem2);
        Edit.add(tem3);
        menubar1.add(Edit);
        setJMenuBar(menubar1);
        setLayout(null);

        try {
            conn = DriverManager.getConnection(DB_URL, USER, PASS);
            st = conn.createStatement();
        } catch (SQLException e) {

            e.printStackTrace();
        }
        JPanel panel=new JPanel();
```

```
panel.setLayout(null);
panel.setBounds(10,10,1500,100);
panel.setBackground(Color.ORANGE);
Border br=BorderFactory.createLineBorder(Color.BLACK,2);
panel.setBorder(br);
showgirls=new JButton("show girls");
showgirls.setBounds(20,20,150,60);
showgirls.setBorder(br);
showgirls.setFont(font2);
panel.add(showgirls);
showboys=new JButton("show boys");
showboys.setBounds(190,20,150,60);
showboys.setBorder(br);
showboys.setFont(font2);
panel.add(showboys);
showall=new JButton("show all students");
showall.setBounds(360,20,150,60);
showall.setBorder(br);
showall.setFont(font2);
panel.add(showall);
label=new JLabel(" COURCE DETAILS ");
label.setBounds(700,20,500,60);
label.setFont(font);
panel.add(label);
goback=new JButton("Go back");
goback.setBounds(1300,20,150,60);
goback.setBorder(br);
goback.setFont(font2);
panel.add(goback);
h.add(panel);
setVisible(true);

showall.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e) {
        data1=getStudentData(1);
        makeTable();
        setVisible(true);
    }
});

showgirls.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e) {
        data1=getStudentData(2);
        makeTable();
        setVisible(true);
    }
});

showboys.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e) {
        data1=getStudentData(3);
        makeTable();
        setVisible(true);
    }
});
```

```

goback.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e) {
        Facultydashboard obb=new Facultydashboard(NAME);
        setVisible(false);
        obb.setVisible(true);
    }
});
public Object[][][] getStudentData(int x) {
    Object data[][][] = null;
    try {
        String QUERY="";
        int r=0,c=6;
        switch(x){
            case 1: QUERY="select rollno,name,email,address,contact,gpa from student";
            r=53;
            break;
            case 2: QUERY="select name,email,contact,address,rollno,gpa from student
where gender='female'";
            r=15;
            break;
            case 3: QUERY="select name,email,contact,address,rollno,gpa from student
where gender='male'";
            r=38;
            break;
        }
        ResultSet res=st.executeQuery(QUERY);
        data = new Object[r][c];
        int i = 0;
        while (res.next()) {
            int j = 0;
            data[i][j++] = res.getString("rollno");
            data[i][j++] = res.getString("name");
            data[i][j++] = res.getString("email");
            data[i][j++] = res.getString("address");
            data[i][j++] = res.getString("contact");
            data[i][j++] = res.getString("gpa");
            i++;
        }
        status = true
    } catch (Exception e) {
        e.printStackTrace();
    }
    return data;
}
@Override
public String toString() {
    return (status) ? "Data Listed Successfully" : "Application Error Occured";
}
static public void makeTable(){
    JPanel panel2=new JPanel();
    panel2.setBounds(300,130,1000,600);
    panel2.setBackground(Color.white);
    String columnnames[]={ "ROLL NUMBER", "NAME", "EMAIL ID", "ADDRESS", "CONTACT", "GPA"};
    h.add(panel2);
    DefaultTableModel model1=new DefaultTableModel(data1,columnnames);
    table1=new JTable(model1);
    TableColumn column = table1.getColumnModel().getColumn(0);
    TableColumn column11 = table1.getColumnModel().getColumn(1);
    TableColumn column21 = table1.getColumnModel().getColumn(2);
    TableColumn column31 = table1.getColumnModel().getColumn(3);
    TableColumn column41 = table1.getColumnModel().getColumn(4);
    TableColumn column51 = table1.getColumnModel().getColumn(5);
}

```

```
table1.setRowHeight(30);
column.setPreferredWidth(200);
column11.setPreferredWidth(200);
column21.setPreferredWidth(400);
column31.setPreferredWidth(400);
column41.setPreferredWidth(150);
column51.setPreferredWidth(100);
table1.setEnabled(false);

JScrollPane scrollpane = new JScrollPane(table1);
scrollpane.setPreferredSize(new Dimension(1000, 590));
panel2.add(new JScrollPane(scrollpane));

}

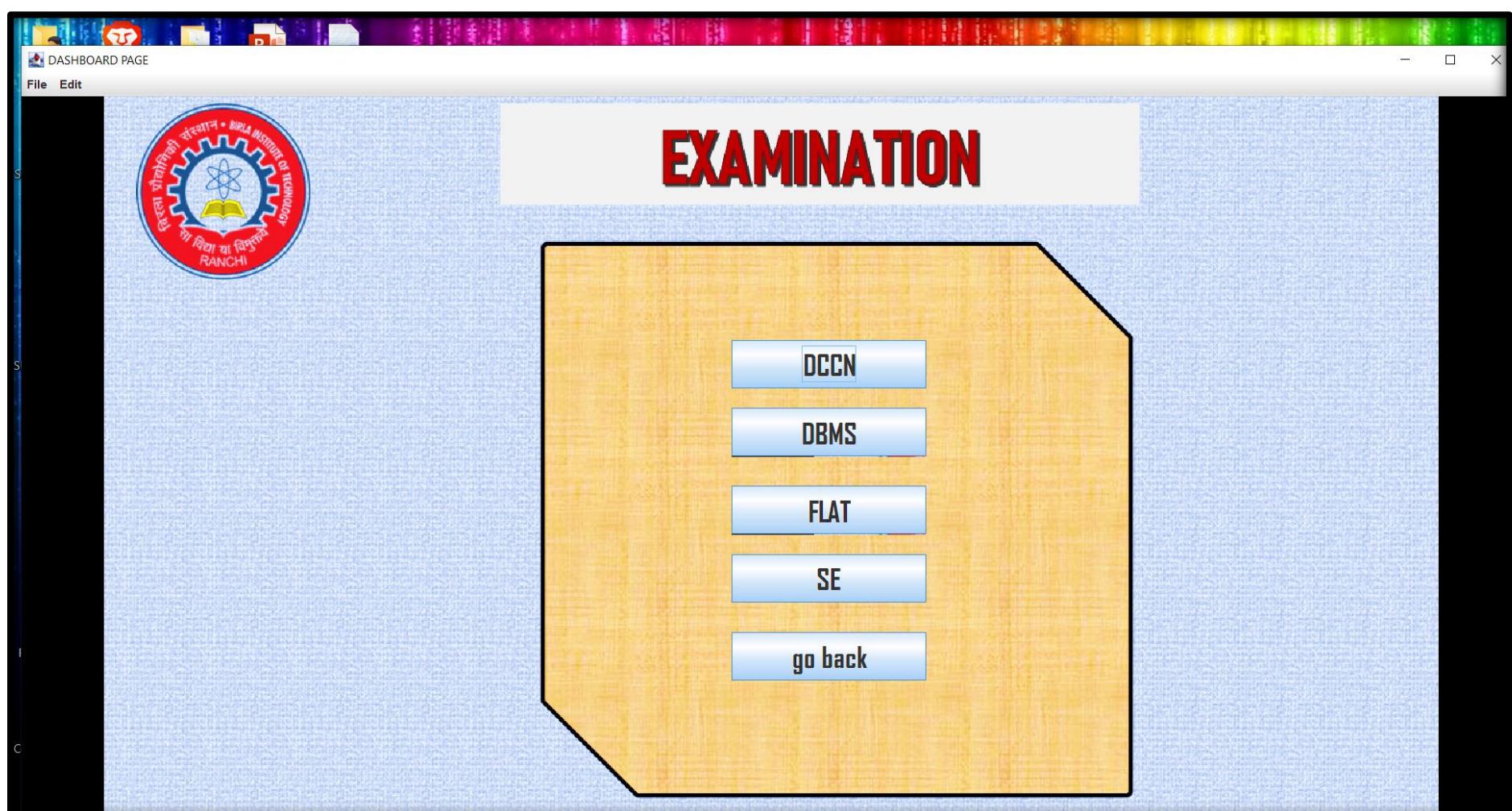
public static void main(String[] args) {
    StudentsData cc=new StudentsData(nn);
    cc.setVisible(true);
}
}
```

(II)

# EXAMINATION MODULE

## Examination Dashboard Page

This is Dashboard of the Examination module where student of the Cse Branch can visit and take exam for the 4 major subject namely DCCN ,SE ,FLAT, DBMS. Since it's a sample project so only 4 question each is given ,later on this module will be modified .



## Code for Examination Dashboard Page

```
package maincodes;
import javax.swing.*;
import java.awt.event.*;
import java.awt.event.ActionEvent;
import java.awt.*;
import java.sql.*;
class Examdashboard extends JFrame{
    static final String DB_URL = "jdbc:mysql://localhost:3306/examination_module";
    static final String USER = "root";
    static final String PASS = "";
    public static Container h;
    public static JButton DCCN,FLAT,DBMS,SE,goback;
    public static JLabel wel;
    Connection conn;
    Statement st;
    public Examdashboard(){
        setTitle("DASHBOARD PAGE");
        setLayout(null);
        h = new Container();
        h.setLayout(null);
        wel = new JLabel("WELCOME TO EXAMINATION MODULE");
        wel.setBounds(300, 100, 400, 50);
        wel.setFont(new Font("Times New Roman", 1, 20));
        wel.setForeground(Color.red);
        h.add(wel);
        DCCN = new JButton("DCCN");
        DCCN.setBounds(300, 150, 200, 50);
        DCCN.setFont(new Font("Times New Roman", 1, 15));
        DCCN.addActionListener(this);
        h.add(DCCN);
        FLAT = new JButton("FLAT");
        FLAT.setBounds(300, 180, 200, 50);
        FLAT.setFont(new Font("Times New Roman", 1, 15));
        FLAT.addActionListener(this);
        h.add(FLAT);
        DBMS = new JButton("DBMS");
        DBMS.setBounds(300, 210, 200, 50);
        DBMS.setFont(new Font("Times New Roman", 1, 15));
        DBMS.addActionListener(this);
        h.add(DBMS);
        SE = new JButton("SE");
        SE.setBounds(300, 240, 200, 50);
        SE.setFont(new Font("Times New Roman", 1, 15));
        SE.addActionListener(this);
        h.add(SE);
        goback = new JButton("go back");
        goback.setBounds(300, 270, 200, 50);
        goback.setFont(new Font("Times New Roman", 1, 15));
        goback.addActionListener(this);
        h.add(goback);
        add(h);
        pack();
        setVisible(true);
    }
    public void actionPerformed(ActionEvent e){
        if(e.getSource() == DCCN)
            System.out.println("DCCN button clicked");
        else if(e.getSource() == FLAT)
            System.out.println("FLAT button clicked");
        else if(e.getSource() == DBMS)
            System.out.println("DBMS button clicked");
        else if(e.getSource() == SE)
            System.out.println("SE button clicked");
        else if(e.getSource() == goback)
            System.out.println("Go back button clicked");
    }
}
```

```

setSize(1590,800);
setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
h= getContentPane();
setLayout(new BorderLayout());
h.setBackground(Color.BLACK);
JLabel c=new JLabel(new ImageIcon("maincodes/images/examdashboard.PNG"));
h.add(c);
Font font2=new Font("Agency FB",Font.BOLD,30);
//Font font3=new Font("Agency FB",Font.BOLD,65);

DCCN=new JButton("DCCN");
DCCN.setBounds(730,250,200,50);
DCCN.setFont(font2);
DBMS=new JButton("DBMS");
DBMS.setBounds(730,320,200,50);
DBMS.setFont(font2);
FLAT=new JButton("FLAT");
FLAT.setBounds(730,400,200,50);
FLAT.setFont(font2);
SE=new JButton("SE");
SE.setBounds(730,470,200,50);
SE.setFont(font2);
goback=new JButton("go back");
goback.setBounds(730,550,200,50);
goback.setFont(font2);
Cursor cur=new Cursor(Cursor.HAND_CURSOR);
DCCN.setCursor(cur);
DBMS.setCursor(cur);
FLAT.setCursor(cur);
SE.setCursor(cur);
goback.setCursor(cur);
c.add(DCCN);
c.add(DBMS);
c.add(FLAT);
c.add(SE);
c.add(goback);
try {
    conn = DriverManager.getConnection(DB_URL, USER, PASS);
    st = conn.createStatement();
} catch (SQLException e) {

    e.printStackTrace();
}

```

```

JMenuBar menubar1=new JMenuBar();
JMenu file=new JMenu("File");
JMenuItem item1=new JMenuItem("new");
JMenuItem item2=new JMenuItem("open");
JMenuItem item3=new JMenuItem("save");
file.add(item1);
file.add(item2);
file.add(item3);
menubar1.add(file);
JMenu Edit=new JMenu("Edit");
JMenuItem tem1=new JMenuItem("undo");
JMenuItem tem2=new JMenuItem("redu");
JMenuItem tem3=new JMenuItem("cut");
Edit.add(tem1);
Edit.add(tem2);
Edit.add(tem3);
menubar1.add(Edit);
setJMenuBar(menubar1);
setVisible(true);
DCCN.addActionListener(new ActionListener(){

    @Override
    public void actionPerformed(ActionEvent e) {
        dccntake oh=new dccntake();
        setVisible(false);
    }
});

```

```
        oh.setVisible(true);

    }

});

DBMS.addActionListener(new ActionListener(){

    @Override
    public void actionPerformed(ActionEvent e) {
        dbmstake oh=new dbmstake();
        setVisible(false);
        oh.setVisible(true);

    }

});

FLAT.addActionListener(new ActionListener(){

    @Override
    public void actionPerformed(ActionEvent e) {
        flattake oh=new flattake();
        setVisible(false);
        oh.setVisible(true);

    }

});

SE.addActionListener(new ActionListener(){

    @Override
    public void actionPerformed(ActionEvent e) {
        setake oh=new setake();
        setVisible(false);
        oh.setVisible(true);

    }

});

goback.addActionListener(new ActionListener(){

    @Override
    public void actionPerformed(ActionEvent e) {
        modules oh=new modules();
        setVisible(false);
        oh.setVisible(true);

    }

});

});

}

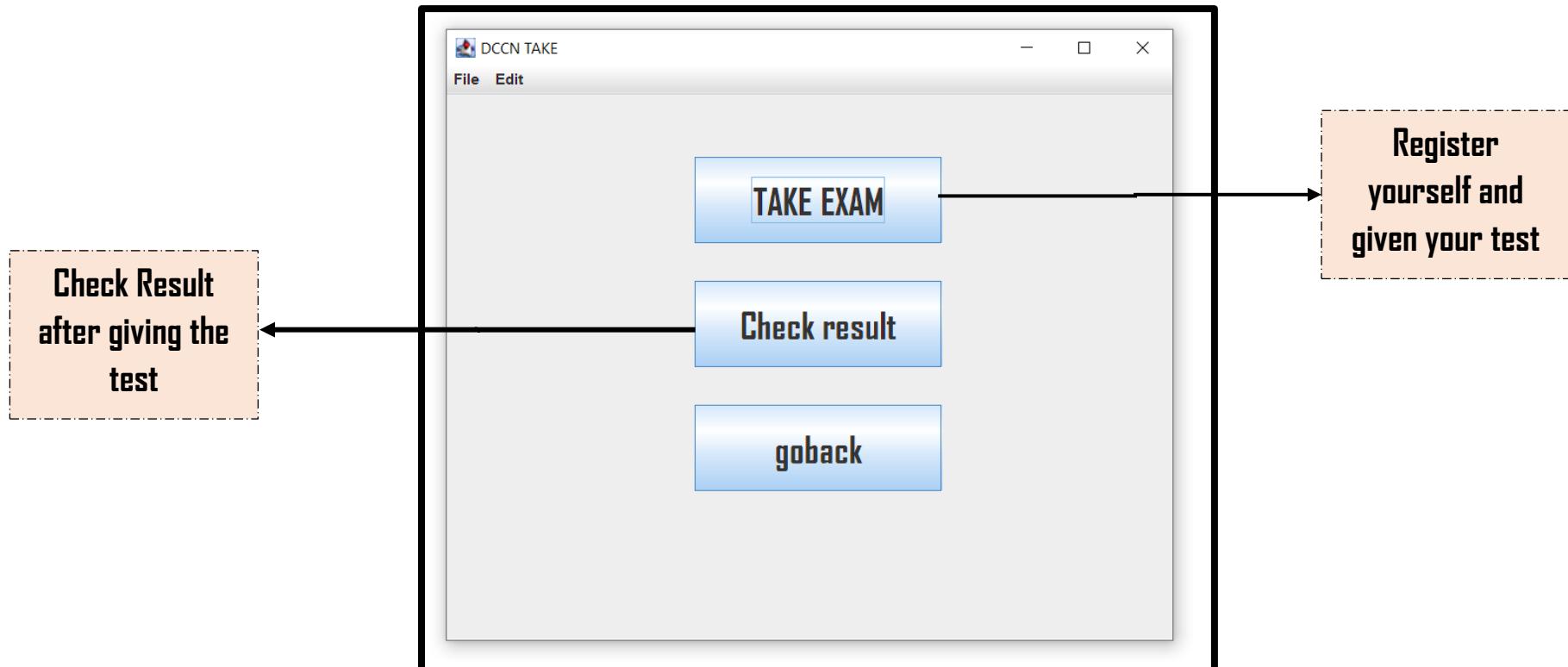
public static void main(String[] args) {
    new Examdashboard();
}

}
```

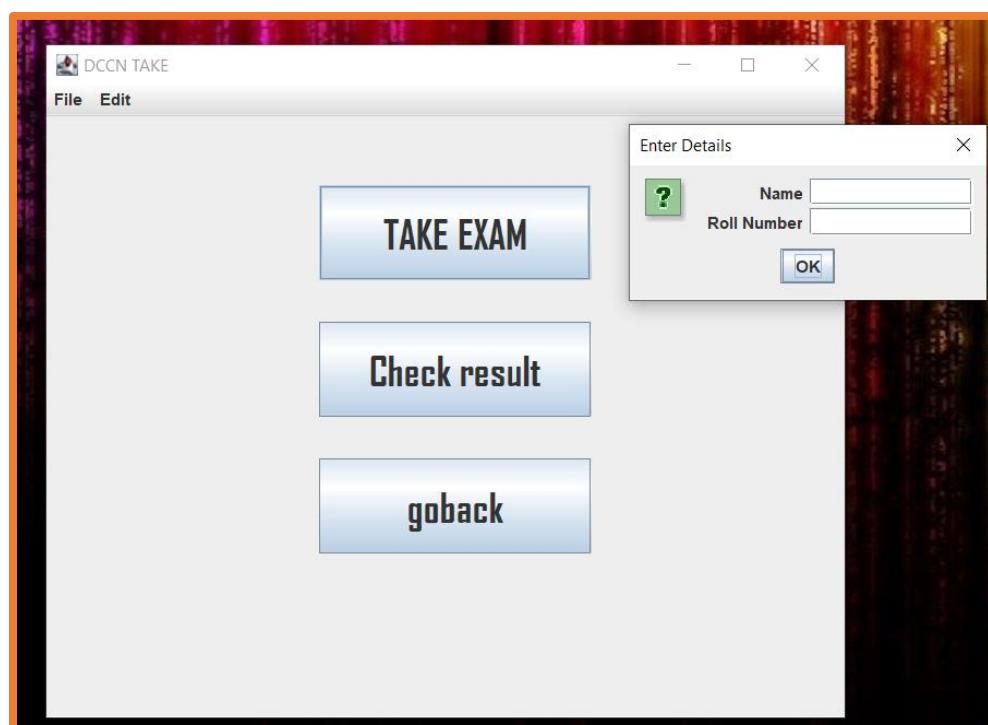
# Lets take the first Test as DCCN

## DCCN take EXAM Page

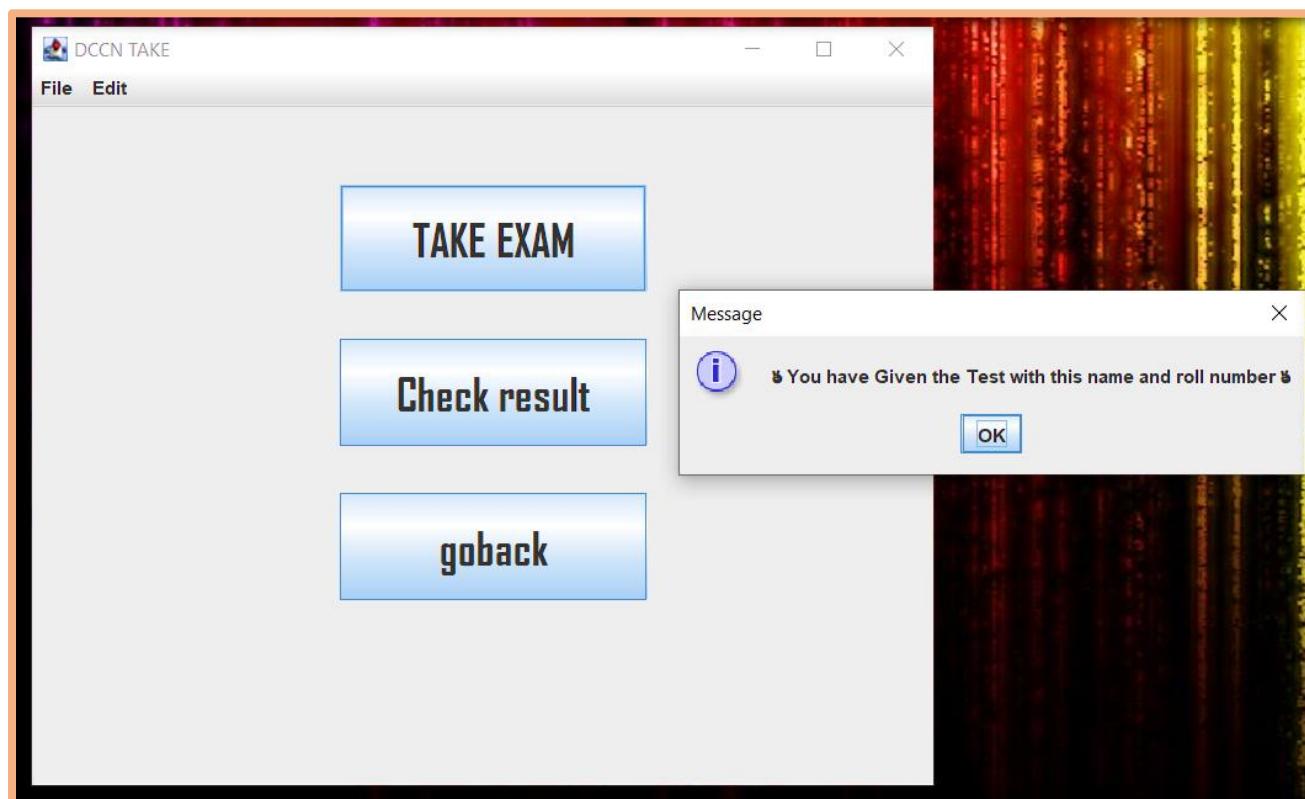
This page structure is common for all the exam in terms of buttons given



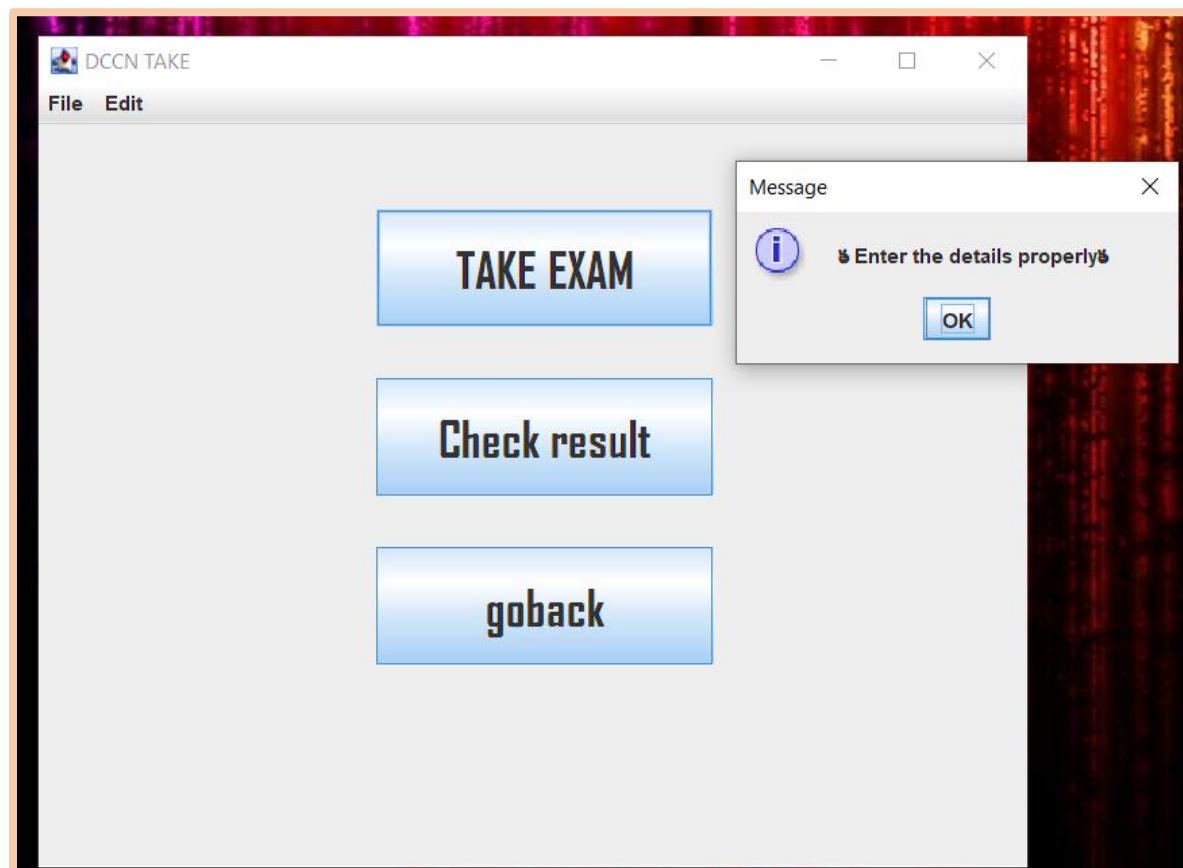
For Registering, Student need to enter the name and Roll Number



**If the user chooses same roll number and name with which he has already given the test then it will show a popup message.**



**If You don't enter the Details Properly then it will show a popup message:**



# Code For DCCN take EXAM

## Page

```
package maincodes;
import javax.swing.*;
import java.awt.event.*;
import java.sql.SQLException;
import java.awt.*;
import java.sql.*;
class dccntake extends JFrame{
    public static Container h;
    public static JButton takeexam,checkresult,goback;
    static final String DB_URL = "jdbc:mysql://localhost:3306/examination_module";
    static final String USER = "root";
    static final String PASS = "";
    Connection conn;
    Statement st;
    static String n="",r="";
    public dccntake(){
        setTitle("DCCN TAKE");
        setSize(600,500);
        setLocation(400,200);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        h=getContentPane();
        h.setLayout(null);
        Font font2=new Font("Agency FB",Font.BOLD,30);
        takeexam=new JButton("TAKE EXAM");
        takeexam.setBounds(200,50,200,70);
        takeexam.setFont(font2);
        checkresult=new JButton("Check result");
        checkresult.setBounds(200,150,200,70);
        checkresult.setFont(font2);
        goback=new JButton("goback");
        goback.setBounds(200,250,200,70);
        goback.setFont(font2);
        Cursor cur=new Cursor(Cursor.HAND_CURSOR);
        takeexam.setCursor(cur);
        checkresult.setCursor(cur);
        goback.setCursor(cur);
        h.add(takeexam);
        h.add(checkresult);
        h.add(goback);

        JMenuBar menubar1=new JMenuBar();
        JMenu file=new JMenu("File");
        JMenuItem item1=new JMenuItem("new");
        JMenuItem item2=new JMenuItem("open");
        JMenuItem item3=new JMenuItem("save");
        file.add(item1);
        file.add(item2);
        file.add(item3);
        menubar1.add(file);
        JMenu Edit=new JMenu("Edit");
        JMenuItem tem1=new JMenuItem("undo");
        JMenuItem tem2=new JMenuItem("redu");
        JMenuItem tem3=new JMenuItem("cut");
        Edit.add(tem1);
        Edit.add(tem2);
        Edit.add(tem3);
        menubar1.add(Edit);
        setJMenuBar(menubar1);
        setVisible(true);
        try {
            conn = DriverManager.getConnection(DB_URL, USER, PASS);
            st = conn.createStatement();
        } catch (SQLException e) {
            e.printStackTrace();
        }
        goback.addActionListener(new ActionListener(){
            @Override
            public void actionPerformed(ActionEvent e) {
                Examdashboard obj=new Examdashboard();
            }
        });
    }
}
```

```

n="";
r="";
setVisible(false);
oj.setVisible(true);

}

});

checkresult.addActionListener(new ActionListener(){

    @Override
    public void actionPerformed(ActionEvent e) {
        try{
            //String q="Select * from response where Student_name='"+n+"' and rollno='"+r+"' and
Test_name='DCCN'";
            //ResultSet rs=st.executeQuery(q);
            JFrame frame=new JFrame();
            JPanel panel = new JPanel(new BorderLayout(5, 5));
            JPanel label = new JPanel(new GridLayout(0, 1, 2, 2));
            label.add(new JLabel("Name", SwingConstants.RIGHT));
            label.add(new JLabel("Roll Number", SwingConstants.RIGHT));
            panel.add(label, BorderLayout.WEST);
            JPanel controls = new JPanel(new GridLayout(0, 1, 2, 2));
            JTextField Name = new JTextField();
            controls.add(Name);
            JTextField Rollno = new JTextField();
            controls.add(Rollno);
            panel.add(controls, BorderLayout.CENTER);
            JOptionPane.showMessageDialog(frame, panel, "Enter Details",
JOptionPane.QUESTION_MESSAGE);
            n=Name.getText();
            r=Rollno.getText();
            if(n.length()==0 || r.length()==0){
                JOptionPane.showMessageDialog(null,"  Enter the details
properly ", "Message", JOptionPane.INFORMATION_MESSAGE);
            }
            else{
                String query="Select * from response where Student_name='"+n+"' and rollno='"+r'+
and Test_name='DCCN'";
                ResultSet res=st.executeQuery(query);
                if(res.next()==true){
                    String sc=res.getString("score");
                    String message="Score of "+n+" in DCCN is-> "+sc;
                    JOptionPane.showMessageDialog(null,message,"Message",JOptionPane.INFORMATION_MESSAGE)
;
                }
                else{
                    JOptionPane.showMessageDialog(null,"Name not
Registered", "Message", JOptionPane.INFORMATION_MESSAGE);
                }
            }
        }
        catch(SQLException f){
            f.printStackTrace();
        }
    }

});

takeexam.addActionListener(new ActionListener(){

    @Override
    public void actionPerformed(ActionEvent e) {
        try{
            JFrame frame=new JFrame();
            JPanel panel = new JPanel(new BorderLayout(5, 5));
            JPanel label = new JPanel(new GridLayout(0, 1, 2, 2));
            label.add(new JLabel("Name", SwingConstants.RIGHT));
            label.add(new JLabel("Roll Number", SwingConstants.RIGHT));
            panel.add(label, BorderLayout.WEST);
            JPanel controls = new JPanel(new GridLayout(0, 1, 2, 2));
            JTextField Name = new JTextField();
            controls.add(Name);
            JTextField Rollno = new JTextField();
            controls.add(Rollno);
            panel.add(controls, BorderLayout.CENTER);

```

```

        JOptionPane.showMessageDialog(frame, panel, "Enter Details",
JOptionPane.QUESTION_MESSAGE);
        n=Name.getText();
        r=Rollno.getText();
        if(n.length()==0 || r.length()==0){
            JOptionPane.showMessageDialog(null,"  Enter the details
properly ","Message",JOptionPane.INFORMATION_MESSAGE);
        }
        else{
            String query="Select Student_name,rollno from response where Student_name='"+n+"' and
rollno='"+r+"' and Test_name='DCCN'";
            ResultSet res=st.executeQuery(query);
            if(res.next()==true){
                JOptionPane.showMessageDialog(null,"  You have Given the Test with this name and
roll number ","Message",JOptionPane.INFORMATION_MESSAGE);
            }
            else{
                String query2="Select * from examination where Test_name='DCCN'";
                ResultSet res2=st.executeQuery(query2);
                String tn="",sub="";
                if(res2.next()){
                    tn=res2.getString("Test_name");
                    sub=res2.getString("subject_code");
                }
                String mainq="Insert into response(Student_name,rollno,subject_code,Test_name,score)
value('"+n+"','"+r+"','"+sub+"','"+tn+"','"+0+"')";
                st.executeUpdate(mainq);
                dccnexam exe=new dccnexam(r);
                setVisible(false);
                exe.setVisible(true);
            }
        }
    }

}
catch(SQLException r){
    r.printStackTrace();
}

});

}

public static void main(String[] args) {
    new dccntake();
}

}

```

If you registered a valid username and roll number which doesn't give the test then you will enter the question paper page.

## DCCN EXAM Page

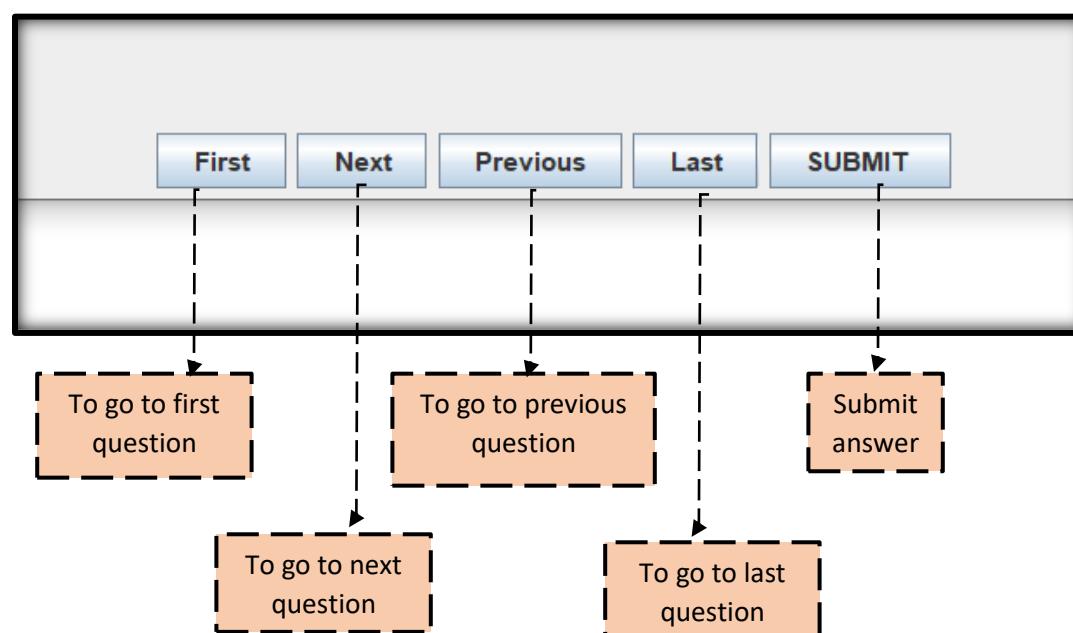
Data Communication and Computer Networking TEST

File Edit

Q 1 Which of these is a standard interface for serial data transmission?

ASCII  
 RS232C  
 2  
 Centronics

First Next Previous Last SUBMIT



Data Communication and Computer Networking TEST

File Edit

Q 1 Which of these is a standard interface for serial data transmission?

ASCII  
 RS232C  
 2  
 Centronics

First Next Previous Last SUBMIT

Q 2 Which of the following transmission directions listed is not a legitimate channel?

Simplex  
 Half Duplex  
 Full Duplex  
 Double Duplex

First Next Previous Last SUBMIT

Q 3 "Parity bits" are used for which of the following purposes?

Encryption of data  
 To transmit faster  
 To detect errors  
 To identify the user

First Next Previous Last SUBMIT

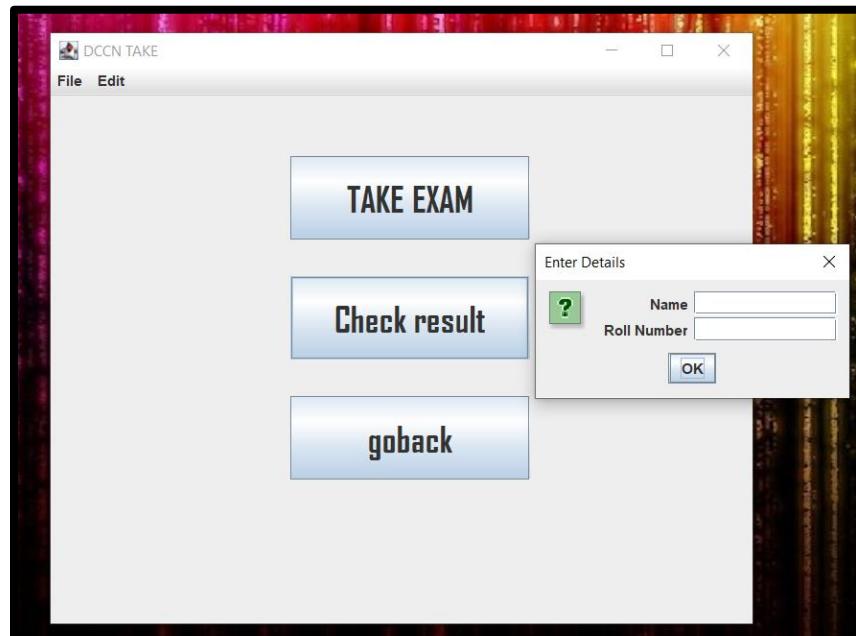
Q 4 The term HTTP stands for?

Hyper terminal tracing program  
 Hypertext tracing protocol  
 Hypertext transfer protocol  
 Hypertext transfer program

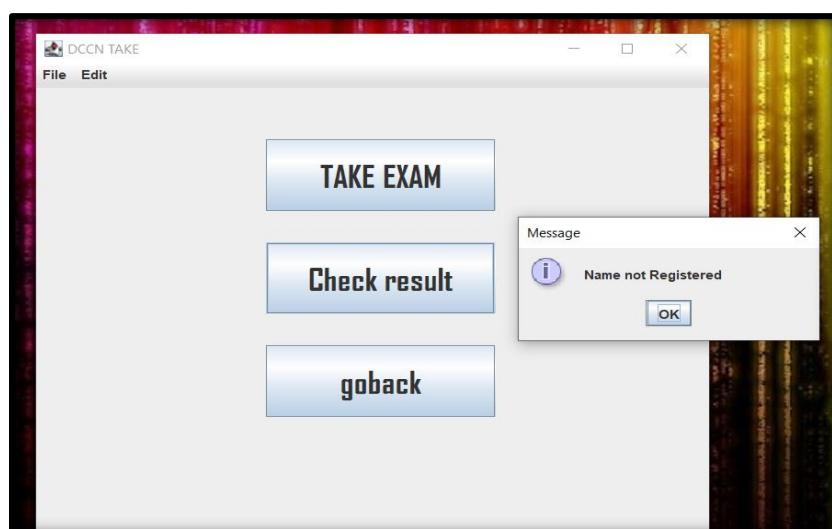
First Next Previous Last SUBMIT

Four Screens of DCCN Question Paper.

**After submit the exam you want to the result you get so for that you need to type the same roll number and name in the check result popup.**

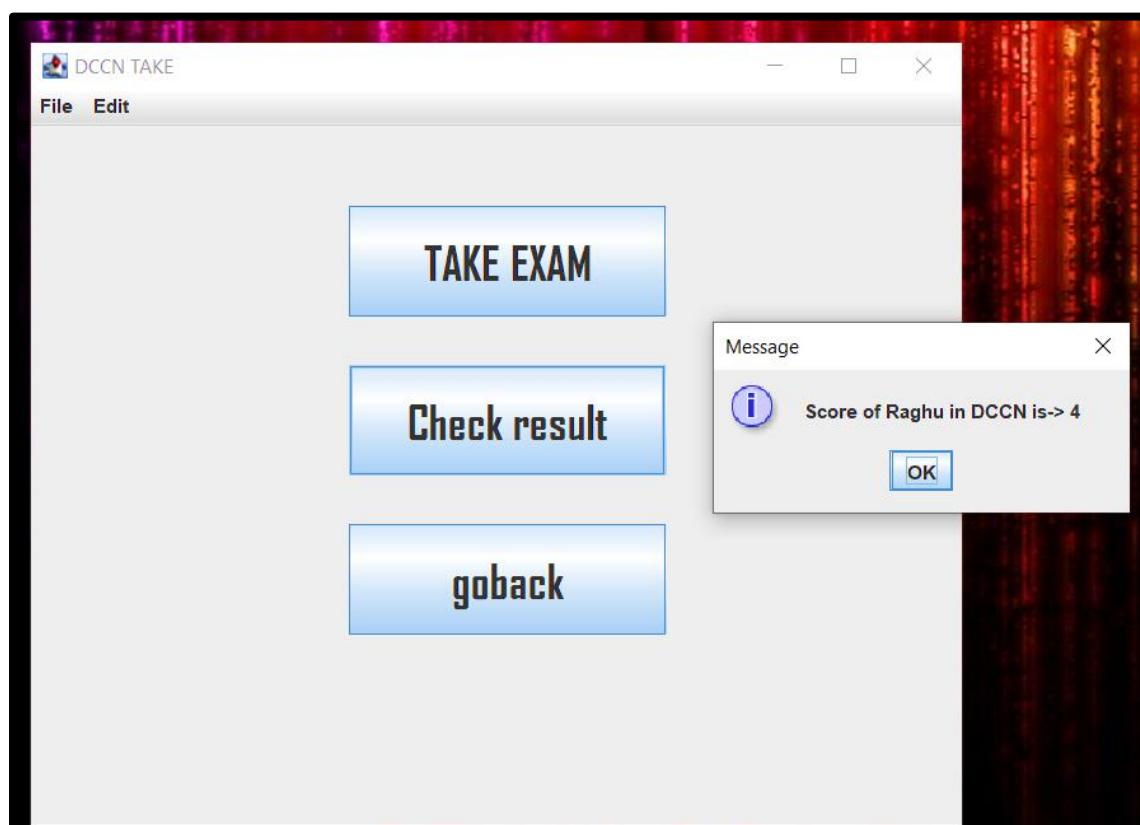


**If You entered a name who doesn't attempted the test then it will show a popup message.**



**This feature ensures that first you give the test then you can see your result.**

**If you have given the test and went to see the result with correct credentials then you shall see your result or marks in a popup window.**



## Code for DCCN EXAM Page

```
package maincodes;
import java.sql.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.SQLException;
import java.util.*;
import javax.swing.*;
class dccnexam extends JFrame{
    public static Container h;
    static final String DB_URL = "jdbc:mysql://localhost:3306/examination_module";
    static final String USER = "root";
    static final String PASS = "";
    static final String card1Text = "Card 1";
    static final String card2Text = "Card 2";
    static final String card3Text = "Card 3";
    static final String card4Text = "Card 4";
    static public JButton submit;
    final JPanel cards;
    static final String FIRST = "FIRST";
    static final String NEXT = "NEXT";
    static final String PREVIOUS = "PREVIOUS";
    static final String LAST = "LAST";
    static public int count=0;
    Connection conn;
    Statement st;
    static String rrn;
    public dccnexam(String rr) {
        rrn=rr;
        setTitle("Data Communication and Computer Networking TEST");
        setSize(1590,800);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        h=getContentPane();
        Font font=new Font("Agency FB",Font.BOLD,20);
        JMenuBar menubar1=new JMenuBar();
        JMenu file=new JMenu("File");
        JMenuItem item1=new JMenuItem("new");
        JMenuItem item2=new JMenuItem("open");
        JMenuItem item3=new JMenuItem("save");
        file.add(item1);
        file.add(item2);
        file.add(item3);
        menubar1.add(file);
        JMenu Edit=new JMenu("Edit");
        JMenuItem tem1=new JMenuItem("undo");
        JMenuItem tem2=new JMenuItem("redu");
        JMenuItem tem3=new JMenuItem("cut");
        Edit.add(tem1);
        Edit.add(tem2);
        Edit.add(tem3);
        menubar1.add(Edit);
        setJMenuBar(menubar1);

        String arr[][]=new String[4][6];
        ArrayList<String> anskey=new ArrayList<String>();

        try{
            conn = DriverManager.getConnection(DB_URL, USER, PASS);
            st = conn.createStatement();
            String query="Select * from dccn";
            ResultSet res=st.executeQuery(query);
            int i=0;
            while(res.next()){
                int j=0;
                arr[i][j++]=Integer.toString(res.getInt("Question_number"));
                arr[i][j++]=res.getString("Question");
                arr[i][j++]=res.getString("OPTION_1");
                arr[i][j++]=res.getString("OPTION_2");
                arr[i][j++]=res.getString("OPTION_3");
                arr[i][j++]=res.getString("OPTION_4");
                anskey.add(" "+res.getString("answer"));
                i++;
            }
        }
```

```

        System.out.println(anskey);
    }
    catch(SQLException e){
        e.printStackTrace();
    }
    int i=0;
    JPanel card1 = new JPanel();
    card1.setLayout(null);
    card1.setBounds(10,10,1000,100);
    JLabel Question1=new JLabel("Q 1 "+arr[i][1]);
    JRadioButton op11=new JRadioButton(" "+arr[i][2]);
    JRadioButton op12=new JRadioButton(" "+arr[i][3]);
    JRadioButton op13=new JRadioButton(" "+arr[i][4]);
    JRadioButton op14=new JRadioButton(" "+arr[i][5]);
    ButtonGroup bg1=new ButtonGroup();
    Question1.setBounds(500,100,900,50);
    op11.setBounds(500,200,300,50);
    op12.setBounds(500,250,300,50);
    op13.setBounds(500,300,300,50);
    op14.setBounds(500,350,300,50);
    Question1.setFont(new Font("Agency FB",Font.BOLD,30));
    op11.setFont(font);
    op12.setFont(font);
    op13.setFont(font);
    op14.setFont(font);
    bg1.add(op11);
    bg1.add(op12);
    bg1.add(op13);
    bg1.add(op14);
    card1.add(Question1);
    card1.add(op11);
    card1.add(op12);
    card1.add(op13);
    card1.add(op14);
    i++;
    JPanel card2 = new JPanel();
    card2.setLayout(null);
    card2.setBounds(10,10,1000,100);
    JLabel Question2=new JLabel("Q 2 "+arr[i][1]);
    JRadioButton op21=new JRadioButton(" "+arr[i][2]);
    JRadioButton op22=new JRadioButton(" "+arr[i][3]);
    JRadioButton op23=new JRadioButton(" "+arr[i][4]);
    JRadioButton op24=new JRadioButton(" "+arr[i][5]);
    ButtonGroup bg2=new ButtonGroup();
    Question2.setBounds(500,100,900,50);
    op21.setBounds(500,200,300,50);
    op22.setBounds(500,250,300,50);
    op23.setBounds(500,300,300,50);
    op24.setBounds(500,350,300,50);
    Question2.setFont(new Font("Agency FB",Font.BOLD,30));
    op21.setFont(font);
    op22.setFont(font);
    op23.setFont(font);
    op24.setFont(font);
    bg2.add(op21);
    bg2.add(op22);
    bg2.add(op23);
    bg2.add(op24);
    card2.add(Question2);
    card2.add(op21);
    card2.add(op22);
    card2.add(op23);
    card2.add(op24);
    i++;
    JPanel card3 = new JPanel();
    card3.setLayout(null);
    card3.setBounds(10,10,1000,100);
    JLabel Question3=new JLabel("Q 3 "+arr[i][1]);
    JRadioButton op31=new JRadioButton(" "+arr[i][2]);
    JRadioButton op32=new JRadioButton(" "+arr[i][3]);
    JRadioButton op33=new JRadioButton(" "+arr[i][4]);
    JRadioButton op34=new JRadioButton(" "+arr[i][5]);
    ButtonGroup bg3=new ButtonGroup();
    Question3.setBounds(500,100,900,50);
    op31.setBounds(500,200,300,50);
    op32.setBounds(500,250,300,50);
    op33.setBounds(500,300,300,50);
    op34.setBounds(500,350,300,50);
    Question3.setFont(new Font("Agency FB",Font.BOLD,30));
    op31.setFont(font);

```

```

op32.setFont(font);
op33.setFont(font);
op34.setFont(font);
bg3.add(op31);
bg3.add(op32);
bg3.add(op33);
bg3.add(op34);
card3.add(Question3);
card3.add(op31);
card3.add(op32);
card3.add(op33);
card3.add(op34);
i++;

JPanel card4 = new JPanel();
card4.setLayout(null);
card4.setBounds(10,10,1000,100);
JLabel Question4=new JLabel("Q 4 "+arr[i][1]);
JRadioButton op41=new JRadioButton(" "+arr[i][2]);
JRadioButton op42=new JRadioButton(" "+arr[i][3]);
JRadioButton op43=new JRadioButton(" "+arr[i][4]);
JRadioButton op44=new JRadioButton(" "+arr[i][5]);
ButtonGroup bg4=new ButtonGroup();
Question4.setBounds(500,100,900,50);
op41.setBounds(500,200,300,50);
op42.setBounds(500,250,300,50);
op43.setBounds(500,300,300,50);
op44.setBounds(500,350,300,50);
Question4.setFont(new Font("Agency FB",Font.BOLD,30));
op41.setFont(font);
op42.setFont(font);
op43.setFont(font);
op44.setFont(font);
bg4.add(op41);
bg4.add(op42);
bg4.add(op43);
bg4.add(op44);
card4.add(Question4);
card4.add(op41);
card4.add(op42);
card4.add(op43);
card4.add(op44);
i++;
cards = new JPanel(new CardLayout());
cards.add(card1, card1Text);
cards.add(card2, card2Text);
cards.add(card3, card3Text);
cards.add(card4, card4Text);

class ControlActionListenter implements ActionListener {
    public void actionPerformed(ActionEvent e) {
        CardLayout cl = (CardLayout)(cards.getLayout());
        String cmd = e.getActionCommand();
        if (cmd.equals(FIRST)) {
            cl.first(cards);
        } else if (cmd.equals(NEXT)) {
            cl.next(cards);
        } else if (cmd.equals(PREVIOUS)) {
            cl.previous(cards);
        } else if (cmd.equals(LAST)) {
            cl.last(cards);
        }
    }
}
ControlActionListenter cal = new ControlActionListenter();

JButton btn1 = new JButton("First");
btn1.setActionCommand(FIRST);
btn1.addActionListener(cal);

JButton btn2 = new JButton("Next");
btn2.setActionCommand(NEXT);
btn2.addActionListener(cal);

JButton btn3 = new JButton("Previous");
btn3.setActionCommand(PREVIOUS);
btn3.addActionListener(cal);

JButton btn4 = new JButton("Last");
btn4.setActionCommand(LAST);

```

```

btn4.addActionListener(cal);

submit =new JButton("SUBMIT ");
submit.setBounds(1200,600,150,50);

JPanel controlButtons = new JPanel();
controlButtons.add(btn1);
controlButtons.add(btn2);
controlButtons.add(btn3);
controlButtons.add(btn4);
controlButtons.add(submit);

h.add(cards, BorderLayout.CENTER);
h.add(controlButtons, BorderLayout.PAGE_END);

setVisible(true);

submit.addActionListener(new ActionListener(){

    @Override
    public void actionPerformed(ActionEvent e) {
        if(op11.isSelected() && anskey.contains(op11.getText()))
            count++;
        else if(op12.isSelected() && anskey.contains(op12.getText()))
            count++;
        else if(op13.isSelected() && anskey.contains(op13.getText()))
            count++;
        else if(op14.isSelected() && anskey.contains(op14.getText()))
            count++;
        if(op21.isSelected() && anskey.contains(op21.getText()))
            count++;
        else if(op22.isSelected() && anskey.contains(op22.getText()))
            count++;
        else if(op23.isSelected() && anskey.contains(op23.getText()))
            count++;
        else if(op24.isSelected() && anskey.contains(op24.getText()))
            count++;
        if(op31.isSelected() && anskey.contains(op31.getText()))
            count++;
        else if(op32.isSelected() && anskey.contains(op32.getText()))
            count++;
        else if(op33.isSelected() && anskey.contains(op33.getText()))
            count++;
        else if(op34.isSelected() && anskey.contains(op34.getText()))
            count++;
        if(op41.isSelected() && anskey.contains(op41.getText()))
            count++;
        else if(op42.isSelected() && anskey.contains(op42.getText()))
            count++;
        else if(op43.isSelected() && anskey.contains(op43.getText()))
            count++;
        else if(op44.isSelected() && anskey.contains(op44.getText()))
            count++;
        System.out.println(count);
        try{
            String query2="Update response set score='"+Integer.toString(count)+"' where rollno='"+rrr+"'
and Test_name='DCCN'";
            st.executeUpdate(query2);
            count=0;
        }
        catch(SQLException t){
            t.printStackTrace();
        }
        JOptionPane.showMessageDialog(null," 🎉 Exam Submitted
🎉","Message",JOptionPane.INFORMATION_MESSAGE);
        dccntake uu=new dccntake();
        setVisible(false);
        uu.setVisible(true);

    }
});

}

public static void main(String[] args) {
    new dccnexam(rrn);
}
}

```

Since the next 3 exam are also done in the same fashion that's why I am not showing the screens rather the code for those screens are here:-

## Code for DBMS EXAM Page

```
package maincodes;
import java.sql.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.SQLException;
import java.util.*;
import javax.swing.*;
class dbmsexam extends JFrame{
    public static Container h;
    static final String DB_URL = "jdbc:mysql://localhost:3306/examination_module";
    static final String USER = "root";
    static final String PASS = "";
    static final String card1Text = "Card 1";
    static final String card2Text = "Card 2";
    static final String card3Text = "Card 3";
    static final String card4Text = "Card 4";
    static public JButton submit;
    final JPanel cards;
    static final String FIRST = "FIRST";
    static final String NEXT = "NEXT";
    static final String PREVIOUS = "PREVIOUS";
    static final String LAST = "LAST";
    static public int count=0;
    Connection conn;
    Statement st;
    static String rrn;
    public dbmsexam(String rr) {
        rrn=rr;
        setTitle("DATABASE MANAGESMENT SYSTEM TEST");
        setSize(1590,800);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        h=ContentPane();
        Font font=new Font("Agency FB",Font.BOLD,20);
        JMenuBar menubar1=new JMenuBar();
        JMenu file=new JMenu("File");
        JMenuItem item1=new JMenuItem("new");
        JMenuItem item2=new JMenuItem("open");
        JMenuItem item3=new JMenuItem("save");
        file.add(item1);
        file.add(item2);
        file.add(item3);
        menubar1.add(file);
        JMenu Edit=new JMenu("Edit");
        JMenuItem tem1=new JMenuItem("undo");
        JMenuItem tem2=new JMenuItem("redu");
        JMenuItem tem3=new JMenuItem("cut");
        Edit.add(tem1);
        Edit.add(tem2);
        Edit.add(tem3);
        menubar1.add(Edit);
        setJMenuBar(menubar1);

        String arr[][]=new String[4][6];
        ArrayList<String> anskey=new ArrayList<String>();

        try{
            conn = DriverManager.getConnection(DB_URL, USER, PASS);
            st = conn.createStatement();
            String query="Select * from dbms";
            ResultSet res=st.executeQuery(query);
            int i=0;
            while(res.next()){
                int j=0;
                arr[i][j++]=Integer.toString(res.getInt("Question_number"));
                arr[i][j++]=res.getString("Question");
                arr[i][j++]=res.getString("OPTION_1");
                arr[i][j++]=res.getString("OPTION_2");
                arr[i][j++]=res.getString("OPTION_3");
                arr[i][j++]=res.getString("OPTION_4");
            }
        }
    }
}
```

```

        anskey.add(" "+res.getString("answer"));
        i++;
    }
    System.out.println(anskey);
}
catch(SQLException e){
    e.printStackTrace();
}
int i=0;
JPanel card1 = new JPanel();
card1.setLayout(null);
card1.setBounds(10,10,1000,100);
JLabel Question1=new JLabel("Q 1 "+arr[i][1]);
JRadioButton op11=new JRadioButton(" "+arr[i][2]);
JRadioButton op12=new JRadioButton(" "+arr[i][3]);
JRadioButton op13=new JRadioButton(" "+arr[i][4]);
JRadioButton op14=new JRadioButton(" "+arr[i][5]);
ButtonGroup bg1=new ButtonGroup();
Question1.setBounds(500,100,900,50);
op11.setBounds(500,200,300,50);
op12.setBounds(500,250,300,50);
op13.setBounds(500,300,300,50);
op14.setBounds(500,350,300,50);
Question1.setFont(new Font("Agency FB",Font.BOLD,30));
op11.setFont(font);
op12.setFont(font);
op13.setFont(font);
op14.setFont(font);
bg1.add(op11);
bg1.add(op12);
bg1.add(op13);
bg1.add(op14);
card1.add(Question1);
card1.add(op11);
card1.add(op12);
card1.add(op13);
card1.add(op14);
i++;
JPanel card2 = new JPanel();
card2.setLayout(null);
card2.setBounds(10,10,1000,100);
JLabel Question2=new JLabel("Q 2 "+arr[i][1]);
JRadioButton op21=new JRadioButton(" "+arr[i][2]);
JRadioButton op22=new JRadioButton(" "+arr[i][3]);
JRadioButton op23=new JRadioButton(" "+arr[i][4]);
JRadioButton op24=new JRadioButton(" "+arr[i][5]);
ButtonGroup bg2=new ButtonGroup();
Question2.setBounds(500,100,900,50);
op21.setBounds(500,200,300,50);
op22.setBounds(500,250,300,50);
op23.setBounds(500,300,300,50);
op24.setBounds(500,350,300,50);
Question2.setFont(new Font("Agency FB",Font.BOLD,30));
op21.setFont(font);
op22.setFont(font);
op23.setFont(font);
op24.setFont(font);
bg2.add(op21);
bg2.add(op22);
bg2.add(op23);
bg2.add(op24);
card2.add(Question2);
card2.add(op21);
card2.add(op22);
card2.add(op23);
card2.add(op24);
i++;
JPanel card3 = new JPanel();
card3.setLayout(null);
card3.setBounds(10,10,1000,100);
JLabel Question3=new JLabel("Q 3 "+arr[i][1]);
JRadioButton op31=new JRadioButton(" "+arr[i][2]);
JRadioButton op32=new JRadioButton(" "+arr[i][3]);
JRadioButton op33=new JRadioButton(" "+arr[i][4]);
JRadioButton op34=new JRadioButton(" "+arr[i][5]);
ButtonGroup bg3=new ButtonGroup();
Question3.setBounds(500,100,1000,50);
op31.setBounds(500,200,300,50);
op32.setBounds(500,250,300,50);
op33.setBounds(500,300,300,50);

```

```

op34.setBounds(500,350,300,50);
Question3.setFont(new Font("Agency FB",Font.BOLD,25));
op31.setFont(font);
op32.setFont(font);
op33.setFont(font);
op34.setFont(font);
bg3.add(op31);
bg3.add(op32);
bg3.add(op33);
bg3.add(op34);
card3.add(Question3);
card3.add(op31);
card3.add(op32);
card3.add(op33);
card3.add(op34);
i++;

JPanel card4 = new JPanel();
card4.setLayout(null);
card4.setBounds(10,10,1000,100);
JLabel Question4=new JLabel("Q 4 "+arr[i][1]);
JRadioButton op41=new JRadioButton(" "+arr[i][2]);
JRadioButton op42=new JRadioButton(" "+arr[i][3]);
JRadioButton op43=new JRadioButton(" "+arr[i][4]);
JRadioButton op44=new JRadioButton(" "+arr[i][5]);
ButtonGroup bg4=new ButtonGroup();
Question4.setBounds(500,100,900,50);
op41.setBounds(500,200,300,50);
op42.setBounds(500,250,300,50);
op43.setBounds(500,300,300,50);
op44.setBounds(500,350,300,50);
Question4.setFont(new Font("Agency FB",Font.BOLD,30));
op41.setFont(font);
op42.setFont(font);
op43.setFont(font);
op44.setFont(font);
bg4.add(op41);
bg4.add(op42);
bg4.add(op43);
bg4.add(op44);
card4.add(Question4);
card4.add(op41);
card4.add(op42);
card4.add(op43);
card4.add(op44);
i++;
cards = new JPanel(new CardLayout());
cards.add(card1, card1Text);
cards.add(card2, card2Text);
cards.add(card3, card3Text);
cards.add(card4, card4Text);

class ControlActionListenter implements ActionListener {
    public void actionPerformed(ActionEvent e) {
        CardLayout cl = (CardLayout)(cards.getLayout());
        String cmd = e.getActionCommand();
        if (cmd.equals(FIRST)) {
            cl.first(cards);
        } else if (cmd.equals(NEXT)) {
            cl.next(cards);
        } else if (cmd.equals(PREVIOUS)) {
            cl.previous(cards);
        } else if (cmd.equals(LAST)) {
            cl.last(cards);
        }
    }
}
ControlActionListenter cal = new ControlActionListenter();

JButton btn1 = new JButton("First");
btn1.setActionCommand(FIRST);
btn1.addActionListener(cal);

JButton btn2 = new JButton("Next");
btn2.setActionCommand(NEXT);
btn2.addActionListener(cal);

JButton btn3 = new JButton("Previous");
btn3.setActionCommand(PREVIOUS);
btn3.addActionListener(cal);

```

```

JButton btn4 = new JButton("Last");
btn4.setActionCommand(LAST);
btn4.addActionListener(cal);

submit =new JButton("SUBMIT ");
submit.setBounds(1200,600,150,50);

JPanel controlButtons = new JPanel();
controlButtons.add(btn1);
controlButtons.add(btn2);
controlButtons.add(btn3);
controlButtons.add(btn4);
controlButtons.add(submit);
h.add(cards, BorderLayout.CENTER);
h.add(controlButtons, BorderLayout.PAGE_END);
setVisible(true);
submit.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e) {
        if(op11.isSelected() && anskey.contains(op11.getText()))
            count++;
        else if(op12.isSelected() && anskey.contains(op12.getText()))
            count++;
        else if(op13.isSelected() && anskey.contains(op13.getText()))
            count++;
        else if(op14.isSelected() && anskey.contains(op14.getText()))
            count++;
        if(op21.isSelected() && anskey.contains(op21.getText()))
            count++;
        else if(op22.isSelected() && anskey.contains(op22.getText()))
            count++;
        else if(op23.isSelected() && anskey.contains(op23.getText()))
            count++;
        else if(op24.isSelected() && anskey.contains(op24.getText()))
            count++;
        if(op31.isSelected() && anskey.contains(op31.getText()))
            count++;
        else if(op32.isSelected() && anskey.contains(op32.getText()))
            count++;
        else if(op33.isSelected() && anskey.contains(op33.getText()))
            count++;
        else if(op34.isSelected() && anskey.contains(op34.getText()))
            count++;
        if(op41.isSelected() && anskey.contains(op41.getText()))
            count++;
        else if(op42.isSelected() && anskey.contains(op42.getText()))
            count++;
        else if(op43.isSelected() && anskey.contains(op43.getText()))
            count++;
        else if(op44.isSelected() && anskey.contains(op44.getText()))
            count++;
        System.out.println(count);
        try{
            String query2="Update response set score='"+Integer.toString(count)+"' where rollno='"+rr+"'
and Test_name='DBMS'";
            st.executeUpdate(query2);
            count=0;
        }
        catch(SQLException t){
            t.printStackTrace();
        }
        JOptionPane.showMessageDialog(null," Exam Submitted
", "Message", JOptionPane.INFORMATION_MESSAGE);
        dbmstake uu=new dbmstake();
        setVisible(false);
        uu.setVisible(true);
    }
});

}

public static void main(String[] args) {
    new dbmsexam(rrn);
}
}

```

## Code for FLAT EXAM Page

```
package maincodes;
import java.sql.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.SQLException;
import java.util.*;
import javax.swing.*;
class flatexam extends JFrame{
    public static Container h;
    static final String DB_URL = "jdbc:mysql://localhost:3306/examination_module";
    static final String USER = "root";
    static final String PASS = "";
    static final String card1Text = "Card 1";
    static final String card2Text = "Card 2";
    static final String card3Text = "Card 3";
    static final String card4Text = "Card 4";
    static public JButton submit;
    final JPanel cards;
    static final String FIRST = "FIRST";
    static final String NEXT = "NEXT";
    static final String PREVIOUS = "PREVIOUS";
    static final String LAST = "LAST";
    static public int count=0;
    Connection conn;
    Statement st;
    static String rrn;
    public flatexam(String rr) {
        rrn=rr;
        setTitle("Formal Language and Automata Theory TEST");
        setSize(1590,800);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        h=getContentPane();
        Font font=new Font("Agency FB",Font.BOLD,20);
        JMenuBar menubar1=new JMenuBar();
        JMenu file=new JMenu("File");
        JMenuItem item1=new JMenuItem("new");
        JMenuItem item2=new JMenuItem("open");
        JMenuItem item3=new JMenuItem("save");
        file.add(item1);
        file.add(item2);
        file.add(item3);
        menubar1.add(file);
        JMenu Edit=new JMenu("Edit");
        JMenuItem tem1=new JMenuItem("undo");
        JMenuItem tem2=new JMenuItem("redu");
        JMenuItem tem3=new JMenuItem("cut");
        Edit.add(tem1);
        Edit.add(tem2);
        Edit.add(tem3);
        menubar1.add(Edit);
        setJMenuBar(menubar1);

        String arr[][]=new String[4][6];
        ArrayList<String> anskey=new ArrayList<String>();

        try{
            conn = DriverManager.getConnection(DB_URL, USER, PASS);
            st = conn.createStatement();
            String query="Select * from flat";
            ResultSet res=st.executeQuery(query);
            int i=0;
            while(res.next()){
                int j=0;
                arr[i][j++]=Integer.toString(res.getInt("Question_number"));
                arr[i][j++]=res.getString("Question");
                arr[i][j++]=res.getString("OPTION_1");
                arr[i][j++]=res.getString("OPTION_2");
                arr[i][j++]=res.getString("OPTION_3");
                arr[i][j++]=res.getString("OPTION_4");
                anskey.add(" "+res.getString("answer"));
                i++;
            }
            System.out.println(anskey);
        }
```

```

}
catch(SQLException e){
    e.printStackTrace();
}
int i=0;
JPanel card1 = new JPanel();
card1.setLayout(null);
card1.setBounds(10,10,1000,100);
JLabel Question1=new JLabel("Q 1 "+arr[i][1]);
JRadioButton op11=new JRadioButton(" "+arr[i][2]);
JRadioButton op12=new JRadioButton(" "+arr[i][3]);
JRadioButton op13=new JRadioButton(" "+arr[i][4]);
JRadioButton op14=new JRadioButton(" "+arr[i][5]);
ButtonGroup bg1=new ButtonGroup();
Question1.setBounds(500,100,900,50);
op11.setBounds(500,200,300,50);
op12.setBounds(500,250,300,50);
op13.setBounds(500,300,300,50);
op14.setBounds(500,350,300,50);
Question1.setFont(new Font("Agency FB",Font.BOLD,30));
op11.setFont(font);
op12.setFont(font);
op13.setFont(font);
op14.setFont(font);
bg1.add(op11);
bg1.add(op12);
bg1.add(op13);
bg1.add(op14);
card1.add(Question1);
card1.add(op11);
card1.add(op12);
card1.add(op13);
card1.add(op14);
i++;
JPanel card2 = new JPanel();
card2.setLayout(null);
card2.setBounds(10,10,1000,100);
JLabel Question2=new JLabel("Q 2 "+arr[i][1]);
JRadioButton op21=new JRadioButton(" "+arr[i][2]);
JRadioButton op22=new JRadioButton(" "+arr[i][3]);
JRadioButton op23=new JRadioButton(" "+arr[i][4]);
JRadioButton op24=new JRadioButton(" "+arr[i][5]);
ButtonGroup bg2=new ButtonGroup();
Question2.setBounds(500,100,900,50);
op21.setBounds(500,200,300,50);
op22.setBounds(500,250,300,50);
op23.setBounds(500,300,300,50);
op24.setBounds(500,350,300,50);
Question2.setFont(new Font("Agency FB",Font.BOLD,30));
op21.setFont(font);
op22.setFont(font);
op23.setFont(font);
op24.setFont(font);
bg2.add(op21);
bg2.add(op22);
bg2.add(op23);
bg2.add(op24);
card2.add(Question2);
card2.add(op21);
card2.add(op22);
card2.add(op23);
card2.add(op24);
i++;
JPanel card3 = new JPanel();
card3.setLayout(null);
card3.setBounds(10,10,1000,100);
JLabel Question3=new JLabel("Q 3 "+arr[i][1]);
JRadioButton op31=new JRadioButton(" "+arr[i][2]);
JRadioButton op32=new JRadioButton(" "+arr[i][3]);
JRadioButton op33=new JRadioButton(" "+arr[i][4]);
JRadioButton op34=new JRadioButton(" "+arr[i][5]);
ButtonGroup bg3=new ButtonGroup();
Question3.setBounds(500,100,900,50);
op31.setBounds(500,200,300,50);
op32.setBounds(500,250,300,50);
op33.setBounds(500,300,300,50);
op34.setBounds(500,350,300,50);
Question3.setFont(new Font("Agency FB",Font.BOLD,30));
op31.setFont(font);
op32.setFont(font);

```

```

op33.setFont(font);
op34.setFont(font);
bg3.add(op31);
bg3.add(op32);
bg3.add(op33);
bg3.add(op34);
card3.add(Question3);
card3.add(op31);
card3.add(op32);
card3.add(op33);
card3.add(op34);
i++;

JPanel card4 = new JPanel();
card4.setLayout(null);
card4.setBounds(10,10,1000,100);
JLabel Question4=new JLabel("Q 4 "+arr[i][1]);
JRadioButton op41=new JRadioButton(" "+arr[i][2]);
JRadioButton op42=new JRadioButton(" "+arr[i][3]);
JRadioButton op43=new JRadioButton(" "+arr[i][4]);
JRadioButton op44=new JRadioButton(" "+arr[i][5]);
ButtonGroup bg4=new ButtonGroup();
Question4.setBounds(500,100,900,50);
op41.setBounds(500,200,300,50);
op42.setBounds(500,250,300,50);
op43.setBounds(500,300,300,50);
op44.setBounds(500,350,300,50);
Question4.setFont(new Font("Agency FB",Font.BOLD,30));
op41.setFont(font);
op42.setFont(font);
op43.setFont(font);
op44.setFont(font);
bg4.add(op41);
bg4.add(op42);
bg4.add(op43);
bg4.add(op44);
card4.add(Question4);
card4.add(op41);
card4.add(op42);
card4.add(op43);
card4.add(op44);
i++;
cards = new JPanel(new CardLayout());
cards.add(card1, card1Text);
cards.add(card2, card2Text);
cards.add(card3, card3Text);
cards.add(card4, card4Text);

class ControlActionListenter implements ActionListener {
    public void actionPerformed(ActionEvent e) {
        CardLayout cl = (CardLayout)(cards.getLayout());
        String cmd = e.getActionCommand();
        if (cmd.equals(FIRST)) {
            cl.first(cards);
        } else if (cmd.equals(NEXT)) {
            cl.next(cards);
        } else if (cmd.equals(PREVIOUS)) {
            cl.previous(cards);
        } else if (cmd.equals(LAST)) {
            cl.last(cards);
        }
    }
}
ControlActionListenter cal = new ControlActionListenter();

JButton btn1 = new JButton("First");
btn1.setActionCommand(FIRST);
btn1.addActionListener(cal);

JButton btn2 = new JButton("Next");
btn2.setActionCommand(NEXT);
btn2.addActionListener(cal);

JButton btn3 = new JButton("Previous");
btn3.setActionCommand(PREVIOUS);
btn3.addActionListener(cal);

JButton btn4 = new JButton("Last");
btn4.setActionCommand(LAST);
btn4.addActionListener(cal);

```

```

submit =new JButton("SUBMIT ");
submit.setBounds(1200,600,150,50);

JPanel controlButtons = new JPanel();
controlButtons.add(btn1);
controlButtons.add(btn2);
controlButtons.add(btn3);
controlButtons.add(btn4);
controlButtons.add(submit);

h.add(cards, BorderLayout.CENTER);
h.add(controlButtons, BorderLayout.PAGE_END);

setVisible(true);

submit.addActionListener(new ActionListener(){

    @Override
    public void actionPerformed(ActionEvent e) {
        if(op11.isSelected() && anskey.contains(op11.getText())))
        count++;
        else if(op12.isSelected() && anskey.contains(op12.getText())))
        count++;
        else if(op13.isSelected() && anskey.contains(op13.getText())))
        count++;
        else if(op14.isSelected() && anskey.contains(op14.getText())))
        count++;

        if(op21.isSelected() && anskey.contains(op21.getText())))
        count++;
        else if(op22.isSelected() && anskey.contains(op22.getText())))
        count++;
        else if(op23.isSelected() && anskey.contains(op23.getText())))
        count++;
        else if(op24.isSelected() && anskey.contains(op24.getText())))
        count++;
        if(op31.isSelected() && anskey.contains(op31.getText())))
        count++;
        else if(op32.isSelected() && anskey.contains(op32.getText())))
        count++;
        else if(op33.isSelected() && anskey.contains(op33.getText())))
        count++;
        else if(op34.isSelected() && anskey.contains(op34.getText())))
        count++;
        if(op41.isSelected() && anskey.contains(op41.getText())))
        count++;
        else if(op42.isSelected() && anskey.contains(op42.getText())))
        count++;
        else if(op43.isSelected() && anskey.contains(op43.getText())))
        count++;
        else if(op44.isSelected() && anskey.contains(op44.getText())))
        count++;
        System.out.println(count);
        try{
            String query2="Update response set score='"+Integer.toString(count)+"' where rollno='"+rrr+"'
and Test_name='FLAT'";
            st.executeUpdate(query2);
            count=0;
        }
        catch(SQLException t){
            t.printStackTrace();
        }
        JOptionPane.showMessageDialog(null," 🎉 Exam Submitted
🎉","Message",JOptionPane.INFORMATION_MESSAGE);
        flattake uu=new flattake();
        setVisible(false);
        uu.setVisible(true);
    }

});

}

public static void main(String[] args) {
    new flateexam(rrr);
}
}

```

# Code for SE EXAM Page

```
package maincodes;
import java.sql.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.SQLException;
import java.util.*;
import javax.swing.*;
class seexam extends JFrame{
    public static Container h;
    static final String DB_URL = "jdbc:mysql://localhost:3306/examination_module";
    static final String USER = "root";
    static final String PASS = "";
    static final String card1Text = "Card 1";
    static final String card2Text = "Card 2";
    static final String card3Text = "Card 3";
    static final String card4Text = "Card 4";
    static public JButton submit;
    final JPanel cards;
    static final String FIRST = "FIRST";
    static final String NEXT = "NEXT";
    static final String PREVIOUS = "PREVIOUS";
    static final String LAST = "LAST";
    static public int count=0;
    Connection conn;
    Statement st;
    static String rrn;
    public seexam(String rr) {
        rrn=rr;
        setTitle("SOFTWARE ENGINEERING TEST");
        setSize(1590,800);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        h=getContentPane();
        Font font=new Font("Agency FB",Font.BOLD,20);
        JMenuBar menubar1=new JMenuBar();
        JMenu file=new JMenu("File");
        JMenuItem item1=new JMenuItem("new");
        JMenuItem item2=new JMenuItem("open");
        JMenuItem item3=new JMenuItem("save");
        file.add(item1);
        file.add(item2);
        file.add(item3);
        menubar1.add(file);
        JMenu Edit=new JMenu("Edit");
        JMenuItem tem1=new JMenuItem("undo");
        JMenuItem tem2=new JMenuItem("redu");
        JMenuItem tem3=new JMenuItem("cut");
        Edit.add(tem1);
        Edit.add(tem2);
        Edit.add(tem3);
        menubar1.add(Edit);
        setJMenuBar(menubar1);

        String arr[][]=new String[4][6];
        ArrayList<String> anskey=new ArrayList<String>();

        try{
            conn = DriverManager.getConnection(DB_URL, USER, PASS);
            st = conn.createStatement();
            String query="Select * from se";
            ResultSet res=st.executeQuery(query);
            int i=0;
            while(res.next()){
                int j=0;
                arr[i][j++]=Integer.toString(res.getInt("Question_number"));
                arr[i][j++]=res.getString("Question");
                arr[i][j++]=res.getString("OPTION_1");
                arr[i][j++]=res.getString("OPTION_2");
                arr[i][j++]=res.getString("OPTION_3");
                arr[i][j++]=res.getString("OPTION_4");
                anskey.add(" "+res.getString("answer"));
                i++;
            }
            System.out.println(anskey);
        }
```

```

        catch(SQLException e){
            e.printStackTrace();
        }
        int i=0;
        JPanel card1 = new JPanel();
        card1.setLayout(null);
        card1.setBounds(10,10,1000,100);
        JLabel Question1=new JLabel("Q 1 "+arr[i][1]);
        JRadioButton op11=new JRadioButton(" "+arr[i][2]);
        JRadioButton op12=new JRadioButton(" "+arr[i][3]);
        JRadioButton op13=new JRadioButton(" "+arr[i][4]);
        JRadioButton op14=new JRadioButton(" "+arr[i][5]);
        ButtonGroup bg1=new ButtonGroup();
        Question1.setBounds(500,100,900,50);
        op11.setBounds(500,200,300,50);
        op12.setBounds(500,250,300,50);
        op13.setBounds(500,300,300,50);
        op14.setBounds(500,350,300,50);
        Question1.setFont(new Font("Agency FB",Font.BOLD,30));
        op11.setFont(font);
        op12.setFont(font);
        op13.setFont(font);
        op14.setFont(font);
        bg1.add(op11);
        bg1.add(op12);
        bg1.add(op13);
        bg1.add(op14);
        card1.add(Question1);
        card1.add(op11);
        card1.add(op12);
        card1.add(op13);
        card1.add(op14);
        i++;
        JPanel card2 = new JPanel();
        card2.setLayout(null);
        card2.setBounds(10,10,1000,100);
        JLabel Question2=new JLabel("Q 2 "+arr[i][1]);
        JRadioButton op21=new JRadioButton(" "+arr[i][2]);
        JRadioButton op22=new JRadioButton(" "+arr[i][3]);
        JRadioButton op23=new JRadioButton(" "+arr[i][4]);
        JRadioButton op24=new JRadioButton(" "+arr[i][5]);
        ButtonGroup bg2=new ButtonGroup();
        Question2.setBounds(500,100,900,50);
        op21.setBounds(500,200,300,50);
        op22.setBounds(500,250,300,50);
        op23.setBounds(500,300,300,50);
        op24.setBounds(500,350,300,50);
        Question2.setFont(new Font("Agency FB",Font.BOLD,30));
        op21.setFont(font);
        op22.setFont(font);
        op23.setFont(font);
        op24.setFont(font);
        bg2.add(op21);
        bg2.add(op22);
        bg2.add(op23);
        bg2.add(op24);
        card2.add(Question2);
        card2.add(op21);
        card2.add(op22);
        card2.add(op23);
        card2.add(op24);
        i++;
        JPanel card3 = new JPanel();
        card3.setLayout(null);
        card3.setBounds(10,10,1000,100);
        JLabel Question3=new JLabel("Q 3 "+arr[i][1]);
        JRadioButton op31=new JRadioButton(" "+arr[i][2]);
        JRadioButton op32=new JRadioButton(" "+arr[i][3]);
        JRadioButton op33=new JRadioButton(" "+arr[i][4]);
        JRadioButton op34=new JRadioButton(" "+arr[i][5]);
        ButtonGroup bg3=new ButtonGroup();
        Question3.setBounds(500,100,1000,50);
        op31.setBounds(500,200,300,50);
        op32.setBounds(500,250,300,50);
        op33.setBounds(500,300,300,50);
        op34.setBounds(500,350,300,50);
        Question3.setFont(new Font("Agency FB",Font.BOLD,25));
        op31.setFont(font);
        op32.setFont(font);
        op33.setFont(font);

```

```

op34.setFont(font);
bg3.add(op31);
bg3.add(op32);
bg3.add(op33);
bg3.add(op34);
card3.add(Question3);
card3.add(op31);
card3.add(op32);
card3.add(op33);
card3.add(op34);
i++;

JPanel card4 = new JPanel();
card4.setLayout(null);
card4.setBounds(10,10,1000,100);
JLabel Question4=new JLabel("Q 4 "+arr[i][1]);
JRadioButton op41=new JRadioButton(" "+arr[i][2]);
JRadioButton op42=new JRadioButton(" "+arr[i][3]);
JRadioButton op43=new JRadioButton(" "+arr[i][4]);
JRadioButton op44=new JRadioButton(" "+arr[i][5]);
ButtonGroup bg4=new ButtonGroup();
Question4.setBounds(500,100,900,50);
op41.setBounds(500,200,300,50);
op42.setBounds(500,250,300,50);
op43.setBounds(500,300,300,50);
op44.setBounds(500,350,300,50);
Question4.setFont(new Font("Agency FB",Font.BOLD,30));
op41.setFont(font);
op42.setFont(font);
op43.setFont(font);
op44.setFont(font);
bg4.add(op41);
bg4.add(op42);
bg4.add(op43);
bg4.add(op44);
card4.add(Question4);
card4.add(op41);
card4.add(op42);
card4.add(op43);
card4.add(op44);
i++;
cards = new JPanel(new CardLayout());
cards.add(card1, card1Text);
cards.add(card2, card2Text);
cards.add(card3, card3Text);
cards.add(card4, card4Text);

class ControlActionListenter implements ActionListener {
    public void actionPerformed(ActionEvent e) {
        CardLayout cl = (CardLayout)(cards.getLayout());
        String cmd = e.getActionCommand();
        if (cmd.equals(FIRST)) {
            cl.first(cards);
        } else if (cmd.equals(NEXT)) {
            cl.next(cards);
        } else if (cmd.equals(PREVIOUS)) {
            cl.previous(cards);
        } else if (cmd.equals(LAST)) {
            cl.last(cards);
        }
    }
}
ControlActionListenter cal = new ControlActionListenter();

JButton btn1 = new JButton("First");
btn1.setActionCommand(FIRST);
btn1.addActionListener(cal);

JButton btn2 = new JButton("Next");
btn2.setActionCommand(NEXT);
btn2.addActionListener(cal);

JButton btn3 = new JButton("Previous");
btn3.setActionCommand(PREVIOUS);
btn3.addActionListener(cal);

JButton btn4 = new JButton("Last");
btn4.setActionCommand(LAST);
btn4.addActionListener(cal);

```

```

submit =new JButton("SUBMIT ");
submit.setBounds(1200,600,150,50);

JPanel controlButtons = new JPanel();
controlButtons.add(btn1);
controlButtons.add(btn2);
controlButtons.add(btn3);
controlButtons.add(btn4);
controlButtons.add(submit);

h.add(cards, BorderLayout.CENTER);
h.add(controlButtons, BorderLayout.PAGE_END);

setVisible(true);

submit.addActionListener(new ActionListener(){

    @Override
    public void actionPerformed(ActionEvent e) {
        if(op11.isSelected() && anskey.contains(op11.getText()))
        count++;
        else if(op12.isSelected() && anskey.contains(op12.getText()))
        count++;
        else if(op13.isSelected() && anskey.contains(op13.getText()))
        count++;
        else if(op14.isSelected() && anskey.contains(op14.getText()))
        count++;

        if(op21.isSelected() && anskey.contains(op21.getText()))
        count++;
        else if(op22.isSelected() && anskey.contains(op22.getText()))
        count++;
        else if(op23.isSelected() && anskey.contains(op23.getText()))
        count++;
        else if(op24.isSelected() && anskey.contains(op24.getText()))
        count++;

        if(op31.isSelected() && anskey.contains(op31.getText()))
        count++;
        else if(op32.isSelected() && anskey.contains(op32.getText()))
        count++;
        else if(op33.isSelected() && anskey.contains(op33.getText()))
        count++;
        else if(op34.isSelected() && anskey.contains(op34.getText()))
        count++;

        if(op41.isSelected() && anskey.contains(op41.getText()))
        count++;
        else if(op42.isSelected() && anskey.contains(op42.getText()))
        count++;
        else if(op43.isSelected() && anskey.contains(op43.getText()))
        count++;
        else if(op44.isSelected() && anskey.contains(op44.getText()))
        count++;
        System.out.println(count);
        try{
            String query2="Update response set score='"+Integer.toString(count)+"' where rollno='"+rrr+"' and
Test_name='SE'";
            st.executeUpdate(query2);
            count=0;
        }
        catch(SQLException t){
            t.printStackTrace();
        }
        JOptionPane.showMessageDialog(null," Exam Submitted","Message",JOptionPane.INFORMATION_MESSAGE);
        setake uu=new setake();
        setVisible(false);
        uu.setVisible(true);
    }
}

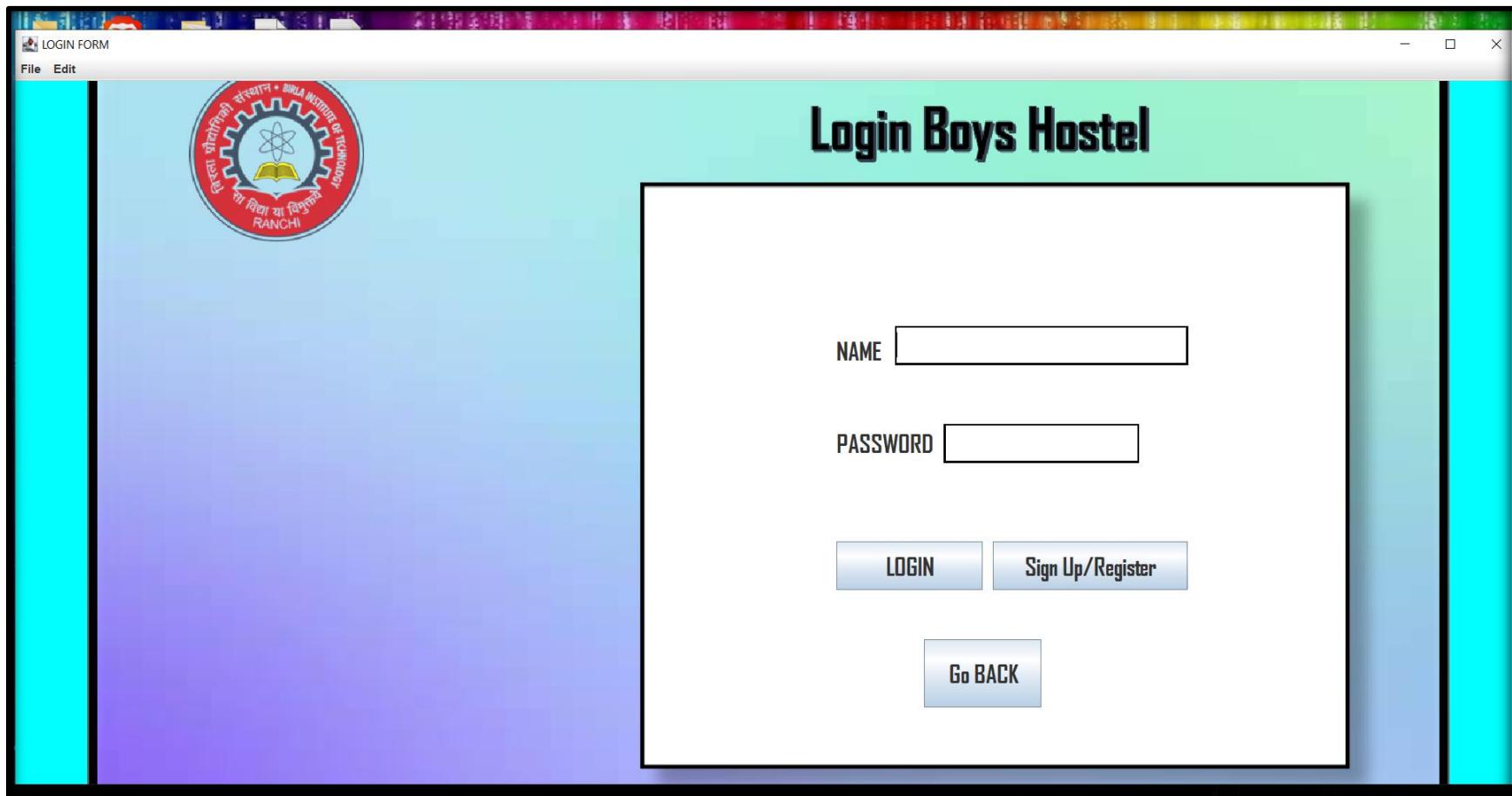
public static void main(String[] args) {
    new seexam(rrr);
}
}

```

# (III) BOYS HOSTEL MODULE

## Boys Hostel Login Page

This is the login page for the Boys hostel database



## Code for Boys Hostel Login Page

```
package maincodes;
import javax.swing.*;
import javax.swing.border.*;
import java.awt.event.*;
import java.sql.*;
import java.awt.*;
class loginboys extends JFrame{
    public static Container h;
    public static JLabel Name,Password,label;
    public static JTextField name;
    public static JButton login,signup,goback;
    public static JPasswordField pswd;
    static final String DB_URL = "jdbc:mysql://localhost:3306/boys_hostel_module";
    static final String USER = "root";
    static final String PASS = "";
    Connection conn;
    Statement st;
    public loginboys() {
        setTitle("LOGIN FORM");
        setSize(1590,800);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        h=getContentPane();
        setLayout(new BorderLayout());
        h.setBackground(Color.CYAN);

        JLabel c=new JLabel(new ImageIcon("maincodes/images/loginboys.png"));
```

```

h.add(c);
Font font=new Font("Century Schoolbook",Font.BOLD,20);
Font font2=new Font("Agency FB",Font.BOLD,25);
Border br=BorderFactory.createLineBorder(Color.BLACK,2);
Name=new JLabel("NAME");
name=new JTextField("");
Name.setBounds(840,250,120,50);
Name.setFont(font2);
name.setBounds(900,250,300,40);
name.setFont(font);
Password=new JLabel("PASSWORD");
pswd=new JPasswordField("");
Password.setFont(font2);
pswd.setFont(font);
Password.setBounds(840,350,100,40);
pswd.setBounds(950,350,200,40);
name.setBorder(br);
pswd.setBorder(br);
login =new JButton("LOGIN");
login.setFont(font2);
login.setBounds(840,470,150,50);
signup =new JButton("Sign Up/Register");
signup.setFont(font2);
signup.setBounds(1000,470,200,50);
goback=new JButton("Go BACK");
goback.setBounds(930,570,120,70);
goback.setFont(font2);
Cursor cur=new Cursor(Cursor.HAND_CURSOR);
goback.setCursor(cur);
signup.setCursor(cur);
login.setCursor(cur);
c.add(goback);
c.add(signup);
c.add(login);

c.add(Password);
c.add(pswd);
c.add(Name);
c.add(name);
JMenuBar menubar1=new JMenuBar();
JMenu file=new JMenu("File");
JMenuItem item1=new JMenuItem("new");
JMenuItem item2=new JMenuItem("open");
JMenuItem item3=new JMenuItem("save");
file.add(item1);
file.add(item2);
file.add(item3);
menubar1.add(file);
JMenu Edit=new JMenu("Edit");
JMenuItem tem1=new JMenuItem("undo");
JMenuItem tem2=new JMenuItem("redu");
JMenuItem tem3=new JMenuItem("cut");
Edit.add(tem1);
Edit.add(tem2);
Edit.add(tem3);
menubar1.add(Edit);
setJMenuBar(menubar1);

setVisible(true);
try {
    conn = DriverManager.getConnection(DB_URL, USER, PASS);
    st = conn.createStatement();
} catch (SQLException e) {

    e.printStackTrace();
}
goback.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e) {

```

```

        modules mg=new modules();
        setVisible(false);
        mg.setVisible(true);

    }

});

signup.addActionListener(new ActionListener(){

    @Override
    public void actionPerformed(ActionEvent e) {
        boysHostelregister rg=new boysHostelregister();
        setVisible(false);
        rg.setVisible(true);

    }

});

login.addActionListener(new ActionListener(){

    @Override
    public void actionPerformed(ActionEvent e) {
        try{
            String NAME=name.getText();
            char ch[]=pswd.getPassword();
            String PASSWORD="";
            for(int i=0;i<ch.length;i++){PASSWORD+=ch[i];}
            String query="Select Boys_name,password,rollno from boys where
Boys_name='"+NAME+"' and password='"+PASSWORD+"' ";
            ResultSet res=st.executeQuery(query);
            if(res.next()==true){
                JOptionPane.showMessageDialog(null," ✍ Press OK To LOGIN
", "Message", JOptionPane.INFORMATION_MESSAGE);
                BoysHosteldashboard oh=new BoysHosteldashboard(NAME);
                setVisible(false);
                oh.setVisible(true);
            }
            else{
                JOptionPane.showMessageDialog(null," ✍ NAME OR PASSWORD INVALID TRY
AGAIN ✍", "Message", JOptionPane.ERROR_MESSAGE);
            }
            name.setText("");
            pswd.setText("");
        }
        catch(SQLException h){
            h.printStackTrace();
        }
    }

}

));

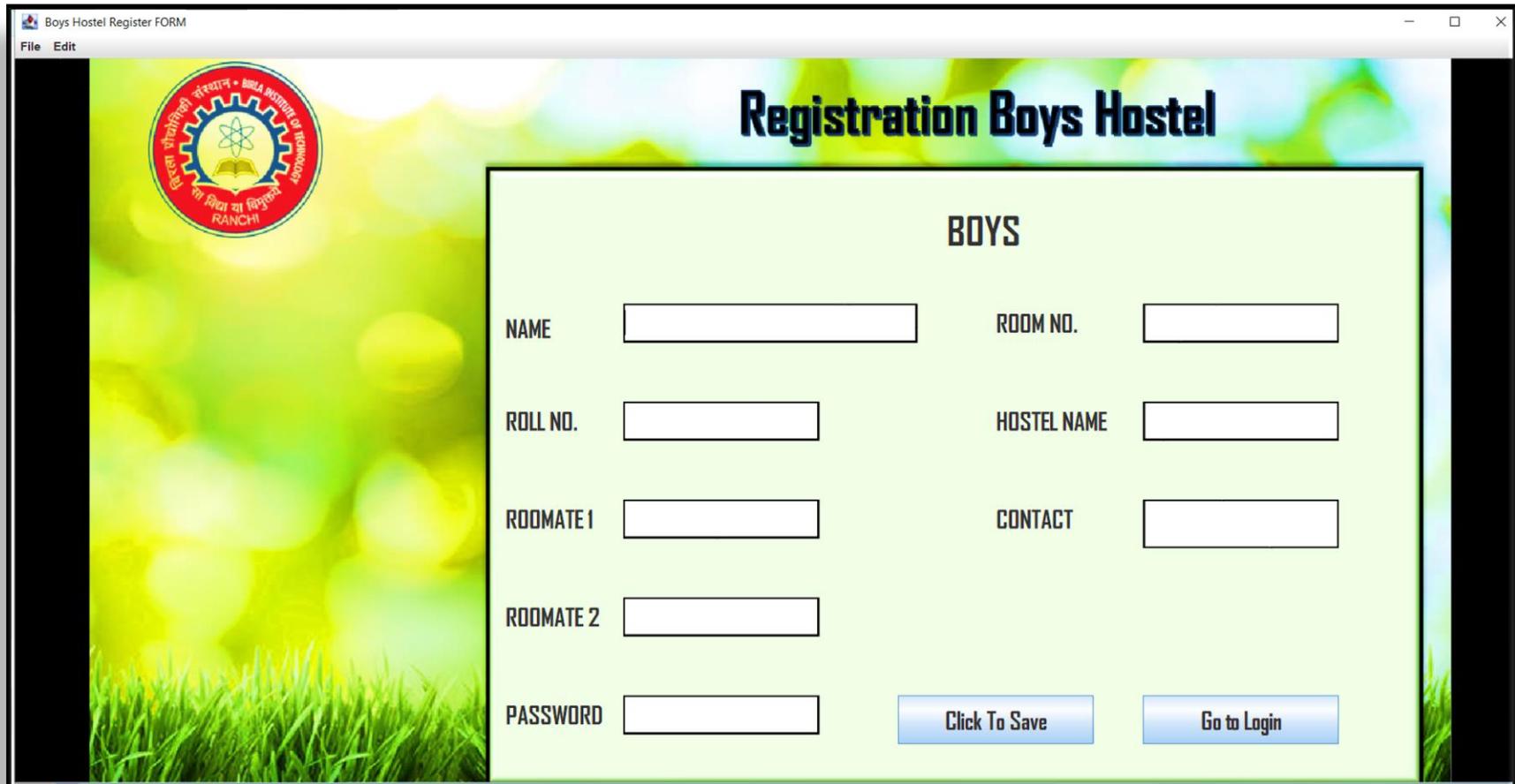
}

public static void main(String[] args) {
    new loginboys();
}
}

```

# Boys Hostel Register Page

This is registration page for Boys Hostel Module:



## Code For Boys Hostel Register Page

```
package maincodes;
import javax.swing.*;
import javax.swing.border.Border;
import java.awt.event.*;
import java.awt.*;
import java.sql.*;
class boysHostelregister extends JFrame{

    public static Container h;
    public static JLabel Name,Roomno,Rno,Hostelname,R1,R2,label,Contact,Password;
    public static JTextField name,roomno,rno,hostelname,r1,r2,contact;

    public static JButton register,gotologin;
    public static JPasswordField pswd;
    static final String DB_URL = "jdbc:mysql://localhost:3306/boys_hostel_module";
    static final String USER = "root";
    static final String PASS = "";
    Connection conn;
    Statement st;
    public boysHostelregister() {
        setTitle(" Boys Hostel Register FORM");
        setSize(1590,800);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        h=getContentPane();
        setLayout(new BorderLayout());
        h.setBackground(Color.BLACK);

        JLabel c=new JLabel(new ImageIcon("maincodes/images/boysregister.png"));
        h.add(c);
```

```
Font font=new Font("Century Schoolbook",Font.BOLD,20);
Font font2=new Font("Agency FB",Font.BOLD,25);
Border br=BorderFactory.createLineBorder(Color.BLACK,2);
label=new JLabel("BOYS");
label.setFont(new Font("Agency FB",Font.BOLD,40));
label.setBounds(950,150,300,50);
Name=new JLabel("NAME");
name=new JTextField("");
Name.setBounds(500,250,120,50);
Name.setFont(font2);
name.setBounds(620,250,300,40);
name.setFont(font);
Roomno=new JLabel("ROOM NO.");
roomno=new JTextField("");
Roomno.setBounds(1000,250,200,40);
Roomno.setFont(font2);
roomno.setBounds(1150,250,200,40);
roomno.setFont(font);
Rno=new JLabel("ROLL NO.");
rno=new JTextField("");
Rno.setBounds(500,350,200,40);
Rno.setFont(font2);
rno.setBounds(620,350,200,40);
rno.setFont(font);
Hostelname=new JLabel("HOSTEL NAME");
hostelname=new JTextField("");
Hostelname.setBounds(1000,350,200,40);
Hostelname.setFont(font2);
hostelname.setBounds(1150,350,200,40);
hostelname.setFont(font);
Contact=new JLabel("CONTACT");
contact=new JTextField("");
Contact.setBounds(1000,450,200,40);
Contact.setFont(font2);
contact.setBounds(1150,450,200,50);
contact.setFont(font);
R1=new JLabel("ROOMATE 1");
r1=new JTextField("");
R1.setBounds(500,450,100,40);
R1.setFont(font2);
r1.setBounds(620,450,200,40);
r1.setFont(font);
R2=new JLabel("ROOMATE 2");
r2=new JTextField("");
R2.setFont(font2);
R2.setBounds(500,550,100,40);
r2.setBounds(620,550,200,40);
r2.setFont(font);
Password=new JLabel("PASSWORD");
pswd=new JPasswordField("");
Password.setFont(font2);
pswd.setFont(font);
Password.setBounds(500,650,100,40);
pswd.setBounds(620,650,200,40);
register =new JButton("Click To Save");
register.setFont(font2);
register.setBounds(900,650,200,50);
gotologin =new JButton("Go to Login");
gotologin.setFont(font2);
gotologin.setBounds(1150,650,200,50);
pswd.setBorder(br);
contact.setBorder(br);
hostelname.setBorder(br);
name.setBorder(br);
r1.setBorder(br);
rno.setBorder(br);
roomno.setBorder(br);
r2.setBorder(br);
Cursor cur=new Cursor(Cursor.HAND_CURSOR);
register.setCursor(cur);
```

```

gotologin.setCursor(cur);
c.add(label);
c.add(gotologin);
c.add(register);
c.add>Password();
c.add(pswd);
c.add(R1);
c.add(r1);
c.add(R2);
c.add(r2);
c.add(contact);
c.add(Contact);
c.add(hostname);
c.add(Hostname);
c.add(Rno);
c.add(rno);
c.add(roomno);
c.add(Roomno);
c.add(Name);
c.add(name);
JMenuBar menubar1=new JMenuBar();
JMenu file=new JMenu("File");
JMenuItem item1=new JMenuItem("new");
JMenuItem item2=new JMenuItem("open");
JMenuItem item3=new JMenuItem("save");
file.add(item1);
file.add(item2);
file.add(item3);
menubar1.add(file);
JMenu Edit=new JMenu("Edit");
JMenuItem tem1=new JMenuItem("undo");
JMenuItem tem2=new JMenuItem("redu");
JMenuItem tem3=new JMenuItem("cut");
Edit.add(tem1);
Edit.add(tem2);
Edit.add(tem3);
menubar1.add(Edit);
setJMenuBar(menubar1);
setVisible(true);
try {
    conn = DriverManager.getConnection(DB_URL, USER, PASS);
    st = conn.createStatement();
} catch (SQLException e) {
    e.printStackTrace();
}

register.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e) {
        try{
            int count=0;
            String NAME=name.getText();
            String ROOMNO=roomno.getText();
            String RNO=rno.getText();
            String Room1=r1.getText();
            char ch[]=pswd.getPassword();
            String PASSWORD="";
            for(int i=0;i<ch.length;i++){PASSWORD=PASSWORD+ch[i];}
            String CONTACT=contact.getText();
            String HOSTELNAME=hostname.getText();
            String Room2=(r2.getText());
            count=(NAME.length()==0)?count+1:count;
            count=(RNO.length()==0)?count+1:count;
            count=(ROOMNO.length()==0)?count+1:count;
            count=(CONTACT.length()==0)?count+1:count;
            count=(Room1.length()==0)?count+1:count;
            count=(ch.length==0)?count+1:count;
            count=(HOSTELNAME.length()==0)?count+1:count;
            count=(Room2.length()==0)?count+1:count;
        }
    }
}

```

```

        ResultSet res=st.executeQuery("Select Boys_name,rollno from boys where
Boys_name='"+NAME+"' or rollno='"+RNO+"'");
        if(res.next()==true){
            JOptionPane.showMessageDialog(null,"Already Registered Try
Again","Error",JOptionPane.ERROR_MESSAGE);

        }
        else if(count>0){
            JOptionPane.showMessageDialog(null,"FILL THE
FORM PROPERLY","Error",JOptionPane.ERROR_MESSAGE);
        }
        else{
            String x="Insert into
boys(Boys_name,rollno,Roomno,Roommate_1,Roommate_2,Contact,Hostel_name,password)
values('"+NAME+"','"+RNO+"','"+ROOMNO+"','"+Room1+"','"+Room2+"','"+CONTACT+"','"+HOSTELNAME+
"', '"+PASSWORD+"')";
            st.executeUpdate(x);
            JOptionPane.showMessageDialog(null," User Registered
", "Message", JOptionPane.INFORMATION_MESSAGE);
        }
        name.setText("");
        rno.setText("");
        roomno.setText("");
        r1.setText("");
        contact.setText("");
        hostname.setText("");
        pswd.setText("");
        r2.setText("");

    }

    catch(SQLException h){
        h.printStackTrace();
    }

}

});gotologin.addActionListener(new ActionListener(){

@Override
public void actionPerformed(ActionEvent e) {
    loginboys lg=new loginboys();
    setVisible(false);
    lg.setVisible(true);

}

});

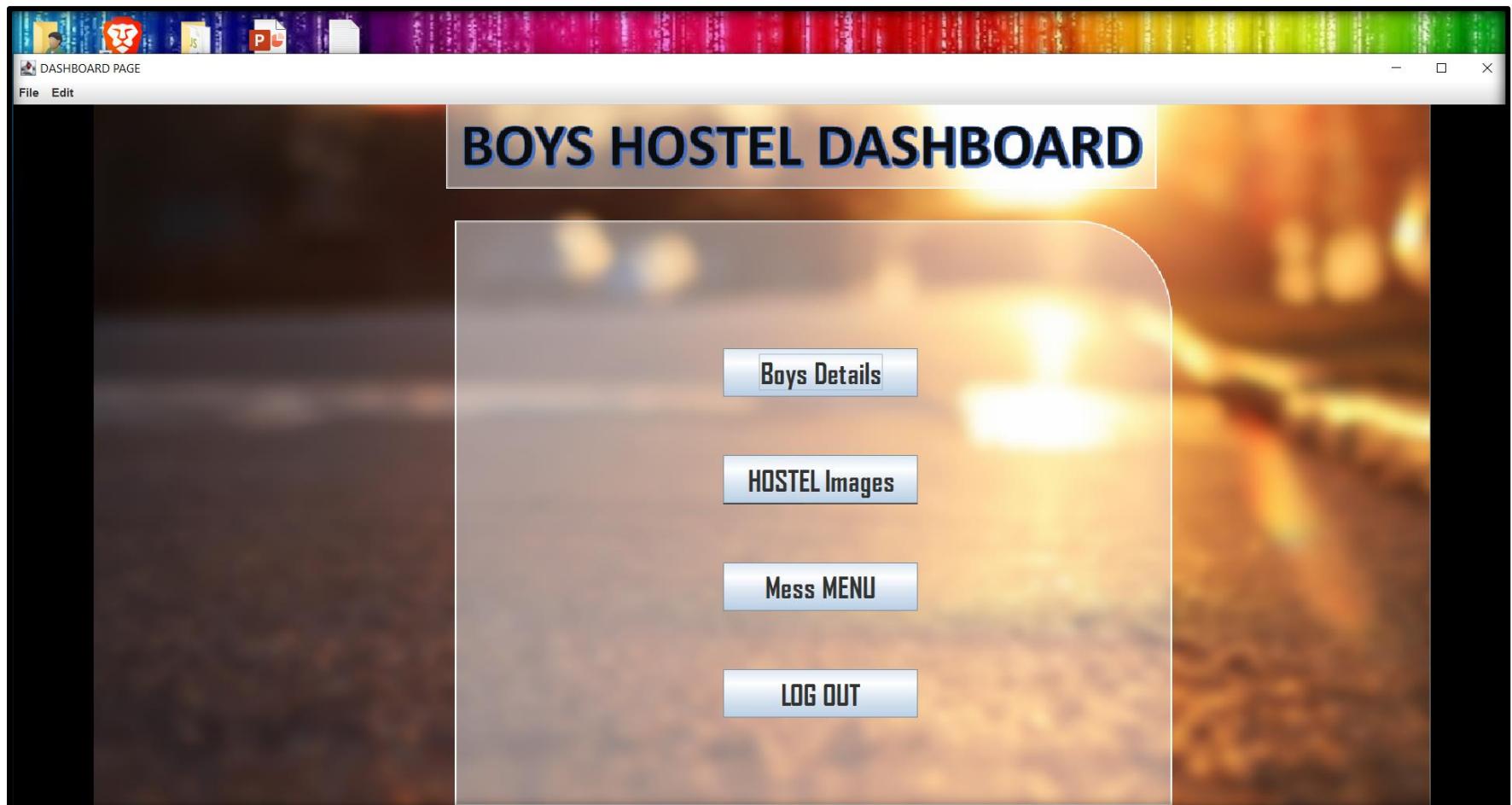
}

public static void main(String[] args) {
    new boysHostelregister();
}
}

```

# Boys Hostel Dashboard Page

This is dashboard of boys Hostel.



## Code For Boys Hostel Dashboard Page

```
package maincodes;

import javax.swing.*;
import java.awt.event.*;
import java.awt.event.ActionEvent;
import java.awt.*;
class BoysHosteldashboard extends JFrame{
    public static Container h;
    public static JButton std,logout,hostelimages,mess_menu;
    public static JLabel wel;
    static String nn,rnn;
    public BoysHosteldashboard(String NAME){
        nn=NAME;

        setTitle("DASHBOARD PAGE");
        setSize(1590,800);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        h=getContentPane();
        setLayout(new BorderLayout());
        h.setBackground(Color.BLACK);
        JLabel c=new JLabel(new ImageIcon("maincodes/images/boyshosteldashboard.PNG"));
        h.add(c);
        Font font2=new Font("Agency FB",Font.BOLD,30);
        Cursor cur=new Cursor(Cursor.HAND_CURSOR);
        JMenuBar menubar1=new JMenuBar();
        JMenu file=new JMenu("File");
        JMenuItem item1=new JMenuItem("new");
        JMenuItem item2=new JMenuItem("open");
        JMenuItem item3=new JMenuItem("save");
        file.add(item1);
        file.add(item2);
```

```

file.add(item3);
menubar1.add(file);
JMenu Edit=new JMenu("Edit");
JMenuItem tem1=new JMenuItem("undo");
JMenuItem tem2=new JMenuItem("redu");
JMenuItem tem3=new JMenuItem("cut");
Edit.add(tem1);
Edit.add(tem2);
Edit.add(tem3);
menubar1.add(Edit);
setJMenuBar(menubar1);
std=new JButton("Boys Details");
std.setBounds(730,250,200,50);
std.setFont(font2);
hostelimages=new JButton("HOSTEL Images");
hostelimages.setBounds(730,360,200,50);
hostelimages.setFont(font2);
mess_menu=new JButton("Mess MENU");
mess_menu.setBounds(730,470,200,50);
mess_menu.setFont(font2);
logout=new JButton("LOG OUT");
logout.setBounds(730,580,200,50);
logout.setFont(font2);
std.setCursor(cur);
hostelimages.setCursor(cur);
mess_menu.setCursor(cur);
logout.setCursor(cur);
c.add(std);
c.add(hostelimages);
c.add(mess_menu);
c.add(logout);
setVisible(true);
mess_menu.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e) {
        messMenu jj=new messMenu(NAME);
        setVisible(false);
        jj.setVisible(true);
    }
});

std.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e) {
        boysDetails ogg=new boysDetails(NAME);
        setVisible(false);
        ogg.setVisible(true);
    }
});

hostelimages.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e) {
        hostelimages ogg=new hostelimages(NAME);
        setVisible(false);
        ogg.setVisible(true);
    }
});

logout.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e) {
        loginboys oj=new loginboys();
        setVisible(false);
        oj.setVisible(true);
    }
});

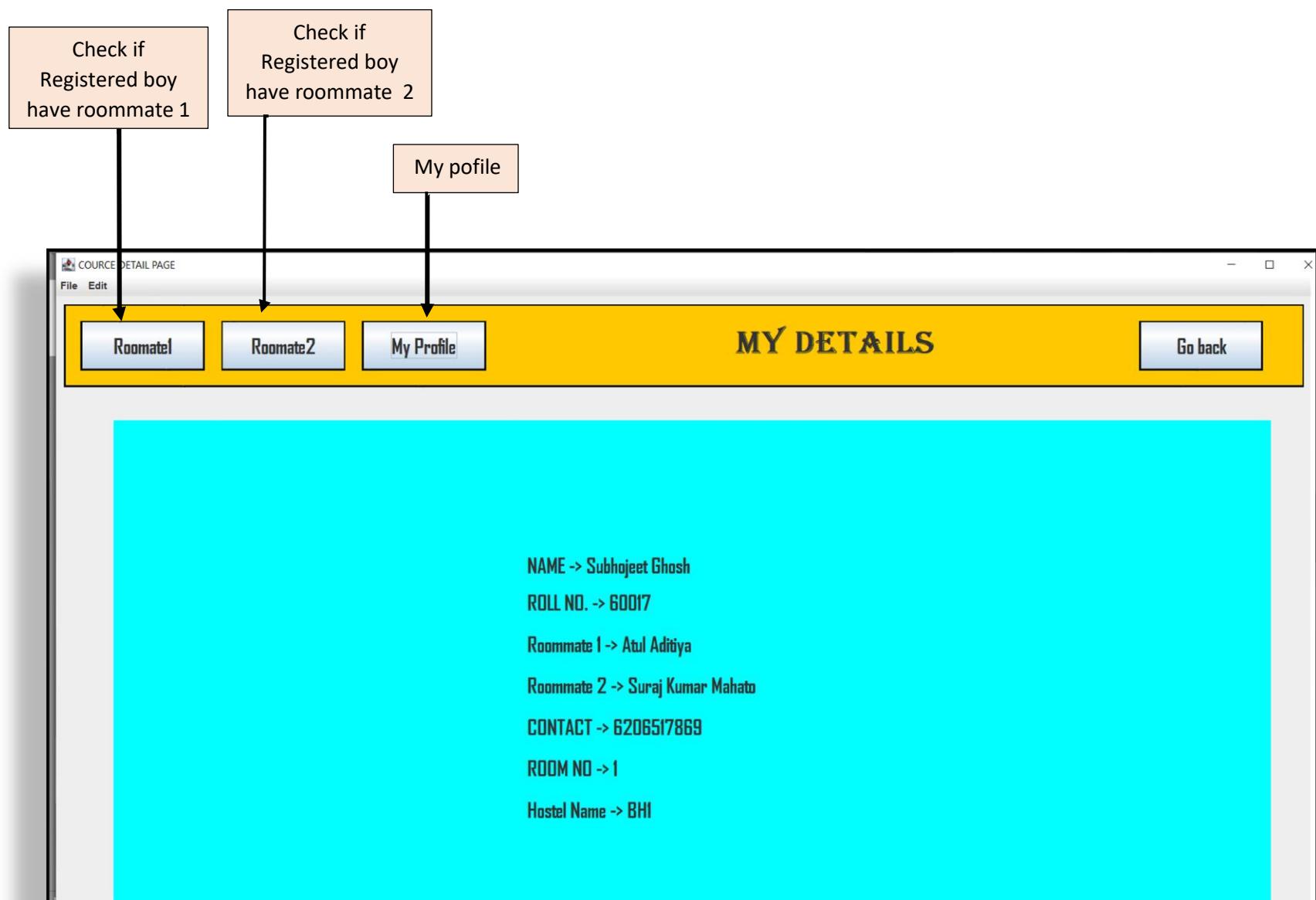
});

}

public static void main(String[] args) {
    new BoysHosteldashboard("");
}
}

```

# Boys Details Page



# Code For Boys Details

## Page

```
import javax.swing.*;
import javax.swing.border.Border;
import javax.swing.table.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
class boysDetails extends JFrame{
    public static JLabel c;
    public static JTable table;
    public static JScrollPane scrollPane;
    public static DefaultTableModel model;
    public static DefaultTableCellRenderer cellRenderer;
    public static Container h;
    public static JButton roomate1,roomate2,showmy,goback;
    public static JLabel name,rno,r1,r2,rno1,hn,contact,cc;
    public static JLabel label;
    static final String DB_URL = "jdbc:mysql://localhost:3306/boys_hostel_module";
    static final String USER = "root";
    static final String PASS = "";
    static public Object[][][]data;
    public static boolean status;
    Connection conn;
    Statement st;
    public static String nn;

    public boysDetails(String NAME){
        nn=NAME;
        setTitle("COURSE DETAIL PAGE");
        setSize(1590,800);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        Font font2=new Font("Agency FB",Font.BOLD,25);
        Font font=new Font("Algerian",Font.BOLD,40);
        h=getContentPane();

        setBackground(Color.CYAN);
        JMenuBar menubar1=new JMenuBar();
        JMenu file=new JMenu("File");
        JMenuItem item1=new JMenuItem("new");
        JMenuItem item2=new JMenuItem("open");
        JMenuItem item3=new JMenuItem("save");
        file.add(item1);
        file.add(item2);
        file.add(item3);
        menubar1.add(file);
        JMenu Edit=new JMenu("Edit");
        JMenuItem tem1=new JMenuItem("undo");
        JMenuItem tem2=new JMenuItem("redu");
        JMenuItem tem3=new JMenuItem("cut");
        Edit.add(tem1);
        Edit.add(tem2);
        Edit.add(tem3);
        menubar1.add(Edit);
        setJMenuBar(menubar1);
        setLayout(null);

        try {
            conn = DriverManager.getConnection(DB_URL, USER, PASS);
            st = conn.createStatement();
        } catch (SQLException e) {

            e.printStackTrace();
        }
        JPanel panel=new JPanel();
        panel.setLayout(null);
        panel.setBounds(10,10,1500,100);
        panel.setBackground(Color.ORANGE);
        Border br=BorderFactory.createLineBorder(Color.BLACK,2);
        panel.setBorder(br);
```

```

roomate1=new JButton("Roomate1");
roomate1.setBounds(20,20,150,60);
roomate1.setBorder(br);
roomate1.setFont(font2);
panel.add(roomate1);
roomate2=new JButton("Roomate2");
roomate2.setBounds(190,20,150,60);
roomate2.setBorder(br);
roomate2.setFont(font2);
panel.add(roomate2);
showmy=new JButton("My Profile");
showmy.setBounds(360,20,150,60);
showmy.setBorder(br);
showmy.setFont(font2);
panel.add(showmy);

label=new JLabel(" MY DETAILS ");
label.setBounds(800,20,500,60);
label.setFont(font);
panel.add(label);
goback=new JButton("Go back");
goback.setBounds(1300,20,150,60);
goback.setBorder(br);
goback.setFont(font2);
panel.add(goback);
h.add(panel);
setVisible(true);
roomate2.addActionListener(new ActionListener(){

    @Override
    public void actionPerformed(ActionEvent e) {
        try{
            conn = DriverManager.getConnection(DB_URL, USER, PASS);
            st = conn.createStatement();
            String query="Select Roommate_2 from boys where Boys_name='"+NAME+"'";
            ResultSet res=st.executeQuery(query);
            String romm1="";
            if(res.next()){
                romm1=res.getString("Roommate_2");
            }
            if(romm1.length()==0){
                JOptionPane.showMessageDialog(null,"You Dont Have Roommate 2 or he must have not registered","Error",JOptionPane.ERROR_MESSAGE);
            }
            else{
                String q2="Select * from boys where Boys_name='"+romm1+"'";
                res=st.executeQuery(q2);
                if(res.next()==false){
                    JOptionPane.showMessageDialog(null,"Can't find Details","Error",JOptionPane.ERROR_MESSAGE);
                }
                else{
                    JPanel panel2=new JPanel();
                    panel2.setLayout(new BorderLayout());
                    panel2.setBounds(70,150,1400,600);
                    h.add(panel2);
                    panel2.setBackground(Color.green);
                    String Name="",Rno="",ROOM="",CONTACT="",HOSTELNAME="";
                    String query3="Select * from boys where Boys_name='"+romm1+"'";
                    ResultSet res3=st.executeQuery(query3);
                    if(res3.next()){
                        Name=res3.getString("Boys_name");
                        Rno=res3.getString("rollno");
                        CONTACT=res3.getString("Contact");
                        ROOM=res3.getString("RoomNo");
                        HOSTELNAME=res3.getString("Hostel_name");
                    }
                }
            }
        }
        name=new JLabel("NAME -> "+Name);
        name.setBounds(500,150,400,50);
        name.setFont(font2);
        rno=new JLabel("ROLL NO. -> "+Rno);
        rno.setBounds(500,200,400,40);
        rno.setFont(font2);
        contact=new JLabel("CONTACT -> "+CONTACT);
        contact.setBounds(500,250,400,40);
        contact.setFont(font2);
        rno1=new JLabel("ROOM NO -> "+ROOM);
        rno1.setBounds(500,300,250,40);
        rno1.setFont(font2);
    }
}

```

```

hn=new JLabel("Hostel Name -> "+HOSTELNAME);
hn.setFont(font2);
hn.setBounds(500,350,250,40);
cc=new JLabel("");
cc.setFont(font2);
cc.setBounds(500,400,250,40);
panel2.add(name);
panel2.add(rno);
panel2.add(contact);
panel2.add(rno1);
panel2.add(hn);
panel2.add(cc);

setVisible(true);

}

}

}

catch(SQLException d){
d.printStackTrace();
}

}

};

roomate1.addActionListener(new ActionListener(){

@Override
public void actionPerformed(ActionEvent e) {
try{
conn = DriverManager.getConnection(DB_URL, USER, PASS);
st = conn.createStatement();
String query="Select Roommate_1 from boys where Boys_name='"+NAME+"' ";
ResultSet res=st.executeQuery(query);
String romm1="";
if(res.next()){
romm1=res.getString("Roommate_1");
}
if(romm1.length()==0){
JOptionPane.showMessageDialog(null,"You Dont Have Roommate 1 or he must have not
registered","Error",JOptionPane.ERROR_MESSAGE);
}
else{
String q2="Select * from boys where Boys_name='"+romm1+"' ";
res=st.executeQuery(q2);
if(res.next()==false){
JOptionPane.showMessageDialog(null,"Can't find
Details","Error",JOptionPane.ERROR_MESSAGE);
}
else{
JPanel panel2=new JPanel();
panel2.setLayout(new BorderLayout());
panel2.setBounds(70,150,1400,600);
h.add(panel2);
panel2.setBackground(Color.green);
String Name="",Rno="",ROOM="",CONTACT="",HOSTELNAME="";
String query3="Select * from boys where Boys_name='"+romm1+"' ";
ResultSet res3=st.executeQuery(query3);
if(res3.next()){
Name=res3.getString("Boys_name");
Rno=res3.getString("rollno");
CONTACT=res3.getString("Contact");
ROOM=res3.getString("RoomNo");
HOSTELNAME=res3.getString("Hostel_name");
}

name=new JLabel("NAME -> "+Name);
name.setBounds(500,150,400,50);
name.setFont(font2);
rno=new JLabel("ROLL NO. -> "+Rno);
rno.setBounds(500,200,400,40);
rno.setFont(font2);
contact=new JLabel("CONTACT -> "+CONTACT);
contact.setBounds(500,250,400,40);
contact.setFont(font2);
rno1=new JLabel("ROOM NO -> "+ROOM);
rno1.setBounds(500,300,250,40);

```

```

rno1.setFont(font2);
hn=new JLabel("Hostel Name -> "+HOSTELNAME);
hn.setFont(font2);
hn.setBounds(500,350,250,40);
cc=new JLabel("");
cc.setFont(font2);
cc.setBounds(500,400,250,40);
panel2.add(name);
panel2.add(rno);
panel2.add(contact);
panel2.add(rno1);
panel2.add(hn);
panel2.add(cc);

setVisible(true);

}

}

}

catch(SQLException d){
d.printStackTrace();
}

}

});

showmy.addActionListener(new ActionListener(){

@Override
public void actionPerformed(ActionEvent e) {
JPanel panel2=new JPanel();
panel2.setLayout(new BorderLayout());
panel2.setBounds(70,150,1400,600);
h.add(panel2);
panel2.setBackground(Color.CYAN);

String Name="",Rno="",R1="",R2="",ROOM="",CONTACT="",HOSTELNAME="";
try {
conn = DriverManager.getConnection(DB_URL, USER, PASS);
st = conn.createStatement();

String query="Select * from boys where Boys_name='"+NAME+"'";
ResultSet res=st.executeQuery(query);
if(res.next()){
Name=res.getString("Boys_name");
Rno=res.getString("rollno");
R2=res.getString("Roommate_2");
CONTACT=res.getString("Contact");
ROOM=res.getString("RoomNo");
R1=res.getString("Roommate_1");
HOSTELNAME=res.getString("Hostel_name");
}
}

name=new JLabel("NAME -> "+Name);
name.setBounds(500,150,400,50);
name.setFont(font2);
rno=new JLabel("ROLL NO. -> "+Rno);
rno.setBounds(500,200,400,40);
rno.setFont(font2);
r1=new JLabel("Roommate 1 -> "+R1);
r1.setBounds(500,250,400,40);
r1.setFont(font2);
r2=new JLabel("Roommate 2 -> "+R2);
r2.setBounds(500,300,500,40);
r2.setFont(font2);
contact=new JLabel("CONTACT -> "+CONTACT);
contact.setBounds(500,350,400,40);
contact.setFont(font2);
rno1=new JLabel("ROOM NO -> "+ROOM);
rno1.setBounds(500,400,250,40);
rno1.setFont(font2);
hn=new JLabel("Hostel Name -> "+HOSTELNAME);
hn.setFont(font2);
hn.setBounds(500,450,250,40);
cc=new JLabel("");
cc.setFont(font2);
cc.setBounds(500,500,250,40);
panel2.add(name);

```

```

panel2.add(r1);
panel2.add(rno);
panel2.add(contact);
panel2.add(r2);
panel2.add(rno1);
panel2.add(hn);
panel2.add(cc);

setVisible(true);

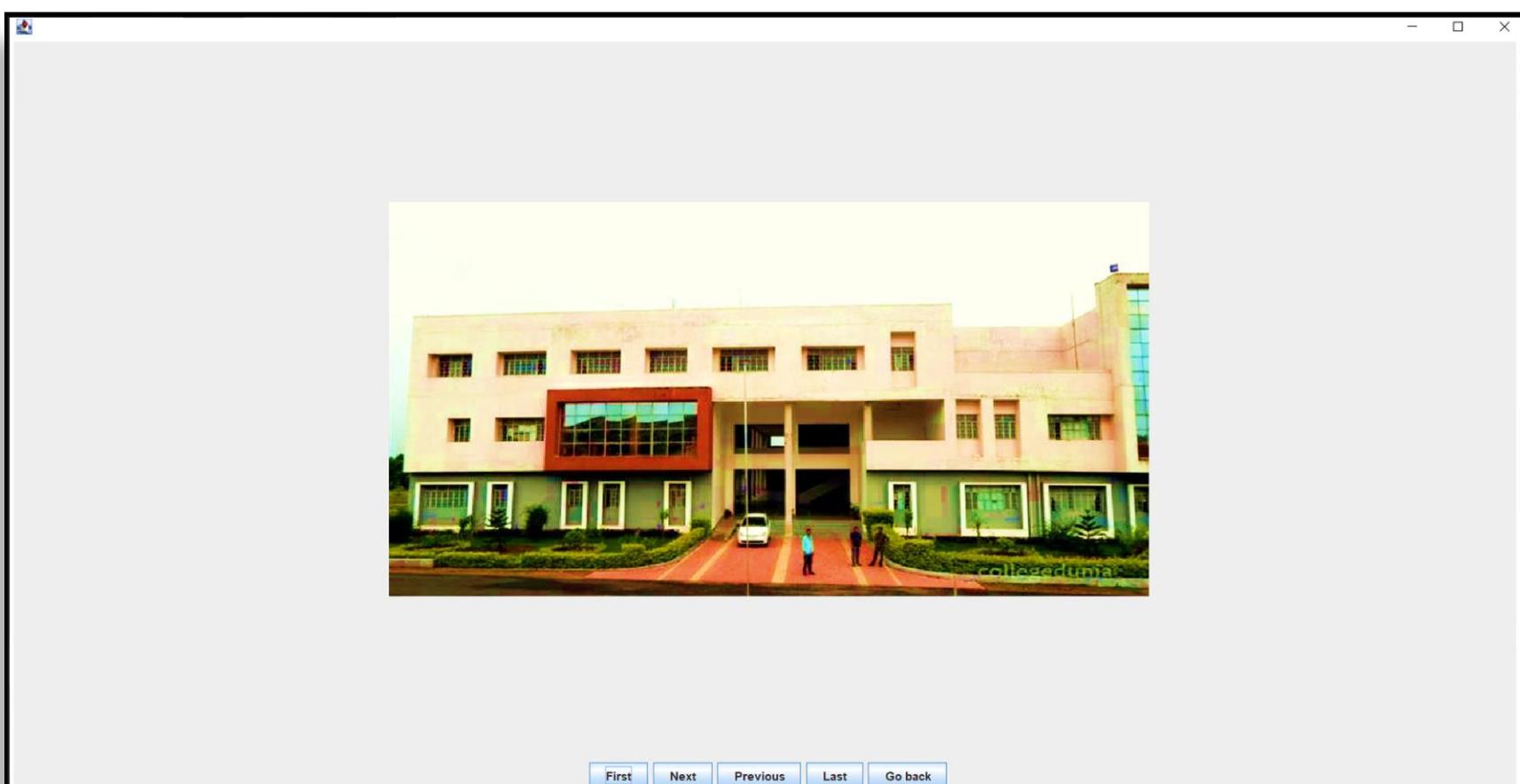
} catch (SQLException k) {
    k.printStackTrace();
}

});

goback.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e) {
        BoysHosteldashboard ox=new BoysHosteldashboard(nn);
        setVisible(false);
        ox.setVisible(true);
    }
});
}
public static void main(String[] args) {
    new boysDetails("");
}
}

```

## Hostel images Page



## Code for Hostel images Page

```
import java.awt.*;
import java.awt.event.*;
import javax.swing.*;

class hostelimages extends JFrame {
    public static Container h;
public hostelimages(String x) {

    final String card1Text = "Card 1";
    final String card2Text = "Card 2";
    final String card3Text = "Card 3";
    final JPanel cards;

    final String FIRST = "FIRST";
    final String NEXT = "NEXT";
    final String PREVIOUS = "PREVIOUS";
    final String LAST = "LAST";

    setSize(1590, 800);
    setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    h= getContentPane();
    JPanel card1 = new JPanel();
    card1.setLayout(new BorderLayout());
    JLabel c=new JLabel(new ImageIcon("maincodes/images/img1.jpg"));
    c.setBounds(20,50,500,500);
    card1.add(c);

    JPanel card2 = new JPanel();
    card2.setLayout(new BorderLayout());
    JLabel c1=new JLabel(new ImageIcon("maincodes/images/img2.jfif"));
    c1.setBounds(20,50,500,500);
    card2.add(c1);

    JPanel card3 = new JPanel();
    card3.add(new JLabel("Card 3"));
    card3.setBackground(new Color(0,0,255));

    cards = new JPanel(new CardLayout());
    cards.add(card1, card1Text);
    cards.add(card2, card2Text);
    cards.add(card3, card3Text);

    class ControlActionListenter implements ActionListener {
        public void actionPerformed(ActionEvent e) {
            CardLayout cl = (CardLayout) (cards.getLayout());
            String cmd = e.getActionCommand();
            if (cmd.equals(FIRST)) {
                cl.first(cards);
            } else if (cmd.equals(NEXT)) {
                cl.next(cards);
            } else if (cmd.equals(PREVIOUS)) {
                cl.previous(cards);
            } else if (cmd.equals(LAST)) {
                cl.last(cards);
            }
        }
    }
    ControlActionListenter cal = new ControlActionListenter();
```

```
 JButton btn1 = new JButton("First");
btn1.setActionCommand(FIRST);
btn1.addActionListener(cal);

 JButton btn2 = new JButton("Next");
btn2.setActionCommand(NEXT);
btn2.addActionListener(cal);

 JButton btn3 = new JButton("Previous");
btn3.setActionCommand(PREVIOUS);
btn3.addActionListener(cal);

 JButton btn4 = new JButton("Last");
btn4.setActionCommand(LAST);
btn4.addActionListener(cal);

 JButton btn5 = new JButton("Go back");
btn5.setActionCommand(LAST);
btn5.addActionListener(cal);

 JPanel controlButtons = new JPanel();
controlButtons.add(btn1);
controlButtons.add(btn2);
controlButtons.add(btn3);
controlButtons.add(btn4);
controlButtons.add(btn5);

 h.add(cards, BorderLayout.CENTER);
 h.add(controlButtons, BorderLayout.PAGE_END);
setVisible(true);
btn5.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e) {
        BoysHosteldashboard oo=new BoysHosteldashboard(x);
        setVisible(false);
        oo.setVisible(true);
    }
});

});

}

public static void main(String[] args) {
    new hostelimages("");
}
}
```

## Mess Menu Page



## Code for Mess Menu Page

```
import java.awt.*;
import java.awt.event.*;
import javax.swing.*;

class hostelimages extends JFrame {
    public static Container h;
    public hostelimages(String x) {

        final String card1Text = "Card 1";
        final String card2Text = "Card 2";
        final String card3Text = "Card 3";
        final JPanel cards;

        final String FIRST = "FIRST";
        final String NEXT = "NEXT";
        final String PREVIOUS = "PREVIOUS";
        final String LAST = "LAST";

        setSize(1590, 800);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        h= getContentPane();
        JPanel card1 = new JPanel();
        card1.setLayout(new BorderLayout());
        JLabel c=new JLabel(new ImageIcon("maincodes/images/img1.jpg"));
        c.setBounds(20,50,500,500);
        card1.add(c);

        JPanel card2 = new JPanel();
        card2.setLayout(new BorderLayout());
        JLabel c1=new JLabel(new ImageIcon("maincodes/images/img2.jfif"));
        c1.setBounds(20,50,500,500);
        card2.add(c1);
```

```

JPanel card3 = new JPanel();
card3.add(new JLabel("Card 3"));
card3.setBackground(new Color(0,0,255));

cards = new JPanel(new CardLayout());
cards.add(card1, card1Text);
cards.add(card2, card2Text);
cards.add(card3, card3Text);

class ControlActionListenter implements ActionListener {
    public void actionPerformed(ActionEvent e) {
        CardLayout cl = (CardLayout)(cards.getLayout());
        String cmd = e.getActionCommand();
        if (cmd.equals(FIRST)) {
            cl.first(cards);
        } else if (cmd.equals(NEXT)) {
            cl.next(cards);
        } else if (cmd.equals(PREVIOUS)) {
            cl.previous(cards);
        } else if (cmd.equals(LAST)) {
            cl.last(cards);
        }
    }
}
ControlActionListenter cal = new ControlActionListenter();

JButton btn1 = new JButton("First");
btn1.setActionCommand(FIRST);
btn1.addActionListener(cal);

JButton btn2 = new JButton("Next");
btn2.setActionCommand(NEXT);
btn2.addActionListener(cal);

JButton btn3 = new JButton("Previous");
btn3.setActionCommand(PREVIOUS);
btn3.addActionListener(cal);

JButton btn4 = new JButton("Last");
btn4.setActionCommand(LAST);
btn4.addActionListener(cal);

JButton btn5 = new JButton("Go back");
btn5.setActionCommand(LAST);
btn5.addActionListener(cal);

JPanel controlButtons = new JPanel();
controlButtons.add(btn1);
controlButtons.add(btn2);
controlButtons.add(btn3);
controlButtons.add(btn4);
controlButtons.add(btn5);

h.add(cards, BorderLayout.CENTER);
h.add(controlButtons, BorderLayout.PAGE_END);
setVisible(true);
btn5.addActionListener(new ActionListener(){

    @Override
    public void actionPerformed(ActionEvent e) {
        BoysHosteldashboard oo=new BoysHosteldashboard(x);
        setVisible(false);
        oo.setVisible(true);
    }
});

}

public static void main(String[] args) {
    new hostelimages("");
}
}

```

**THANK YOU**  
**END OF PROJECT**  
**COMPUTERIZATION OF**  
**BIT DEOGHAR**  
**SUBHOJEET GHOSH**  
**BTECH/60017/19**