DECLARATION

I the undersigned solemnly declare that the report of the project work entitled **"SOLUCIONES"**, is based my own work carried out during the vocational training duration under the supervision of "**MR.SHISHIR KESHARWANI**" from **BIOS Education Raipur**.

I assert that statements made and conclusions drawn are an outcome of the project work. I further declare that to the best of my knowledge and belief that report does not contain any part of any work has been submitted before.

_____

(Signature of the Candidate)

Name of the Candidate: Naman Khard

DECLARATION

I the undersigned solemnly declare that the report of the project work entitled **"SOLUCIONES"**, is based my own work carried out during the vocational training duration under the supervision of "**MR.SHISHIR KESHARWANI**" from **BIOS Education Raipur**.

I assert that statements made and conclusions drawn are an outcome of the project work. I further declare that to the best of my knowledge and belief that report does not contain any part of any work has been submitted before.

_____

(Signature of the Candidate)

Name of the Candidate: Naman Ajmera

CERTIFICATE

This is to certify that the report of the project submitted is an outcome of the project work entitled **"SOLUCIONES"** carried out by Naman Khard and Naman Ajmera carried out under my guidance and supervision for the vocational training project as per university curriculum.

To the best of my knowledge the report

I) Embodies the work of the candidate himself/herself,
II) Has duly been completed,
III) Is up to the desired standard for the purpose of which is submitted.

_____

(Signature of the Guide)

Name: Shishir Kesharwani

Name & Address of the Institute/Organization:
BIOS Education Raipur.

ACKNOWLEDGEMENT

It gives me a great pleasure to express my deep sense of gratitude to the management of **BIOS Education Raipur** for providing me the environment to develop a successful running project in their esteemed organization.

I express my deep sense of respect, gratitude and thanks to my project guide **Shishir Sir** who blessed me with his technical guidance and valuable suggestion to complete this project.

I am also thankful to **Naman Ajmera.**

Finally, I am thankful to all who have helped us directly and indirectly and were instrumental in completing this work.

Thank you,

_____

(Signature of the student)

Name: NAMAN KHARD

ACKNOWLEDGEMENT

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I am also thankful to **Naman Khard.**

Finally, I am thankful to all who have helped us directly and indirectly and were instrumental in completing this work.

Thank you,

_____

(Signature of the student)

Name: NAMAN AJMERA

ABSTRACT

Soluciones is a fully integrated college management software that covers functional areas like Administration, Management etc… This system is used to manage the resource to the fullest extend. The integrated features are Enrolling Employees, Enrolling Students, Providing Notices, Attendance Manager and many more.

The main objective of this project is functional integration. This project aims to store records of college in more efficient manner and to access them at one place. For Example, adding and storing students of data of different branches and semester and making them access at one place where records of employees (faculties) are also viewed in more secured way makes the essential feature of this feature. Not only this, it provides the ease of managing attendance of enrolled students for the employees.

This project focuses to cover and integrate all aspects like Administration , Management for all kinds of users i.e. Admin, Employee and Student.

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1. INTRODUCTION

For any organization, administration is the essential body. It can be called as the brain of our body. Without that, we can't do anything systematically and effectively. If the organization is college then administry becomes very important. To run administration successfully, role of administer matters. His job is crucial and not at all easy. So to lessen the burden of his job we bring Soluciones which provides the complete college solutions (as our tagline tells). Governing body of college is known to be largest after the industrial sector. With 1000-1200 peoples, single person/team manages their role and records in various ways. Our software helps them in more effective and secured manner. Not only this, Administer can interact with employees through notice and similarly employees interacts with the enrolled students. Our software begins with the login of user keeping in mind the security, which is further categorized into three sections:

- Admin Section
- Employee Section
- Student Section

Each section will be having own kind of users which can be accessed by the help of IDs and passwords which will be allotted to them. Further, each section has been provided with essential features and functionalities which will be discussed further.

1.1 TECHNOLOGY USED

- Netbeans IDE 8.2 for Interface Design.
- Microsoft SQL Server 2014 for Back End.

2. MODULES

As described above, Soluciones is for various kinds of users. If the user is admin, then he/she can add or delete employees or students. Not only this, admin can store all personal details and salary details of employees which can be viewed any time. The stored records can be updated further. It can be viewed in form layout or tabular layout for viewing multiple records at a time. If admin wants to inform his employees, he can do by creating notice which will be viewed to all the employees. Since admin will be the main user of our product so he will be having the rights to create login for its employees and students.

If the user is employee, then he will be able to take attendance of his students easily and can generate notice too. Not only this, faculties of respective subjects can give their assignments to their students which will be sent to their id.

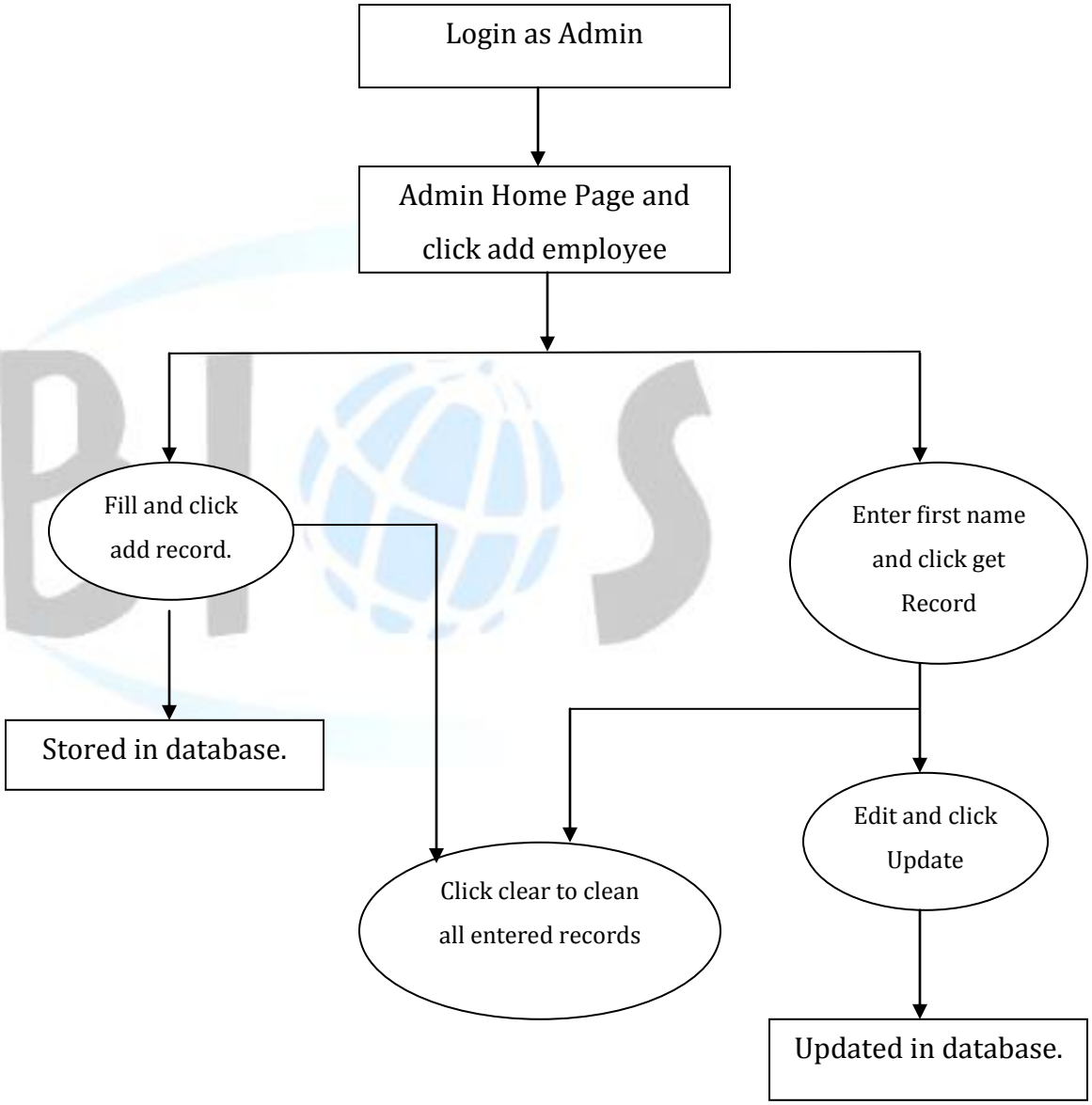
And for students, they can view their attendance and assignments for the enrolled subjects provided by their teachers.

The following modules are:

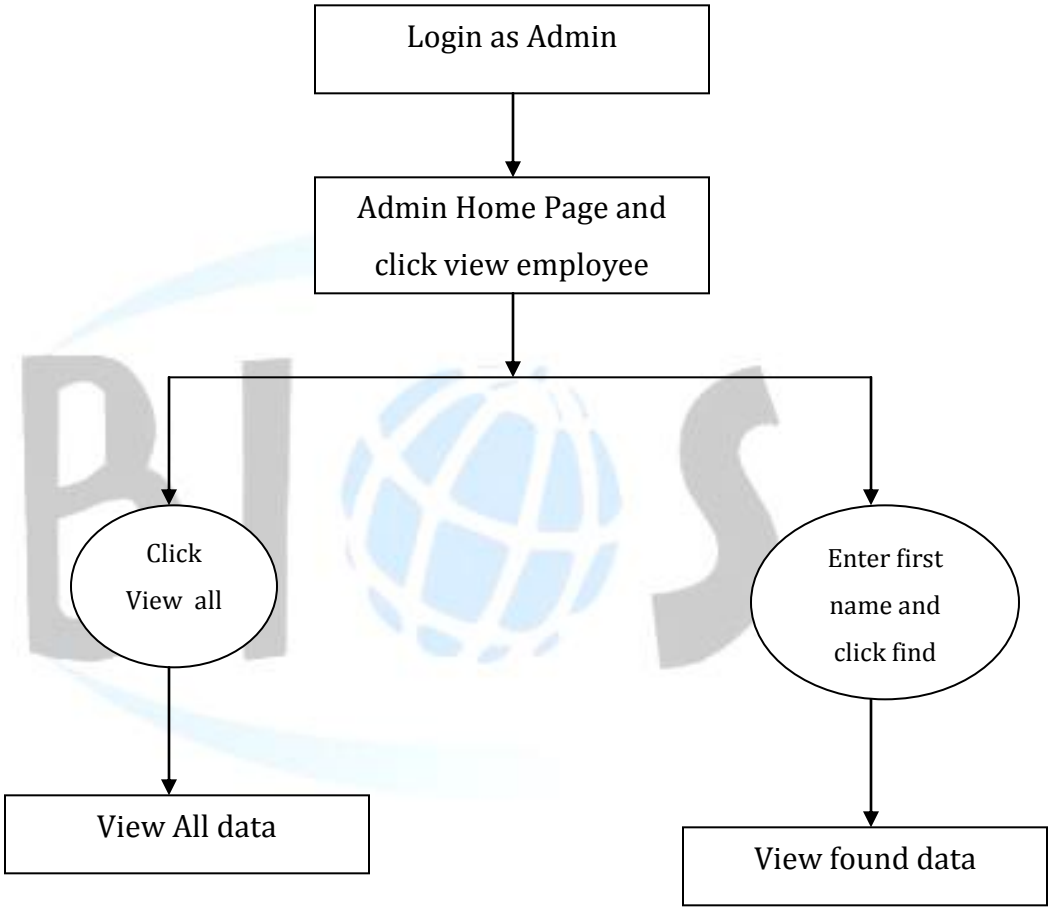
- Login Page
- Admin Section
    (1) Add/Update Employee
    (2) View Employee
    (3) Notice
    (4) Add Student
    (5) View Student
    (6) Create Login
- Employee Section
    (1) Create Attendance
    (2) View Admin's Notice
    (3) Add Student Notice
    (4) Take Attendance
    (5) Add Assignments
    (6) View Assignments
- Student Section
    (1) View Attendance
    (2) View Assignments
    (3) View Notice
    (4) Helpline

3. FUNCTIONAL FLOW DIAGRAM or DATA FLOW DIAGRAM

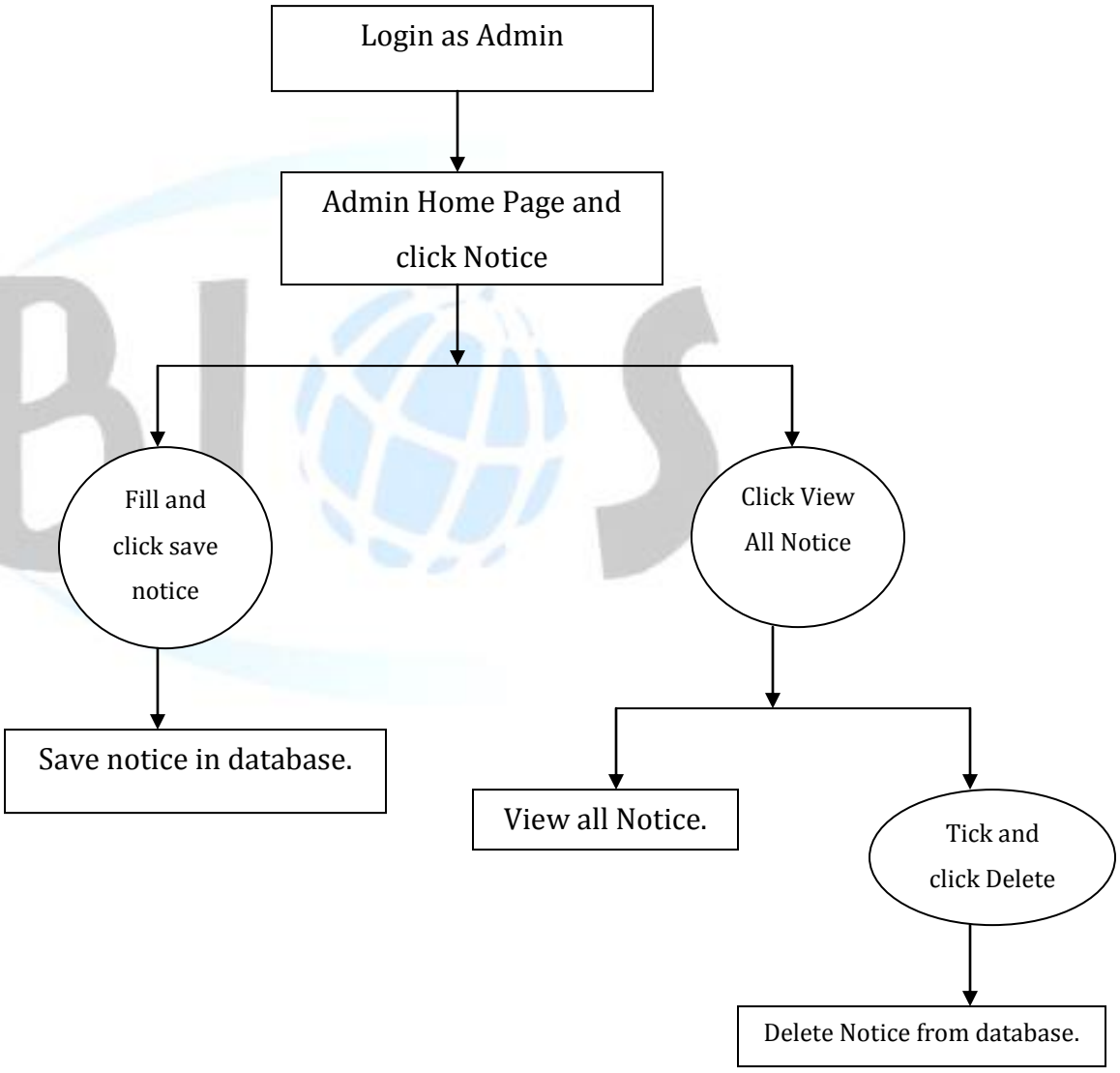
3.1 Add/Update Employee



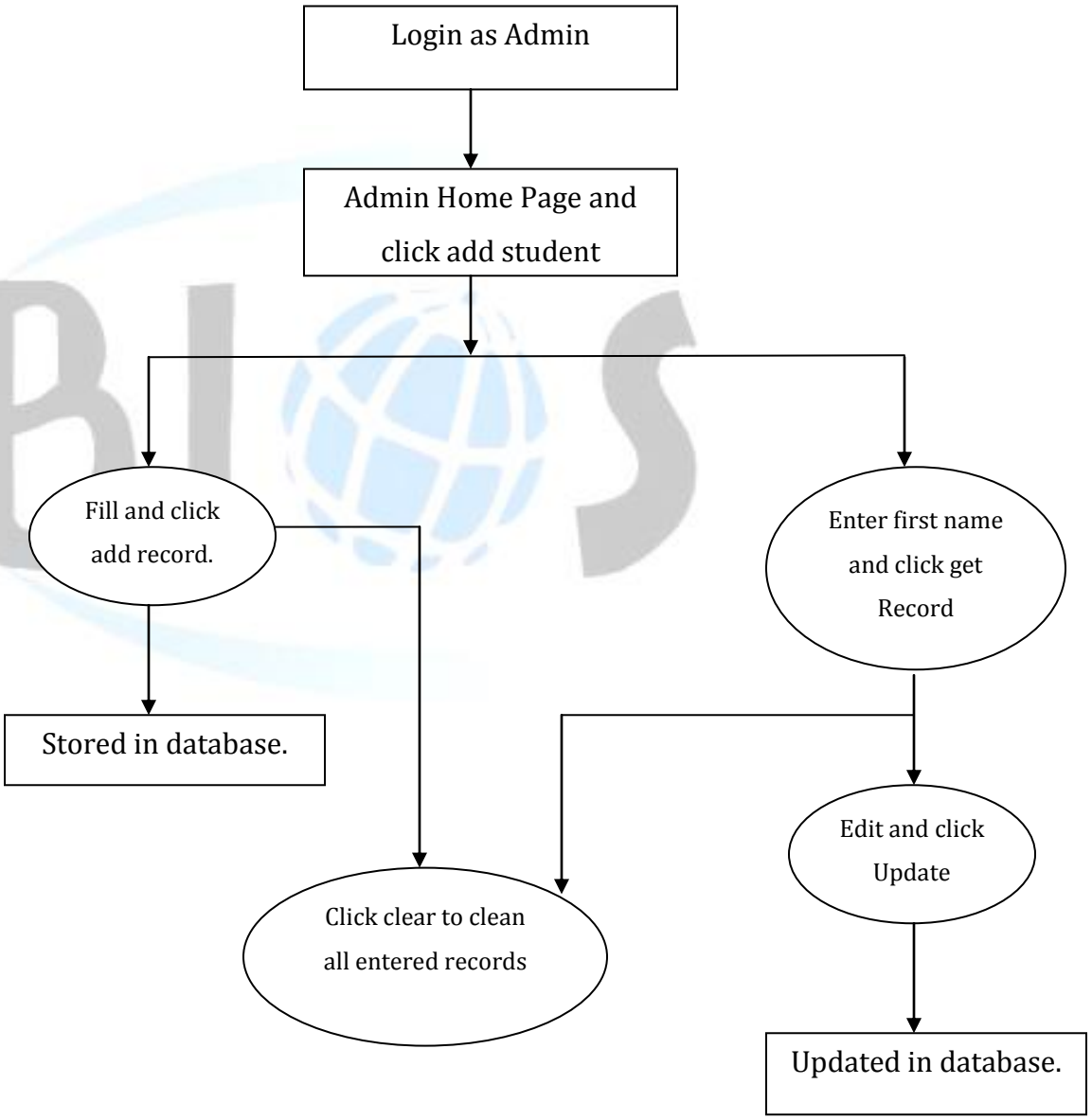
3.2 View Employee



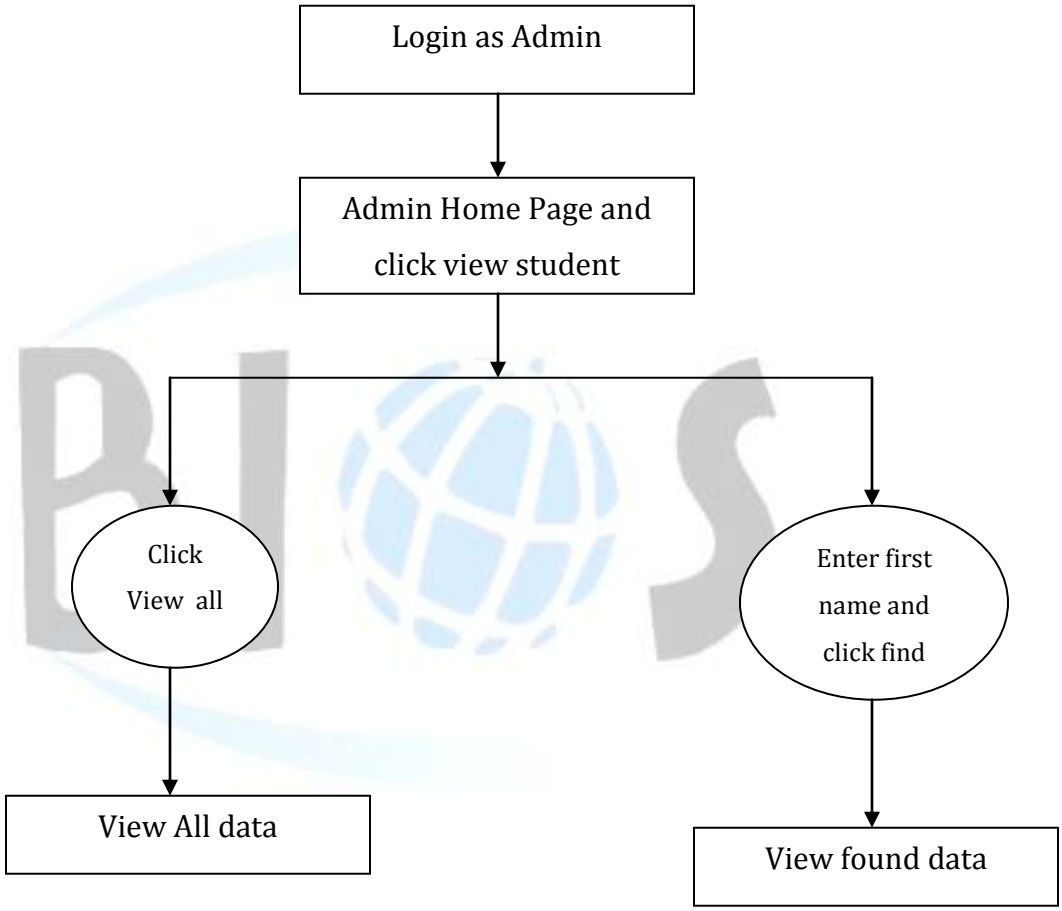
3.3 Notice


Login as Admin
Admin Home Page and click Notice
Fill and click save notice
Save notice in database.
Click View All Notice
View all Notice.
Tick and click Delete
Delete Notice from database.

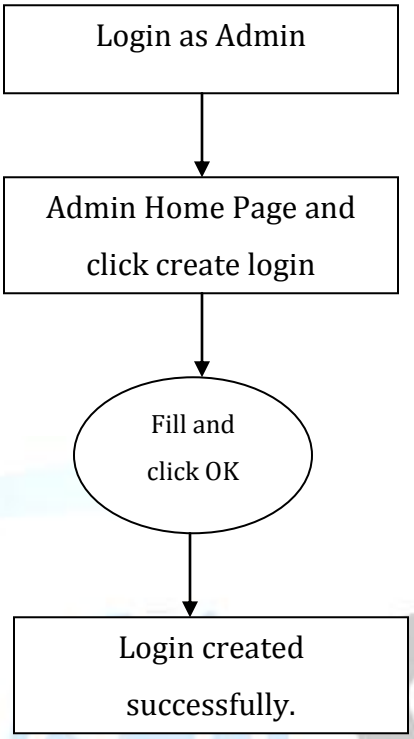
3.4 Add/Update Students



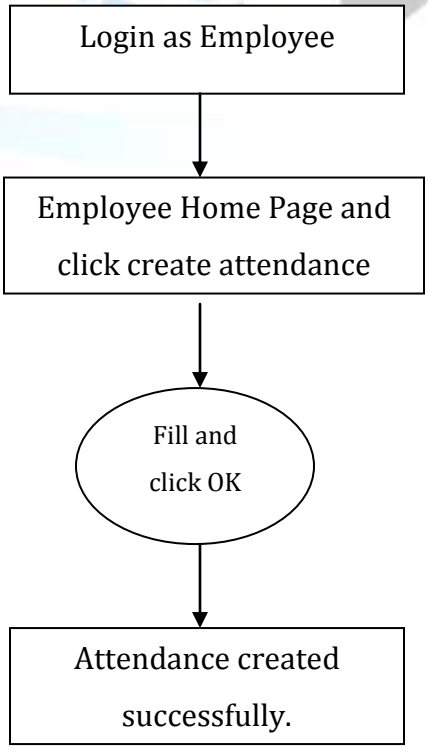
3.5 View Student



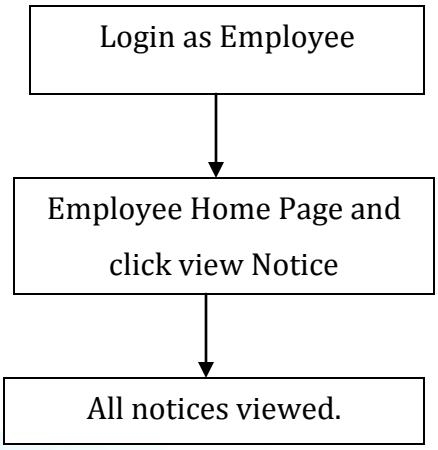
3.6 Create Login



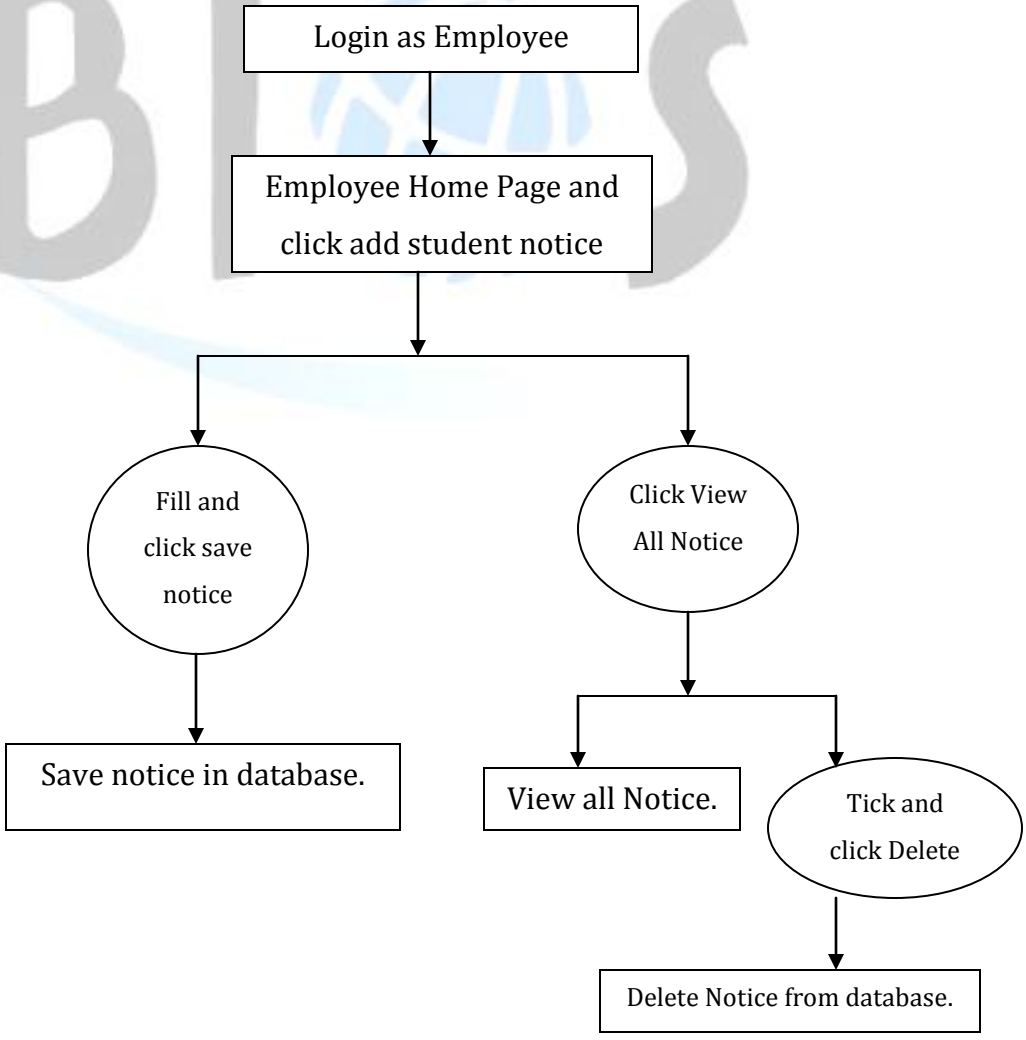
3.7 Create Attendance



3.8 View Employee Notice



3.9 Add/View Student Notice



4. MODULE DESCRIPTION

4.1 Login Page

When application is launched, login page appears first since this is a multi-user application. In this admin will give id and password which will be provided by us. For employees and users, admin can generate for them. This will give more professionalism and enhances the security. Apart from ID and password, one more field is provided which is 'user type' to avoid ambiguous login. Once successfully logged in, you will be redirected to respective home page.

4.2 Admin Section

Once admin successfully logged in, welcome/home page appears. Through this page, he can successfully add students/employees and view them too. He can generate notice for employees and create login for employees and students too. When admin is adding students or employees, he will be asked to fill all fields such as first name, last name etc.. which will be mandatory. Once filled, he has to click at 'add record' button. On clicking, he will be asked to save image of the enroller which is also mandatory. Once submitting this, it will be saved in database which can be accessed or updated further.

View Employee allows the admin to view all details of employee including salary and designation at a time. This is much more convenient. Not only this, he can also find particular employee while in view students he can access all his personal details along with the enrolling details.

Notice can be generated for the employees to inform about certain events or informing them about the happenings of college by which employees can keep themselves updated. At last admin can create login for employees and students which are enrolled or particular of this college. But the admin can't keep the track of existed id's and password, this is because we feel

insecure. Suppose one can steal all credentials of admin then all of the users' data are in threat so to avoid this situation we didn't provided this feature yet.

4.3 Employee Section

Once employee logged in successfully, welcome/home appears. Through this he can take attendance of students, Can add/view or delete assignments, can generate notice for students and can view notice given by admin.

To bring attendance functionality, we have 'create attendance' section. In this section, for all the students enrolled in various branch and semester, new attendance is created. In this employee needs to provide name, roll no is automatically allotted in sequence, branch and semester needs to be provided. Once filling this, he/she needs to click on 'get Subjects' by which all subjects of particular branch and semester will be appeared in the combo boxes. Employee needs to select all the subjects. The purpose of doing this is each subject name will have unique and distinct subject code/id which will be used further in taking attendance. After doing completing this, he needs to click 'OK'. Once attendance is created successfully, employee needs to go back and go to 'Take Attendance'. There he needs to give his teaching id which he will get once he joins this college. Once id has been given, he can get all subjects by clicking 'get Subjects', it will return all those subjects in combo box which are linked with teaching id. On selecting them, he will click at 'take attendance' where attendance register will be opened. On opening he can successfully take attendance of his students. Not only this, he can access them further too for future reference.

Employee can give assignments too their students which will be made view in student id. Not only this, employee can delete multiple and old assignments whose due date has been passed in single click. In our opinion attendance and assignments are essential feature for any college management software, hence we provided this too.

Last but not least, employee can add notices for students which can be further deleted only by employee, students can only view them. Same functionality is provided in notice of admin section too.

4.4 Student Section

Once student is successfully logged in, welcome/home page appears. Through this page, he can only view attendance, view assignments, view notice provided by employee and helpline in case of emergency.

5. TECHNICAL DESCRIPTION

5.1 SYSTEM REQUIREMENTS:-

5.1.1 Software Requirements:-

- Netbeans IDE 8.2 (JDK 1.8)
- JDBC 6.4
- Microsoft SQL Server Management Studio 2014

5.1.2 Hardware Requirements:-

- Processor with at least 2.0 GHz.
- Screen Resolution of at least 800x600 pixels.
- Minimum 3GB RAM.
- 256 MB free disk space.

6. CODING

As a courtesy, here we are providing coding of some popular modules.

- **Login Page**

```
package erp;
import java.awt.Toolkit;
import java.sql.*;
import javax.swing.JOptionPane;
public class LoginPage extends javax.swing.JFrame {

  public LoginPage() {
     initComponents();
     setIcon();
     setLocationRelativeTo(null);
      jLabel3.setVisible(false);
      jLabel5.setVisible(false);
      jLabel7.setVisible(false);
      jComboBox1.setSelectedItem(null);

  }
  private void initComponents() {

     jMenu3 = new javax.swing.JMenu();
     jMenuItem1 = new javax.swing.JMenuItem();
     jMenuItem3 = new javax.swing.JMenuItem();
     jMenuItem5 = new javax.swing.JMenuItem();
```

```
jMenuItem6 = new javax.swing.JMenuItem();
jLabel1 = new javax.swing.JLabel();
jPanel1 = new javax.swing.JPanel();
jLabel2 = new javax.swing.JLabel();
jTextField1 = new javax.swing.JTextField();
jLabel3 = new javax.swing.JLabel();
jLabel4 = new javax.swing.JLabel();
jLabel5 = new javax.swing.JLabel();
jButton2 = new javax.swing.JButton();
jButton5 = new javax.swing.JButton();
jPasswordField1 = new javax.swing.JPasswordField();
jLabel6 = new javax.swing.JLabel();
jLabel7 = new javax.swing.JLabel();
jComboBox1 = new javax.swing.JComboBox<>();
jLabel8 = new javax.swing.JLabel();
jProgressBar1 = new javax.swing.JProgressBar();
jMenuBar1 = new javax.swing.JMenuBar();
jMenu1 = new javax.swing.JMenu();
jMenuItem2 = new javax.swing.JMenuItem();
jMenu2 = new javax.swing.JMenu();
jMenu4 = new javax.swing.JMenu();
jMenuItem4 = new javax.swing.JMenuItem();
jMenuItem7 = new javax.swing.JMenuItem();

jMenu3.setText("jMenu3");

jMenuItem1.setText("jMenuItem1");
```

```
jMenuItem3.setText("jMenuItem3");

jMenuItem5.setText("jMenuItem5");

jMenuItem6.setText("jMenuItem6");

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
setTitle("Login Page");
setBackground(new java.awt.Color(102, 0, 153));

jLabel1.setFont(new java.awt.Font("Tahoma", 1, 24)); // NOI18N
jLabel1.setText("LOGIN");
jLabel1.setHorizontalTextPosition(javax.swing.SwingConstants.CENTER);

jLabel2.setText("ID:");

jLabel3.setForeground(new java.awt.Color(255, 0, 0));
jLabel3.setText("*");

jLabel4.setText("PASSWORD:");

jLabel5.setForeground(new java.awt.Color(255, 0, 0));
jLabel5.setText("*");

jButton2.setText("LOGIN");
jButton2.addActionListener(new java.awt.event.ActionListener() {
   public void actionPerformed(java.awt.event.ActionEvent evt) {
      jButton2ActionPerformed(evt);
```

```
        }
    });

    jButton5.setText("CANCEL");
    jButton5.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton5ActionPerformed(evt);
        }
    });

    jPasswordField1.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jPasswordField1ActionPerformed(evt);
        }
    });

    jLabel6.setText("USER IS:");

    jLabel7.setForeground(new java.awt.Color(255, 0, 0));
    jLabel7.setText("*");

    jComboBox1.setModel(new  javax.swing.DefaultComboBoxModel<>(new  String[]  {
"Admin", "Employee", "Student" }));
    jComboBox1.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jComboBox1ActionPerformed(evt);
        }
    });
```

```
        javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
        jPanel1.setLayout(jPanel1Layout);
        jPanel1Layout.setHorizontalGroup(
            jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addGap(29, 29, 29)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEA
DING)
                    .addGroup(jPanel1Layout.createSequentialGroup()
                        .addComponent(jButton2)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                        .addComponent(jButton5))
                    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel1Layout.createSequentialGroup()

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAI
LING)
                            .addGroup(jPanel1Layout.createSequentialGroup()

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEA
DING)
                                    .addGroup(jPanel1Layout.createSequentialGroup()
                                        .addComponent(jLabel4)
                                        .addGap(0, 40, Short.MAX_VALUE))
```

```
                    .addComponent(jLabel2,     javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEA
DING, false)
                    .addGroup(jPanel1Layout.createSequentialGroup()
                        .addGap(18, 18, 18)
                        .addComponent(jLabel3, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
                    .addGroup(jPanel1Layout.createSequentialGroup()
                        .addGap(18, 18, 18)
                        .addComponent(jLabel5, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))))
                .addGroup(jPanel1Layout.createSequentialGroup()
                    .addComponent(jLabel6)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addComponent(jLabel7)))
            .addGap(31, 31, 31)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEA
DING, false)
                .addComponent(jPasswordField1)
                .addComponent(jTextField1)
                .addComponent(jComboBox1, 0, 158, Short.MAX_VALUE))))
        .addContainerGap())
    );
```

```
        jPanel1Layout.setVerticalGroup(
            jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addGap(61, 61, 61)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BAS
ELINE)
                    .addComponent(jLabel2)
                    .addComponent(jTextField1,        javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jLabel3))
                .addGap(37, 37, 37)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BAS
ELINE)
                    .addComponent(jLabel4)
                    .addComponent(jLabel5)
                    .addComponent(jPasswordField1,
javax.swing.GroupLayout.PREFERRED_SIZE,       javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(34, 34, 34)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BAS
ELINE)
                    .addComponent(jLabel6)
                    .addComponent(jLabel7)
                    .addComponent(jComboBox1,       javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
```

```
            .addGap(71, 71, 71)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BAS
ELINE)
                .addComponent(jButton2)
                .addComponent(jButton5))
            .addContainerGap(75, Short.MAX_VALUE))
        );

        jMenu1.setText("File");

        jMenuItem2.setText("Exit");
        jMenuItem2.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jMenuItem2ActionPerformed(evt);
            }
        });
        jMenu1.add(jMenuItem2);

        jMenuBar1.add(jMenu1);

        jMenu2.setText("Edit");
        jMenuBar1.add(jMenu2);

        jMenu4.setText("Help");

        jMenuItem4.setText("Check for Updates");
        jMenuItem4.addActionListener(new java.awt.event.ActionListener() {
```

```
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jMenuItem4ActionPerformed(evt);
        }
    });
    jMenu4.add(jMenuItem4);

    jMenuItem7.setText("About");
    jMenu4.add(jMenuItem7);

    jMenuBar1.add(jMenu4);

    setJMenuBar(jMenuBar1);

    javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(40, 40, 40)
            .addComponent(jLabel8)
            .addGap(238, 238, 238)
            .addComponent(jLabel1)
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()
            .addContainerGap(141, Short.MAX_VALUE)
```

```
            .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(140, 140, 140))
        .addComponent(jProgressBar1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    );
    layout.setVerticalGroup(
      layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
      .addGroup(layout.createSequentialGroup()
        .addContainerGap(20, Short.MAX_VALUE)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(jLabel1)
            .addComponent(jLabel8))
          .addGap(35, 35, 35)
          .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
          .addGap(41, 41, 41)
          .addComponent(jProgressBar1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
    );

    pack();
  }// </editor-fold>

  private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
    if((jTextField1.getText().equals("")) || (jPasswordField1.getText().equals("")))
    {
```

```
            jLabel3.setVisible(true);
            jLabel5.setVisible(true);
            jLabel7.setVisible(true);
            return;
        }

        try
        {
            Class.forName("com.microsoft.sqlserver.jdbc.SQLServerDriver");
            Connection con = DriverManager.getConnection("jdbc:sqlserver://COMPAQ-PC\\
SQLEXPRESS;databaseName=bios;user=sa;password=opk16168");
            PreparedStatement pst= con.prepareStatement("select * from AdminLogin\n" +
"where (aid =? and apass=? and type = ?)");
            pst.setString(1, jTextField1.getText());
            pst.setString(2, jPasswordField1.getText());
            pst.setString(3, (String) jComboBox1.getSelectedItem());

            Connection con1 = DriverManager.getConnection("jdbc:sqlserver://COMPAQ-
PC\\ SQLEXPRESS;databaseName=bios;user=sa;password=opk16168");
            PreparedStatement pst1 = con1.prepareStatement("select * from EmployeeLogin
where eid=? and epass=? and type=?");
            pst1.setString(1,jTextField1.getText());
            pst1.setString(2,jPasswordField1.getText());
            pst1.setString(3,(String) jComboBox1.getSelectedItem());

            Connection con2 = DriverManager.getConnection("jdbc:sqlserver://COMPAQ-
PC\\ SQLEXPRESS;databaseName=bios;user=sa;password=opk16168");
```

```
        PreparedStatement pst2 = con2.prepareStatement("select * from StudentLogin
where sid=? and spass=? and type=?");
        pst2.setString(1,jTextField1.getText());
        pst2.setString(2,jPasswordField1.getText());
        pst2.setString(3, (String) jComboBox1.getSelectedItem());

        ResultSet rs = pst.executeQuery();
        ResultSet rs1 = pst1.executeQuery();
        ResultSet rs2 = pst2.executeQuery();
        String value = (String) jComboBox1.getSelectedItem();

        if(rs.next() && value.equals("Admin"))
        {
        this.setVisible(false);
           java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
           String msg=jTextField1.getText();
           new AdminHomePage(msg).setVisible(true);



        }
      });
        }
        else if(rs1.next() && value.equals("Employee"))
        {
        this.setVisible(false);
           java.awt.EventQueue.invokeLater(new Runnable() {
```

```
    public void run() {
        String msg=jTextField1.getText();
        new EmployeeHomePage(msg).setVisible(true);
    }
});
    }
    else if(rs2.next() && value.equals("Student"))
    {
    this.setVisible(false);
        java.awt.EventQueue.invokeLater(new Runnable() {
    public void run() {
        String msg = jTextField1.getText();
        new StudentHomePage(msg).setVisible(true);
    }
});
    }
    else
    {
        JOptionPane.showMessageDialog(null,"Invalid Id/password or User type");
        jTextField1.setText("");
        jPasswordField1.setText("");
    }
    con.close();
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(null,e);
}
```

```
    }

    private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) {
        dispose();
    }

    private void jMenuItem2ActionPerformed(java.awt.event.ActionEvent evt) {
        dispose();
    }

    private void jMenuItem4ActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
    }

    private void jComboBox1ActionPerformed(java.awt.event.ActionEvent evt) {

    }

    private void jPasswordField1ActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
    }


    public static void main(String args[]) {
        try {
            for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
```

```
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {
java.util.logging.Logger.getLogger(LoginPage.class.getName()).log(java.util.logging.Level.
SEVERE, null, ex);
    } catch (InstantiationException ex) {
java.util.logging.Logger.getLogger(LoginPage.class.getName()).log(java.util.logging.Level.
SEVERE, null, ex);
    } catch (IllegalAccessException ex) {
java.util.logging.Logger.getLogger(LoginPage.class.getName()).log(java.util.logging.Level.
SEVERE, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
java.util.logging.Logger.getLogger(LoginPage.class.getName()).log(java.util.logging.Level.
SEVERE, null, ex);
    }
    java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
            new LoginPage().setVisible(true);
        }
    });
}
```

```
    private void setIcon() {

setIconImage(Toolkit.getDefaultToolkit().getImage(getClass().getResource("Untitled-
1.png")));
    }
    // Variables declaration - do not modify
    private javax.swing.JButton jButton2;
    private javax.swing.JButton jButton5;
    private javax.swing.JComboBox<String> jComboBox1;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JLabel jLabel3;
    private javax.swing.JLabel jLabel4;
    private javax.swing.JLabel jLabel5;
    private javax.swing.JLabel jLabel6;
    private javax.swing.JLabel jLabel7;
    private javax.swing.JLabel jLabel8;
    private javax.swing.JMenu jMenu1;
    private javax.swing.JMenu jMenu2;
    private javax.swing.JMenu jMenu3;
    private javax.swing.JMenu jMenu4;
    private javax.swing.JMenuBar jMenuBar1;
    private javax.swing.JMenuItem jMenuItem1;
    private javax.swing.JMenuItem jMenuItem2;
    private javax.swing.JMenuItem jMenuItem3;
    private javax.swing.JMenuItem jMenuItem4;
    private javax.swing.JMenuItem jMenuItem5;
```

```
    private javax.swing.JMenuItem jMenuItem6;
    private javax.swing.JMenuItem jMenuItem7;
    private javax.swing.JPanel jPanel1;
    private javax.swing.JPasswordField jPasswordField1;
    private javax.swing.JProgressBar jProgressBar1;
    private javax.swing.JTextField jTextField1;
    // End of variables declaration
}
```

- **Add Employee (with image)**

```
package erp;

import java.awt.Dimension;

import java.awt.Image;

import java.awt.Toolkit;

import java.io.ByteArrayOutputStream;

import java.io.File;

import java.io.FileInputStream;
```

```
import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.PreparedStatement;

import java.sql.ResultSet;

import java.sql.Statement;

import java.util.HashSet;

import java.util.Set;

import javax.swing.ImageIcon;

import javax.swing.JFileChooser;

import javax.swing.JInternalFrame;

import javax.swing.JOptionPane;


public class AddEmployee extends javax.swing.JFrame

    public AddEmployee() {

        initComponents();

        jComboBox1.setSelectedItem(null);

        jComboBox2.setSelectedItem(null);

        setLocationRelativeTo(null);

    }
```

```
private void initComponents() {
    buttonGroup1 = new javax.swing.ButtonGroup();
    buttonGroup2 = new javax.swing.ButtonGroup();
    buttonGroup3 = new javax.swing.ButtonGroup();
    buttonGroup4 = new javax.swing.ButtonGroup();
    buttonGroup5 = new javax.swing.ButtonGroup();
    buttonGroup6 = new javax.swing.ButtonGroup();
    buttonGroup7 = new javax.swing.ButtonGroup();
    buttonGroup8 = new javax.swing.ButtonGroup();
    jLabel2 = new javax.swing.JLabel();
    jLabel3 = new javax.swing.JLabel();
    jTextField1 = new javax.swing.JTextField();
    jTextField2 = new javax.swing.JTextField();
    jLabel4 = new javax.swing.JLabel();
    jTextField3 = new javax.swing.JTextField();
    jLabel5 = new javax.swing.JLabel();
    jLabel6 = new javax.swing.JLabel();
    jRadioButton1 = new javax.swing.JRadioButton();
    jRadioButton2 = new javax.swing.JRadioButton();
    jLabel7 = new javax.swing.JLabel();
```

```
jButton1 = new javax.swing.JButton();

jButton2 = new javax.swing.JButton();

jButton3 = new javax.swing.JButton();

jButton4 = new javax.swing.JButton();

jLabel9 = new javax.swing.JLabel();

jLabel10 = new javax.swing.JLabel();

jTextField5 = new javax.swing.JTextField();

jLabel11 = new javax.swing.JLabel();

jTextField6 = new javax.swing.JTextField();

jLabel12 = new javax.swing.JLabel();

jLabel13 = new javax.swing.JLabel();

jTextField7 = new javax.swing.JTextField();

jComboBox1 = new javax.swing.JComboBox<>();

jButton5 = new javax.swing.JButton();

jLabel8 = new javax.swing.JLabel();

jComboBox2 = new javax.swing.JComboBox<>();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

setTitle("Add Employee");

jLabel2.setText("First Name");

jLabel3.setText("Surname");
```

```
jLabel4.setText("Date Of Birth");

jLabel5.setFont(new java.awt.Font("Tahoma", 0, 8)); // NOI18N

jLabel5.setForeground(new java.awt.Color(255, 0, 51));

jLabel5.setText("DD/MM/YYYY");

jLabel6.setText("Gender");

buttonGroup1.add(jRadioButton1);

jRadioButton1.setText("Male");

buttonGroup1.add(jRadioButton2);

jRadioButton2.setText("Female");

jLabel7.setText("Email:");

jButton1.setText("ADD RECORD");

jButton1.setPreferredSize(new java.awt.Dimension(65, 23));

jButton1.addActionListener(new java.awt.event.ActionListener() {

    public void actionPerformed(java.awt.event.ActionEvent evt) {

        jButton1ActionPerformed(evt);

    }

});
```

```
jButton2.setText("CLEAR");
jButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton2ActionPerformed(evt);
    }
});

jButton3.setText("UPDATE");
jButton3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton3ActionPerformed(evt);
    }
});

jButton4.setText("GET RECORD");
jButton4.setPreferredSize(new java.awt.Dimension(99, 23));
jButton4.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton4ActionPerformed(evt);
    }
```

```
        });

        jLabel9.setText("Phone No:");

        jLabel10.setText("(All Fields Are Mandotory)");

        jTextField5.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jTextField5ActionPerformed(evt);
            }
        });

        jLabel11.setText("Address:");

        jLabel12.setText("Designation:");

        jLabel13.setText("Department:");

        jComboBox1.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] {
"Professor", "HOD", "Sr. Professor", "Asst. Professor" }));
```

```
        jButton5.setText("Back");
        jButton5.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton5ActionPerformed(evt);
            }
        });

        jComboBox2.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] {
"CSE", "MECH", "CIVIL", "ELECTRICAL", "EEE", "ETC", "E&I", " " }));

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(28, 28, 28)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
                .addComponent(jLabel10, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

                .addGroup(layout.createSequentialGroup()


.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)

                    .addComponent(jLabel3, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

                    .addComponent(jLabel2, javax.swing.GroupLayout.DEFAULT_SIZE, 73,
Short.MAX_VALUE)

                    .addComponent(jLabel4, javax.swing.GroupLayout.DEFAULT_SIZE, 73,
Short.MAX_VALUE)

                    .addComponent(jLabel6)

                    .addComponent(jLabel7, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

                    .addComponent(jLabel12, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

                    .addComponent(jLabel9, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

                    .addComponent(jLabel11, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

                    .addComponent(jLabel13, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))

                .addGap(35, 35, 35)
```

```
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                .addComponent(jLabel5)
                .addGroup(layout.createSequentialGroup()
                   .addComponent(jRadioButton1)
                   .addGap(18, 18, 18)
                   .addComponent(jRadioButton2))
                .addComponent(jTextField2)
                .addComponent(jTextField5)
                .addComponent(jTextField1)
                .addComponent(jTextField3)
                .addComponent(jTextField6)
                .addComponent(jTextField7)
                .addComponent(jComboBox1,
javax.swing.GroupLayout.Alignment.TRAILING,  0,  javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                .addComponent(jComboBox2,  0,  javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
              .addGap(62, 62, 62)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
                .addComponent(jLabel8, javax.swing.GroupLayout.PREFERRED_SIZE, 143,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING, false)
                .addComponent(jButton4, javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE, 107, Short.MAX_VALUE)
                .addComponent(jButton2, javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                .addComponent(jButton3, javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                .addComponent(jButton1, javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)))
            .addGap(0, 47, Short.MAX_VALUE)))
        .addContainerGap())
    .addGroup(layout.createSequentialGroup()
        .addComponent(jButton5)
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
);
layout.setVerticalGroup(
```

```
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addComponent(jButton5)
            .addGap(22, 22, 22)
            .addComponent(jLabel10, javax.swing.GroupLayout.PREFERRED_SIZE, 22, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(28, 28, 28)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                        .addComponent(jLabel2)
                        .addComponent(jTextField1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                    .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                        .addComponent(jLabel3)
                        .addComponent(jTextField5, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
```

```
                .addGap(25, 25, 25)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jLabel7)
                    .addComponent(jTextField2, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jTextField3, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED_SIZE, 20,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(jLabel5, javax.swing.GroupLayout.PREFERRED_SIZE, 9,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(27, 27, 27)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(jLabel6)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
```

```
                .addComponent(jRadioButton1)
                .addComponent(jRadioButton2)))
            .addGap(18, 18, 18)
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel13)
                .addComponent(jComboBox2, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(22, 22, 22)
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel12)
                .addComponent(jComboBox1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addGroup(layout.createSequentialGroup()
                .addComponent(jLabel8, javax.swing.GroupLayout.PREFERRED_SIZE, 174,
javax.swing.GroupLayout.PREFERRED_SIZE)
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()
                .addGap(231, 231, 231)
```

```
                .addComponent(jLabel11))
            .addGroup(layout.createSequentialGroup()
                .addGap(42, 42, 42)
                .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 48,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, 48,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jButton2,    javax.swing.GroupLayout.PREFERRED_SIZE,
48, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jTextField7,
javax.swing.GroupLayout.PREFERRED_SIZE,          javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel9))
                .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
```

```
                    .addComponent(jButton4, javax.swing.GroupLayout.PREFERRED_SIZE,
48, javax.swing.GroupLayout.PREFERRED_SIZE)

                    .addComponent(jTextField6,
javax.swing.GroupLayout.PREFERRED_SIZE, 48,
javax.swing.GroupLayout.PREFERRED_SIZE))))))

            .addContainerGap(57, Short.MAX_VALUE))

      );

      pack();

   private void jTextField5ActionPerformed(java.awt.event.ActionEvent evt) {

   }

   private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {

    try

    {

       String filename= null;

       Class.forName("com.microsoft.sqlserver.jdbc.SQLServerDriver");

       Connection con =
DriverManager.getConnection("jdbc:sqlserver://localhost:1434;database=bios;user=sa;pass
word=opk16168");

       PreparedStatement pst = con.prepareStatement("update EmployeeDetail set
surname=?,email=?,dob=?,dept=?,gender=?,desig=?,phone=?,addr=?,img=?,bs=?,hra=?,da=
?,sa=?,pf=? where firstname=?");
```

```
PreparedStatement pst1 = con.prepareStatement("Select * from EmployeeDetail where firstname=?");
pst1.setString(1,jTextField1.getText());//firstname
ResultSet rs = pst1.executeQuery();
if(rs.next())
{
   filename = rs.getString(16);
}

pst.setString(15,jTextField1.getText());
pst.setString(1, jTextField5.getText());//update surname
pst.setString(2, jTextField2.getText());//update email
pst.setString(3, jTextField3.getText());//update dob
pst.setString(4, (String)(jComboBox2.getSelectedItem()));//update dept.
jRadioButton1.setActionCommand("M");
jRadioButton2.setActionCommand("F");
pst.setString(5,buttonGroup1.getSelection().getActionCommand());//update gender
pst.setString(6,(String)(jComboBox1.getSelectedItem()));//update desig
pst.setString(7, jTextField7.getText());
pst.setString(8, jTextField6.getText());
```

```
String value =(String) (jComboBox1.getSelectedItem());
 if(value.equals("Professor")){
    int salary = 120000;
     pst.setInt(10, 106040);//update bs
pst.setInt(11, 4200 );//update hra
pst.setInt(12, 3600);//update da
pst.setInt(13, 5200);//update sa
pst.setInt(14, 960);//update pf
};
if(value.equals("HOD")){
    int salary = 150000;
    pst.setInt(10,132350 );//update bs
pst.setInt(11, 5200);//update hra
pst.setInt(12, 4500);//update da
pst.setInt(13, 6750);//update sa
pst.setInt(14, 1200);//update pf
};
if(value.equals("Sr. Professor")){
    int salary = 135000;
    pst.setInt(10,119070);//update bs
```

```
pst.setInt(11, 4725);//update hra
pst.setInt(12, 4050);//update da
pst.setInt(13, 6075);//update sa
pst.setInt(14, 1080);//update pf
};
if(value.equals("Asst. Professor")){
    int salary = 90000;
    pst.setInt(10,79380 );//update bs
pst.setInt(11, 3150);//update hra
pst.setInt(12, 2700);//update da
pst.setInt(13, 4050);//update sa
pst.setInt(14, 720);//update pf
};
```

```
int count=0;
while(filename!=null && count==0)
{
 JFileChooser fileChooser = new JFileChooser();
  fileChooser.setDialogTitle("Specify a file to save(Choose image)");
```

```
        int userSelection = fileChooser.showSaveDialog(this);
        if (userSelection == JFileChooser.APPROVE_OPTION) {
        File fileToSave = fileChooser.getSelectedFile();
        filename = fileToSave.getAbsolutePath();
   //System.out.println("Save as file: " + fileToSave.getAbsolutePath());
            }
         File fileToSave = fileChooser.getSelectedFile();
         filename = fileToSave.getAbsolutePath();
         ImageIcon imageIcon = new ImageIcon(new
ImageIcon(filename).getImage().getScaledInstance(jLabel8.getWidth(), jLabel8.getHeight(),
Image.SCALE_DEFAULT));
         jLabel8.setIcon(imageIcon);
         count++;
       }
        pst.setString(9,filename);
//         System.out.println("Save as file: " + filename);
//         System.out.println("Count:" + count);
       int rs1=pst.executeUpdate();
       if(rs1>0)
```

```
    {
        JOptionPane.showMessageDialog(null, "data Updated Successfully");
    }
 else
    {
        JOptionPane.showMessageDialog(null,"data not updated");
    }
    con.close();
}
 catch(Exception e)
{
    System.out.println(e);
 }
}


private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
   try
{
    Class.forName("com.microsoft.sqlserver.jdbc.SQLServerDriver");
```

```
Connection con = DriverManager.getConnection("jdbc:sqlserver://localhost:1434;database=bios;user=sa;password=opk16168");

PreparedStatement pst = con.prepareStatement("insert into EmployeeDetail(firstname,surname,email,dob,dept,gender,desig,phone,addr,bs,hra,da,sa,pf,img) values(?,?,?,?,?,?,?,?,?,?,?,?,?,?,?)");



pst.setString(1, jTextField1.getText());//first name

pst.setString(2, jTextField5.getText());//surname

pst.setString(3, jTextField2.getText());//email

pst.setString(4, jTextField3.getText());//dob

pst.setString(5, (String)(jComboBox2.getSelectedItem()));//dept

jRadioButton1.setActionCommand("M");

jRadioButton2.setActionCommand("F");

pst.setString(6,buttonGroup1.getSelection().getActionCommand());//gender

pst.setString(7, (String)(jComboBox1.getSelectedItem()));//desig

String value =(String) (jComboBox1.getSelectedItem());

String filename = null;

while(filename == null)

{
```

```
    JFileChooser fileChooser = new JFileChooser();
    fileChooser.setDialogTitle("Specify a file to save(Choose image)");

    int userSelection = fileChooser.showSaveDialog(this);

    if (userSelection == JFileChooser.APPROVE_OPTION) {
    File fileToSave = fileChooser.getSelectedFile();
    filename = fileToSave.getAbsolutePath();
    //System.out.println("Save as file: " + fileToSave.getAbsolutePath());
}
        File fileToSave = fileChooser.getSelectedFile();
        filename = fileToSave.getAbsolutePath();
        ImageIcon imageIcon = new ImageIcon(new ImageIcon(filename).getImage().getScaledInstance(jLabel8.getWidth(), jLabel8.getHeight(), Image.SCALE_DEFAULT));
        jLabel8.setIcon(imageIcon);
        }
        //System.out.println("Save as file: " + filename);

        pst.setString(15,filename);//image
```

```
if(value.equals("Professor")){
    int salary = 120000;
     pst.setInt(10, 106040);//bs
pst.setInt(11, 4200 );//hra
pst.setInt(12, 3600);//da
pst.setInt(13, 5200);//sa
pst.setInt(14, 960);//pf
};
if(value.equals("HOD")){
    int salary = 150000;
    pst.setInt(10,132350 );//bs
pst.setInt(11, 5200);//hra
pst.setInt(12, 4500);//da
pst.setInt(13, 6750);//sa
pst.setInt(14, 1200);//pf
};
if(value.equals("Sr. Professor")){
    int salary = 135000;
    pst.setInt(10,119070);//bs
```

```
pst.setInt(11, 4725);//hra
pst.setInt(12, 4050);//da
pst.setInt(13, 6075);//sa
pst.setInt(14, 1080);//pf
};
if(value.equals("Asst. Professor")){
    int salary = 90000;
    pst.setInt(10,79380 );//bs
pst.setInt(11, 3150);//hra
pst.setInt(12, 2700);//da
pst.setInt(13, 4050);//sa
pst.setInt(1, 720);//pf
};
pst.setString(8,jTextField7.getText());//phone no
pst.setString(9,jTextField6.getText());//address
 int rs = pst.executeUpdate();
 if(rs>0)
 {
    JOptionPane.showMessageDialog(null,"Data Saved");
 }
```

```
      con.close();
    }
      catch(Exception ex){
       System.out.println(ex);
       }
    }

    private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {
     try
     {
       Class.forName("com.microsoft.sqlserver.jdbc.SQLServerDriver");
       Connection con =
DriverManager.getConnection("jdbc:sqlserver://localhost:1434;database=bios;user=sa;pass
word=opk16168");
       PreparedStatement pst = con.prepareStatement("select * from EmployeeDetail where
firstname = ? ");
       pst.setString(1,jTextField1.getText());
       ResultSet rs = pst.executeQuery();
       if(rs.next())
       {
```

```
        jTextField2.setText(rs.getString(4));
        jTextField3.setText(rs.getString(5));
        jComboBox2.setSelectedItem(rs.getObject(6));
        jTextField5.setText(rs.getString(3));
        jTextField6.setText(rs.getString(10));
        jTextField7.setText(rs.getString(9));
        ImageIcon imageIcon = new ImageIcon(new
ImageIcon(rs.getString(16)).getImage().getScaledInstance(jLabel8.getWidth(),
jLabel8.getHeight(), Image.SCALE_DEFAULT));
        jLabel8.setIcon(imageIcon);
        jComboBox1.setSelectedItem(rs.getObject(8));
        String gn = rs.getString("gender");
        if(gn.equals("M"))
        {
           jRadioButton1.setSelected(true);
           jRadioButton2.setSelected(false);
        }
        else
        {
           jRadioButton1.setSelected(false);
```

```
        jRadioButton2.setSelected(true);
    }
    }
    else
        JOptionPane.showMessageDialog(null,"Data Not found");
  }

  catch(Exception e)
  {
  }
}

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
    jTextField1.setText("");
    jTextField2.setText("");
    jTextField3.setText("");
    jComboBox2.setSelectedItem(null);
    jTextField5.setText("");
    jTextField6.setText("");
    jTextField7.setText("");
```

```
        jLabel8.setIcon(null);
        jComboBox1.setSelectedItem(null);
        buttonGroup1.clearSelection();

    }

    private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) {

        this.setVisible(false);
        java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
                String msg = "";
                new AdminHomePage(msg).setVisible(true);
            }
        });
    }
    public static void main(String args[]) {
        try {
            for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
```

```
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {
java.util.logging.Logger.getLogger(AddEmployee.class.getName()).log(java.util.logging.Level.
SEVERE, null, ex);
    } catch (InstantiationException ex) {
java.util.logging.Logger.getLogger(AddEmployee.class.getName()).log(java.util.logging.Level.
SEVERE, null, ex);
    } catch (IllegalAccessException ex) {
java.util.logging.Logger.getLogger(AddEmployee.class.getName()).log(java.util.logging.Level.
SEVERE, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
java.util.logging.Logger.getLogger(AddEmployee.class.getName()).log(java.util.logging.Level.
SEVERE, null, ex);
    }
```

```
    java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
            new AddEmployee().setVisible(true);
        }
    });
}

// Variables declaration - do not modify
private javax.swing.ButtonGroup buttonGroup1;
private javax.swing.ButtonGroup buttonGroup2;
private javax.swing.ButtonGroup buttonGroup3;
private javax.swing.ButtonGroup buttonGroup4;
private javax.swing.ButtonGroup buttonGroup5;
private javax.swing.ButtonGroup buttonGroup6;
private javax.swing.ButtonGroup buttonGroup7;
private javax.swing.ButtonGroup buttonGroup8;
private javax.swing.JButton jButton1;
private javax.swing.JButton jButton2;
private javax.swing.JButton jButton3;
```

```
private javax.swing.JButton jButton4;
private javax.swing.JButton jButton5;
private javax.swing.JComboBox<String> jComboBox1;
private javax.swing.JComboBox<String> jComboBox2;
private javax.swing.JLabel jLabel10;
private javax.swing.JLabel jLabel11;
private javax.swing.JLabel jLabel12;
private javax.swing.JLabel jLabel13;
private javax.swing.JLabel jLabel2;
private javax.swing.JLabel jLabel3;
private javax.swing.JLabel jLabel4;
private javax.swing.JLabel jLabel5;
private javax.swing.JLabel jLabel6;
private javax.swing.JLabel jLabel7;
private javax.swing.JLabel jLabel8;
private javax.swing.JLabel jLabel9;
private javax.swing.JRadioButton jRadioButton1;
private javax.swing.JRadioButton jRadioButton2;
private javax.swing.JTextField jTextField1;
private javax.swing.JTextField jTextField2;
```

```
    private javax.swing.JTextField jTextField3;
    private javax.swing.JTextField jTextField5;
    private javax.swing.JTextField jTextField6;
    private javax.swing.JTextField jTextField7;
    // End of variables declaration
}
```

- **Attendance Register**

```
package erp;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.PreparedStatement;

import java.sql.ResultSet;

import java.text.SimpleDateFormat;

import java.util.Calendar;

import javax.swing.JOptionPane;

import javax.swing.table.DefaultTableModel;

public class DemoTable2 extends javax.swing.JFrame {

   public DemoTable2(String a,String n) {

      initComponents();

      jLabel1.setVisible(false);

      jLabel1.setText(a);

      DefaultTableModel model=new DefaultTableModel()

   {

    public Class<?> getColumnClass(int column)
```

```
    {
      switch(column)
      {
      case 0:
        return Boolean.class;
      case 1:
        return String.class;
      case 2:
        return String.class;
//      case 3:
//        return String.class;
//      case 4:
//        return String.class;

        default:
          return String.class;
      }
    }
  };
```

```
    jTable1.setModel(model);


   model.addColumn("Select");
   model.addColumn("Student Id");
   model.addColumn("Student Name");


    try
   {
       Class.forName("com.microsoft.sqlserver.jdbc.SQLServerDriver");
       Connection con = DriverManager.getConnection("jdbc:sqlserver://COMPAQ-PC\\
SQLEXPRESS;databaseName=bios;user=sa;password=opk16168");
       String sql = "select idstudent,studentname from student where subject_subjectid=? ";
       PreparedStatement pst  =  con.prepareStatement(sql);
       pst.setString(1,a);
      // pst.setString(2,n);
       ResultSet rs = pst.executeQuery();
       int c=0;
       while(rs.next())
       {
       String p = rs.getString("idstudent");
```

```
            String b = rs.getString("studentname");
             model.addRow(new Object[]{p,b});
             model.setValueAt(false,c,0);
          model.setValueAt(rs.getObject("idstudent"),c,1);
          model.setValueAt(rs.getObject("studentname"),c,2);
          c++;
        }
        }
        catch(Exception e)
        {
          System.out.println(e);
        }
        }
private void initComponents() {

        jScrollPane1 = new javax.swing.JScrollPane();
        jTable1 = new javax.swing.JTable();
        jButton1 = new javax.swing.JButton();
        jButton2 = new javax.swing.JButton();
        jLabel1 = new javax.swing.JLabel();
```

```
jButton3 = new javax.swing.JButton();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

jTable1.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null}
    },
    new String [] {
        "Title 1", "Title 2", "Title 3", "Title 4"
    }
));
jScrollPane1.setViewportView(jTable1);

jButton1.setText("Present");
jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
```

```
        jButton1ActionPerformed(evt);
    }
});

jButton2.setText("Absent");
jButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton2ActionPerformed(evt);
    }
});

jLabel1.setText("jLabel1");

jButton3.setText("Back");
jButton3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton3ActionPerformed(evt);
    }
});
```

```
        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(jScrollPane1, javax.swing.GroupLayout.DEFAULT_SIZE, 639,
Short.MAX_VALUE)
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
                .addContainerGap()
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
                        .addGap(0, 0, Short.MAX_VALUE)
                        .addComponent(jButton1)
                        .addGap(30, 30, 30)
                        .addComponent(jButton2)
                        .addContainerGap())
                    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
                        .addComponent(jButton3)
```

```
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addComponent(jLabel1)
                .addGap(269, 269, 269))))
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
                .addContainerGap()
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel1)
                .addComponent(jButton3))
                .addGap(3, 3, 3)
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jButton1)
                .addComponent(jButton2))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 35,
Short.MAX_VALUE)
```

```
            .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 359,
javax.swing.GroupLayout.PREFERRED_SIZE))
        );


        pack();
    }// </editor-fold>


    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
        for(int i=0;i<jTable1.getRowCount();i++)
        {
         Boolean checked=Boolean.valueOf(jTable1.getValueAt(i, 0).toString());

         String col="present";


         //DISPLAY
         if(checked)
         {
          try {
    Class.forName("com.microsoft.sqlserver.jdbc.SQLServerDriver");
```

```
   Connection con =
DriverManager.getConnection("jdbc:sqlserver://localhost:1434;database=bios;user=sa;pass
word=opk16168");

        String sql = "insert into attendence (date1,status,student_idstudent,
student_subject_subjectid) values(?,?,?,?)";

        PreparedStatement pst =  con.prepareStatement(sql);

        Calendar cal = Calendar.getInstance();

         cal.getTime();

         SimpleDateFormat Time = new SimpleDateFormat("HH:mm:ss");

         SimpleDateFormat Date = new SimpleDateFormat("yyyy/MM/dd");

        pst.setString(1,Date.format(cal.getTime()));

        pst.setString(2, "Present");

        pst.setString(3,(jTable1.getValueAt(i,1).toString()));

        pst.setString(4,jLabel1.getText());

       // System.out.println(jLabel1.getText())

      pst.execute();

        }catch (Exception e ) {

        System.out.println(e);

        //JOptionPane.showMessageDialog(null, e);

                    }
```

```
        JOptionPane.showMessageDialog(null, col);
      }
    }

}

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
  for(int i=0;i<jTable1.getRowCount();i++)
  {
    Boolean checked=Boolean.valueOf(jTable1.getValueAt(i, 0).toString());

    String col="absent";

    //DISPLAY
    if(!checked)
    {
     try {
Class.forName("com.microsoft.sqlserver.jdbc.SQLServerDriver");
```

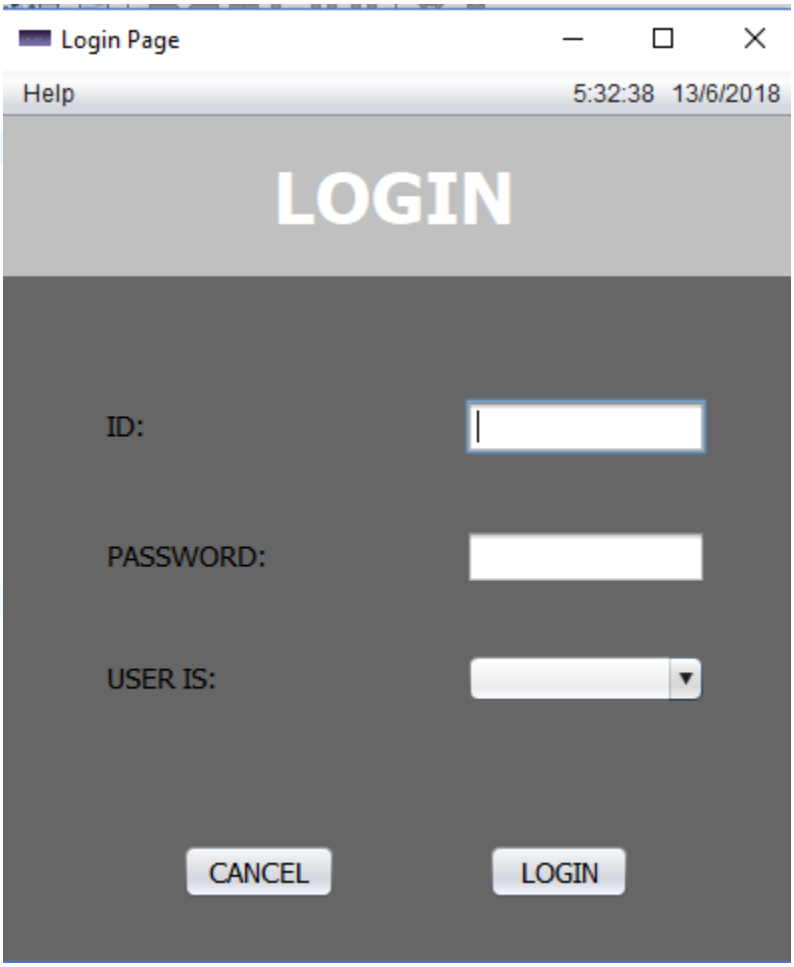
```
   Connection con =
DriverManager.getConnection("jdbc:sqlserver://localhost:1434;database=bios;user=sa;pass
word=opk16168");

         String sql = "insert into attendance (date1,status,student_idstudent,
student_subject_subjectid) values(?,?,?,?)";

         PreparedStatement pst =  con.prepareStatement(sql);


        Calendar cal = Calendar.getInstance();

         cal.getTime();

         SimpleDateFormat Time = new SimpleDateFormat("HH:mm:ss");

         SimpleDateFormat Date = new SimpleDateFormat("yyyy/MM/dd");

         pst.setString(1,Date.format(cal.getTime()));

         pst.setString(2, "Absent");

         pst.setString(3,(jTable1.getValueAt(i,1).toString()));

         pst.setString(4,jLabel1.getText());

        // System.out.println(jLabel1.getText())

      pst.execute();

        }catch (Exception e ) {

         System.out.println(e);

         //JOptionPane.showMessageDialog(null, e);
```

```
                    }

            JOptionPane.showMessageDialog(null, col);

          }

        }

    }


    private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {

     this.setVisible(false);

        java.awt.EventQueue.invokeLater(new Runnable() {

          public void run() {

            new TakeAttendance().setVisible(true);

          }

        });

    }

public static void main(String args[]) {

        try {

          for (javax.swing.UIManager.LookAndFeelInfo info :
  javax.swing.UIManager.getInstalledLookAndFeels()) {

            if ("Nimbus".equals(info.getName())) {

              javax.swing.UIManager.setLookAndFeel(info.getClassName());
```

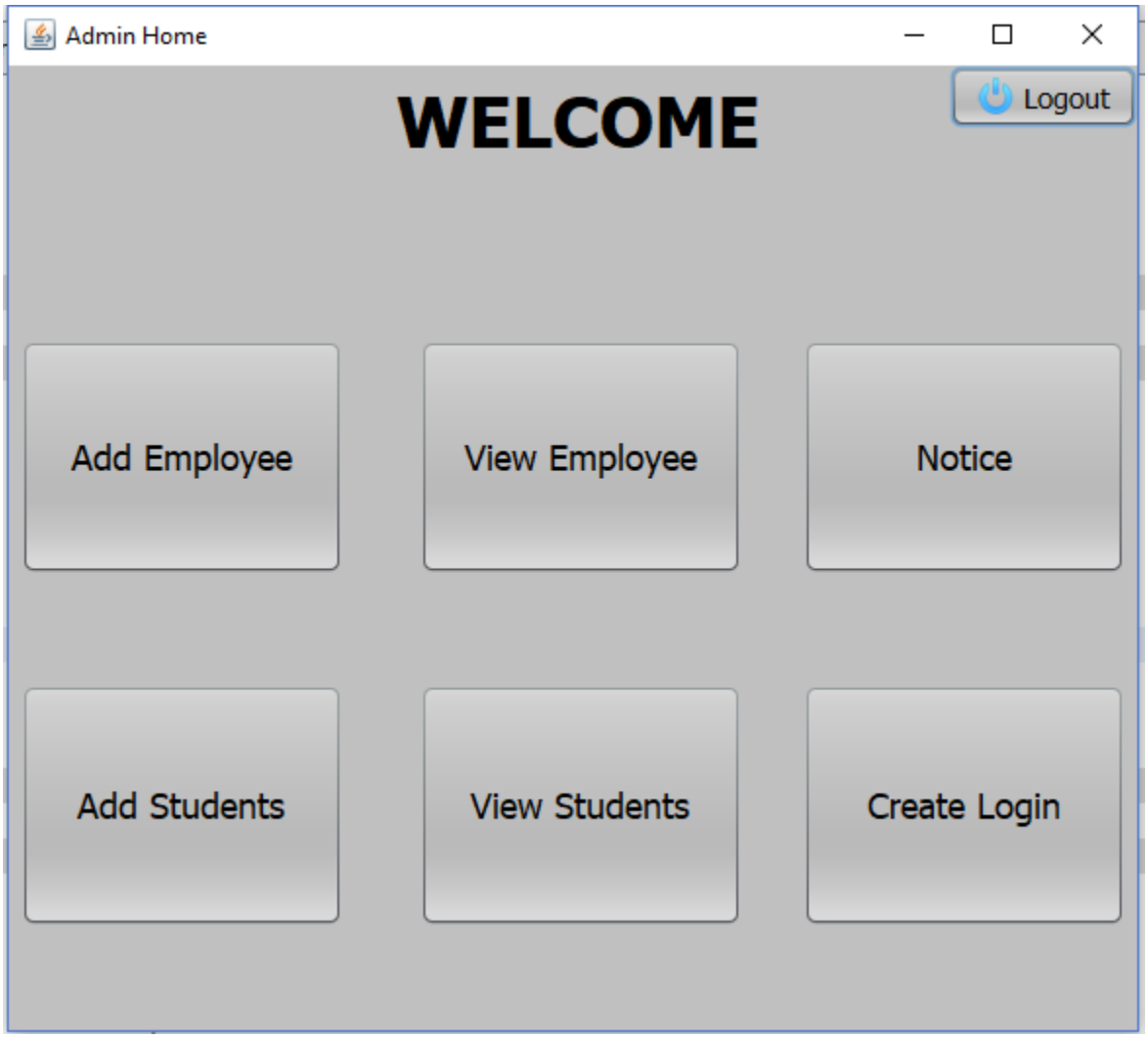
```
                break;
            }
        }
    } catch (ClassNotFoundException ex) {
java.util.logging.Logger.getLogger(DemoTable2.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (InstantiationException ex) {
java.util.logging.Logger.getLogger(DemoTable2.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (IllegalAccessException ex) {
java.util.logging.Logger.getLogger(DemoTable2.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
java.util.logging.Logger.getLogger(DemoTable2.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    }
    java.awt.EventQueue.invokeLater(new Runnable() {
        private String a;
```

```
            private String b;
            public void run() {
                new DemoTable2(a,b).setVisible(true);
            }
        });
    }

    // Variables declaration - do not modify
    private javax.swing.JButton jButton1;
    private javax.swing.JButton jButton2;
    private javax.swing.JButton jButton3;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JScrollPane jScrollPane1;
    private javax.swing.JTable jTable1;
    // End of variables declaration
}
```

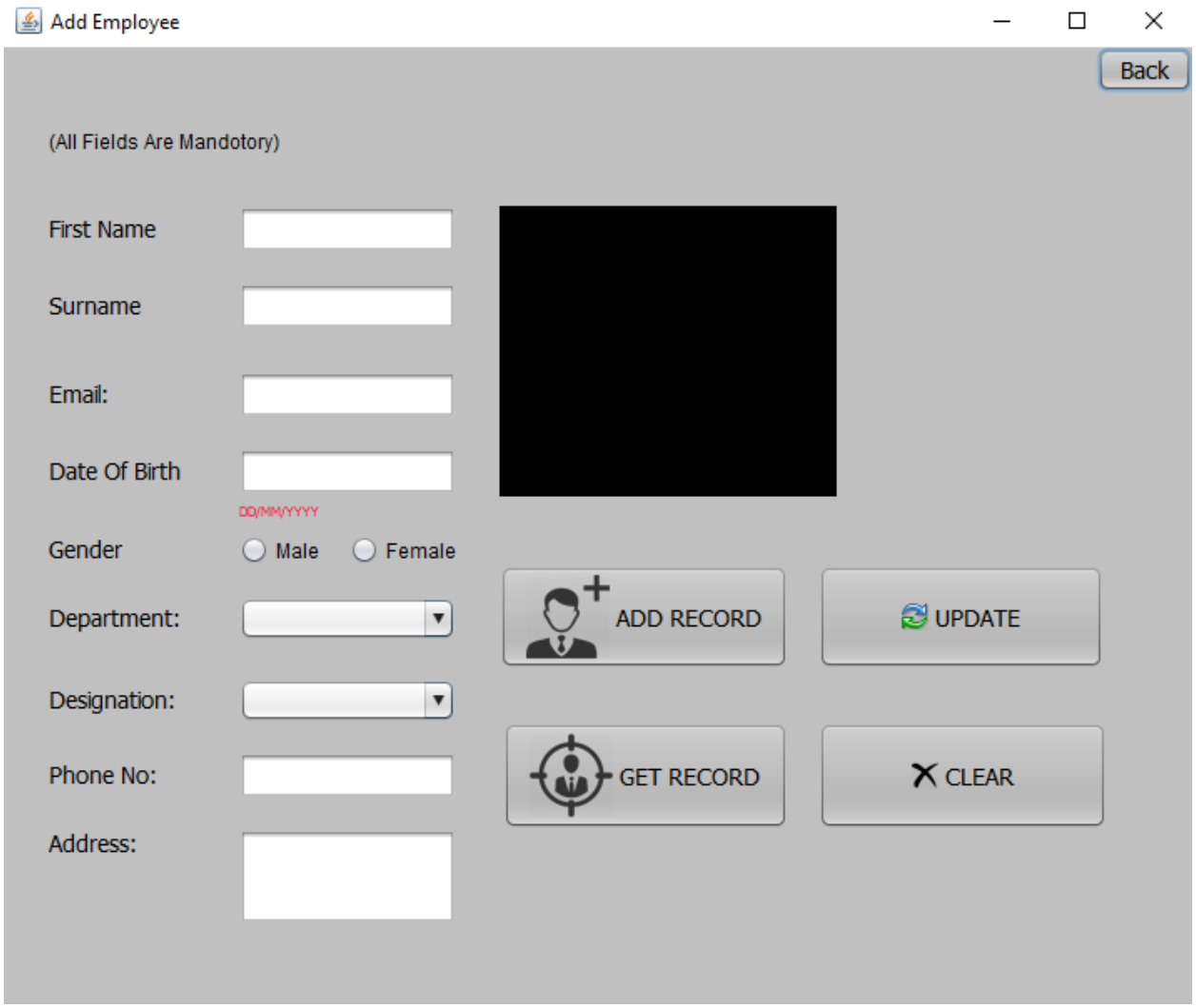
6. SCREENSHOTS



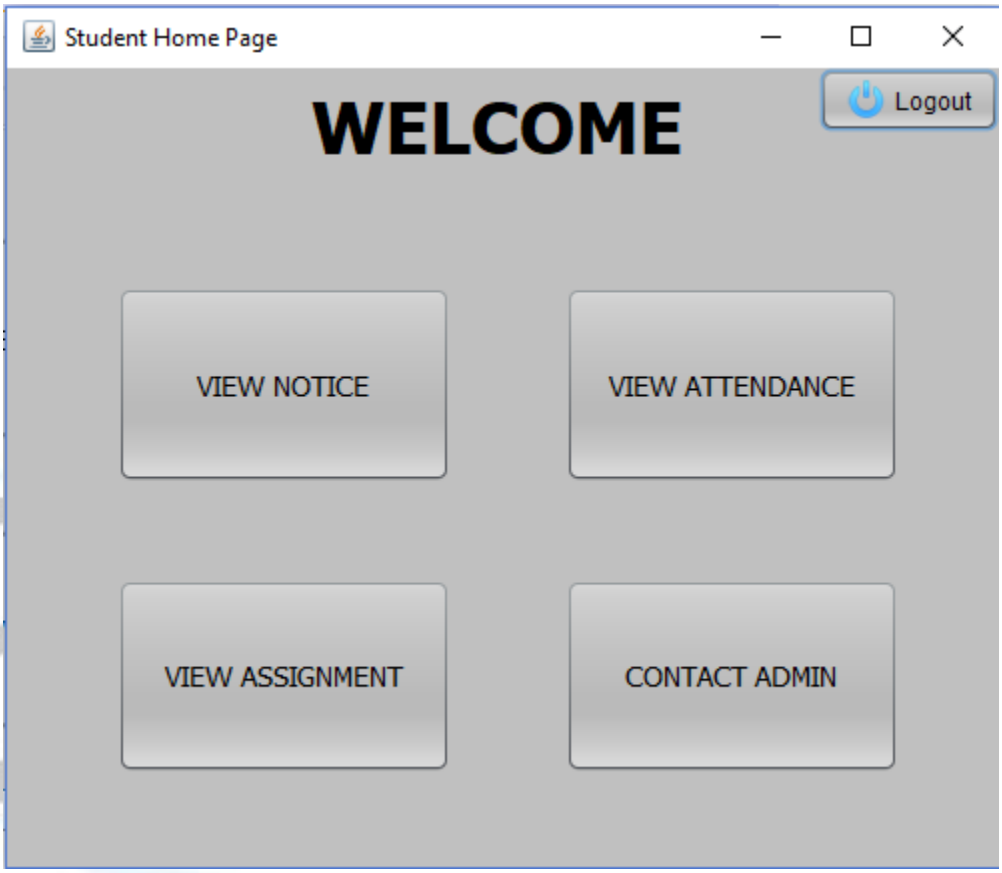
Login Page



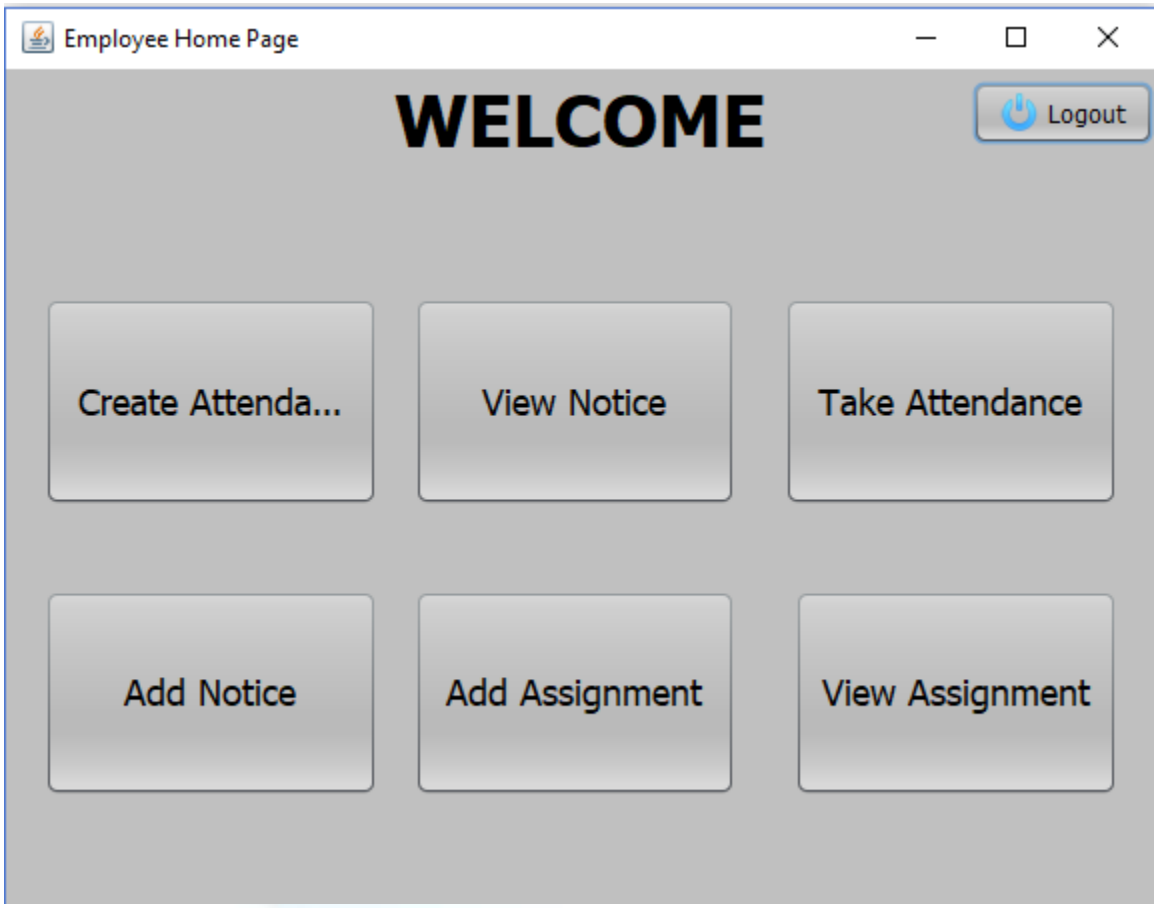
Logged in as Admin



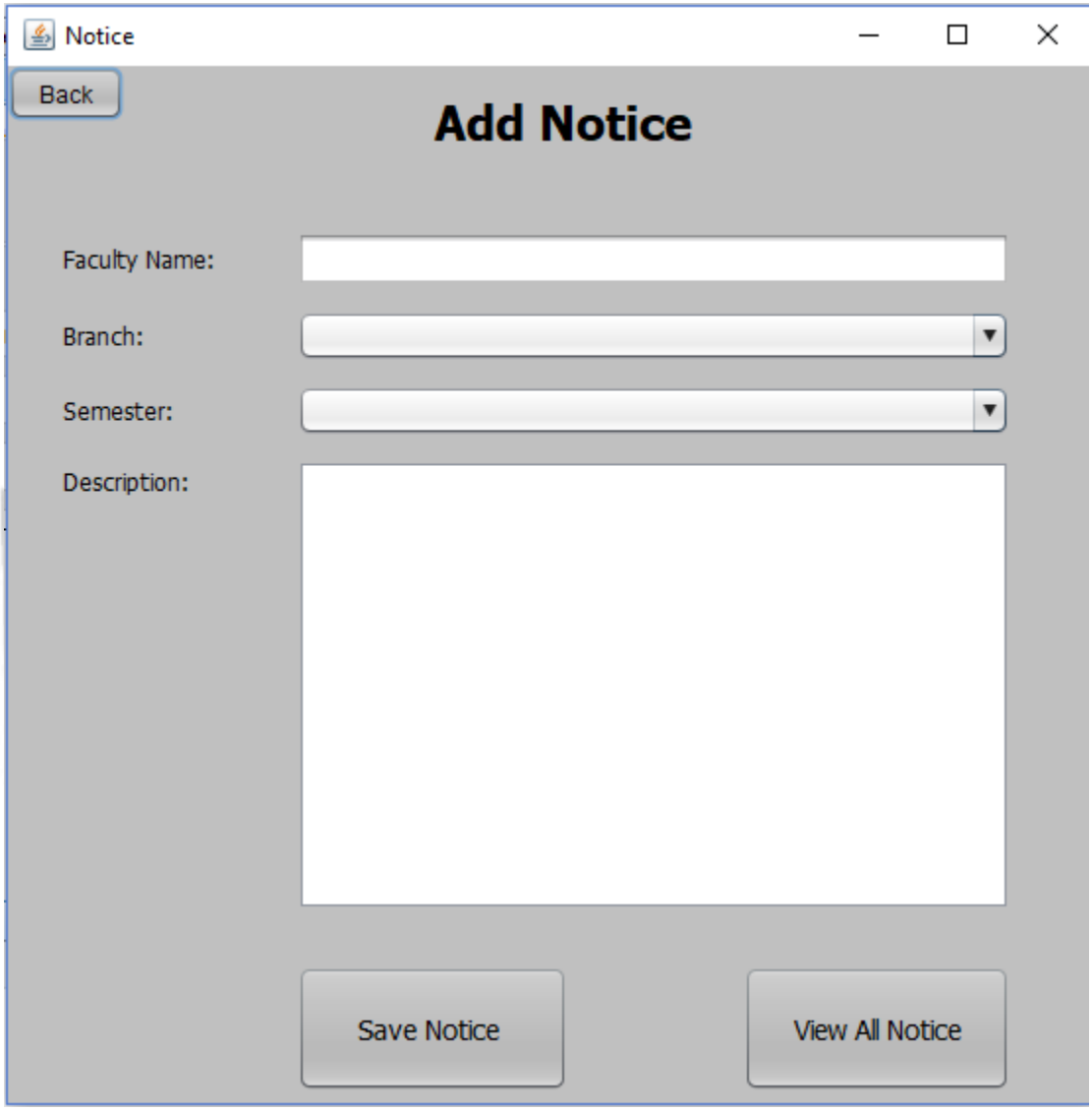
Add Employee page in admin



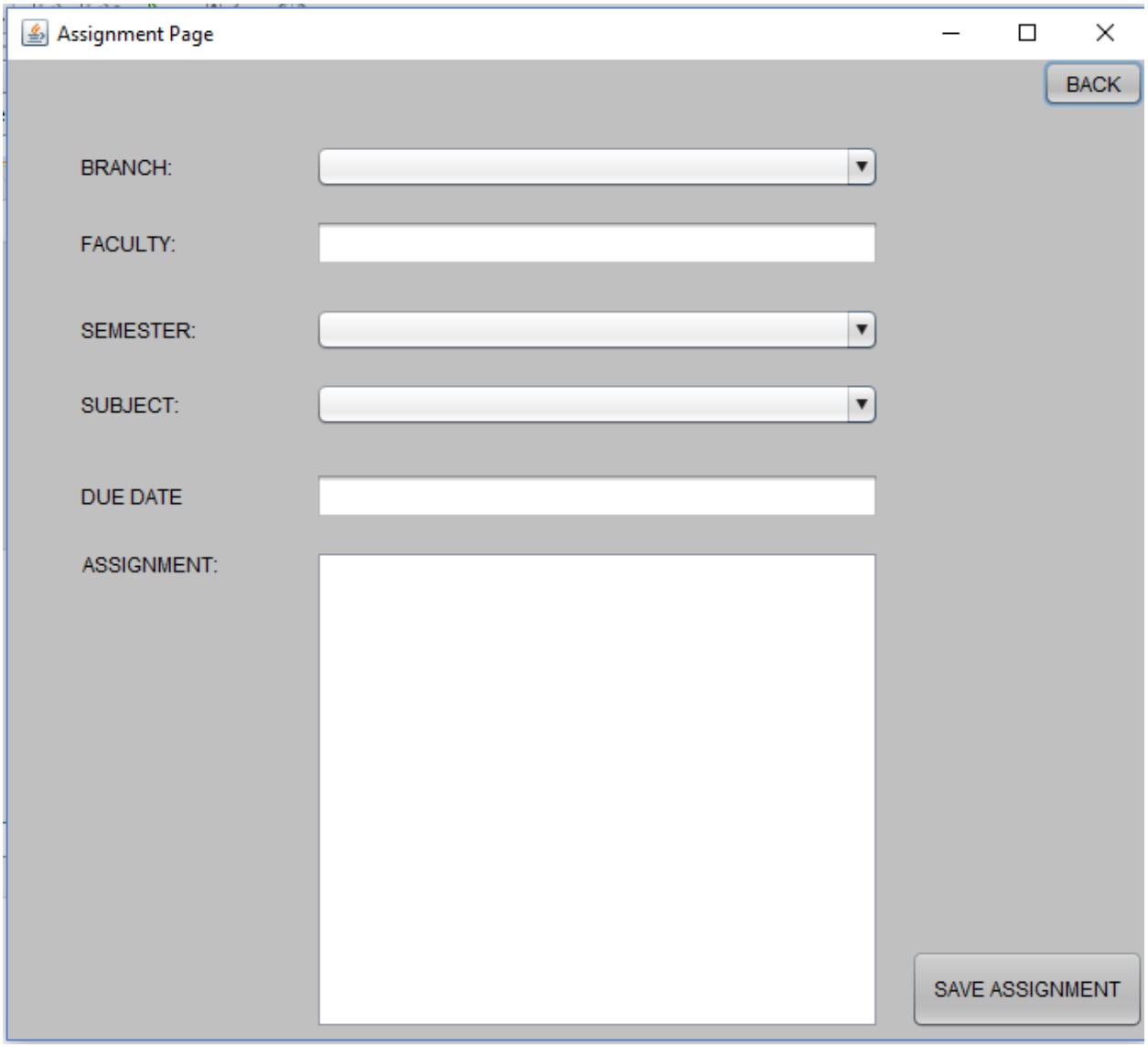
Logged in as Student



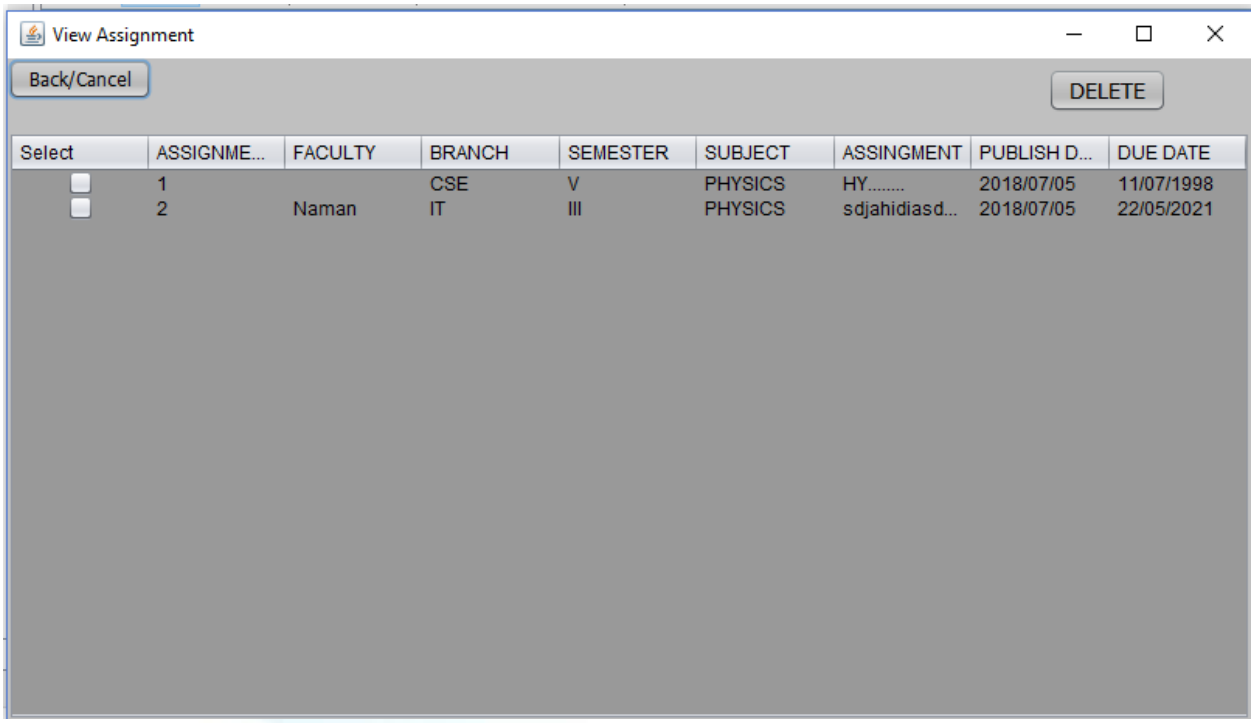
Logged in as Employee



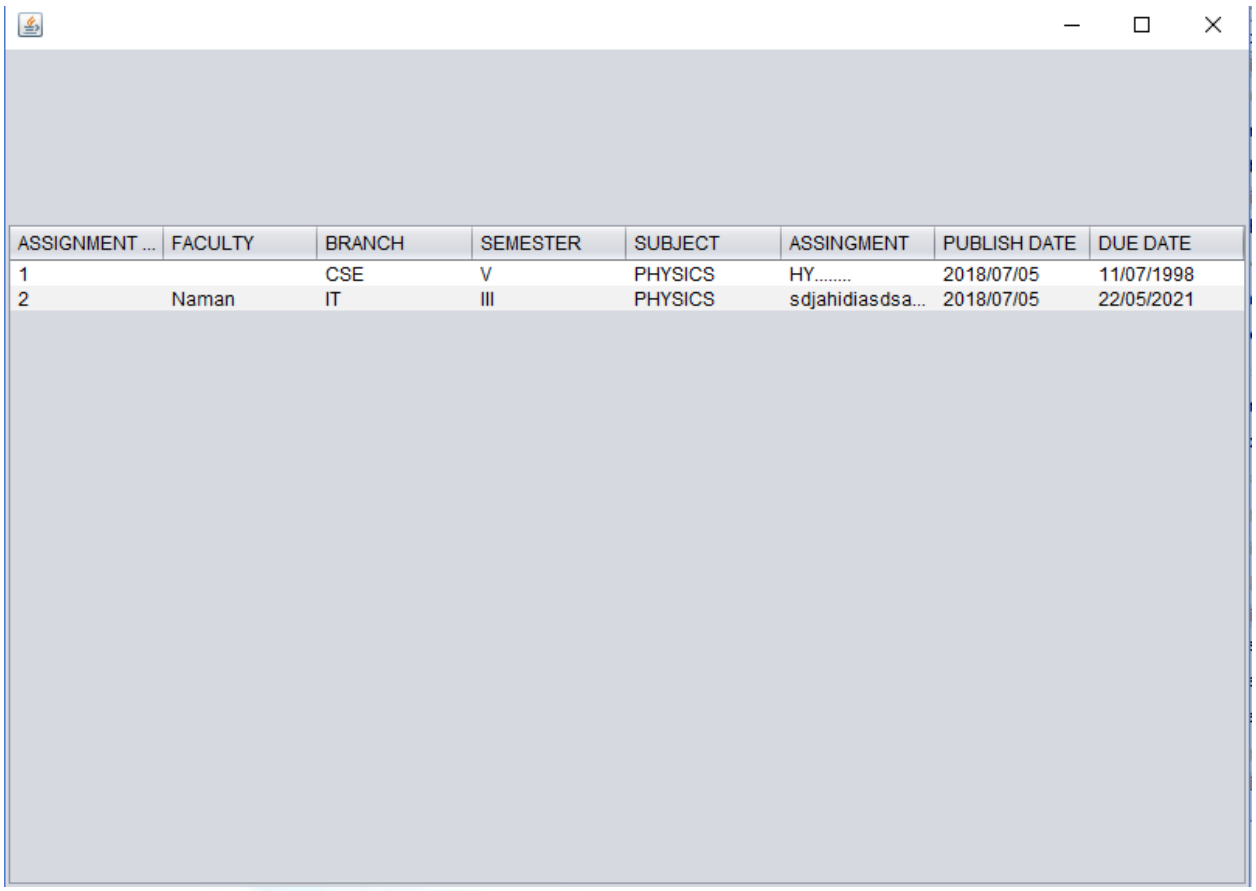
Employee adding notice for students



Employee adding assignment for students



Employee viewing his previously uploaded assignments which can be deleted



Assignment viewed in student section

	AssignmentId	faculty	Branch	semester	subject	Assignment	PublishDate	DueDate
1	1	NULL	CSE	V	PHYSICS	HY.....	2018/07/05	11/07/1998
2	2	Naman	IT	III	PHYSICS	sdjahidiasdsadaa	2018/07/05	22/05/2021

Assignment stored in database in tabular format.

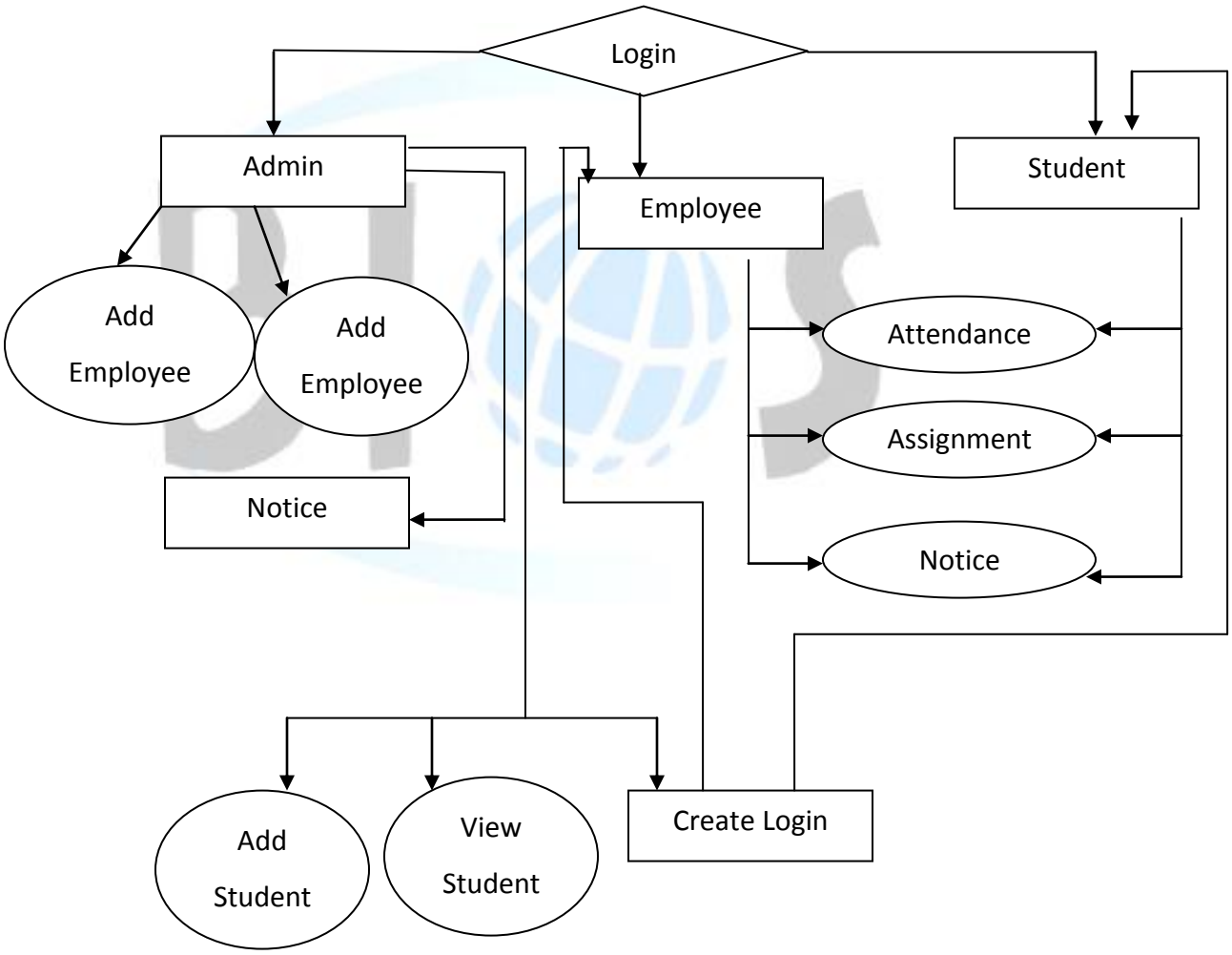
7. DATABASE STRUCTURE

We have three login tables for admin, employee and student. After that, we have table for employee detail where all his records including salary is stored along with images. We have the same for student. Then we have tables student, subject, teaches, attendance for storing daily attendance of each student. At last we have tables for assignment and for notices i.e. for employees and students. All the tables are confined in a database named 'bios1' which is connected with our software. All one needs to do this they need to create 'bios1' database. We will be configuring our software to your SQL server connectivity after that he can freely use our software. Following modules contain certain set of tables and their relation is described in ER diagram.

- **Admin Section**
  i) Employee Detail
  ii) Student Detail
  iii) Employee and Student Login
  iv) Employee Notice
- **Employee Section**
  (1) Attendance
  (2) Student Notice
  (3) Assignments
- **Student Section**

  Nothing.

8. ER DIAGRAM


Login
Admin
Employee
Student
Add Employee
Add Employee
Notice
Attendance
Assignment
Notice
Add Student
View Student
Create Login

9. FUTURE ENHANCEMENTS

Soluciones is still in development phase, right now it has only limited features. There are lot more things that needs to be added. Our goal will be to provide erp for college. In the upcoming versions, users can except to have new features such as:-

- Viewing time table
- Accounting functionality
- Library Management
- Mailing System

And many more.

10. CONCLUSION

Hereby at the end of our Training report and Project completion we conclude that this opportunity of dealing with Soluciones and the libraries and enhancing the functionality of systems, which we got from our college and our Trainer was a great opportunity and We would definitely like to work for its completion with lots of more stuffs to enhance the Soluciones.

Here is a brief note of what we learnt:

- Team Work
- Designing UI in java
- Database Connectivity in Java

11. REFERENCES

Websites Referred:

- www.google.com
- www.youtube.com
- https://github.com/mascot6699/Attendance-Management-System