A Project Report on

SCHOOL MANAGEMENT SYSTEM

Dr. A.P.J. ABDUL KALAM TECHNICAL UIVERSITY, LUCKNOW

In partial fulfillment of the requirement for the award of the degree of

MASTER OF COMPUTER APPLICATION

With Specialization In

COMPUTER APPLICATION

Submitted by

RAVAN RATHORE (2000650140012)

Under the Esteemed guidance of

Mr. Amit Verma

Project Cordinator

B.S.A COLLEGE OF ENGINEERING AND TECHNOLOGY,

MATHURA, (U.P)-INDIA

2020

CANDIDATE'S DECLARATION

We, Ravan Rathore (2000650140012), hereby submit the project, as approved by the project supervisor **Mr. Amit Verma**, Project Coordinator of Master in computer Application Department, B.S.A. College of Engineering & Technology, Mathura. We hereby declare that the work presented in this project is an authentic work carried out by us during Oct 2021 – Dec 2021. We have read and understand the Institute's rule relating to the thesis, inventions, innovations and other work and agree to be bound by them. We also declare that, to the best of our knowledge and belief, this work has not been submitted earlier for the award of any other degree.

Dec, 2021
Mathura

Ravan Rathore
(2000650140012)

CERTIFICATE

This is to certify that the mini project entitled "**School Management System"** is being submitted by **Ravan Rathore (2000650140012)** in partial fulfillment of the requirement for the award of the degree of **MASTER IN COMPUTER APPLICATION to** the **Department of MCA, B.S.A. College of Engineering & Technology, Mathura** during the academic year 2021-2022. The results embodied in this project have not been submitted for the award of any other degree. I approve their submission for the above mentioned degree.

Date: 10/12/2021

Place: Mathura (U.P.)

(**Mr. Amit Verma**)

Department of MCA
B.S.A. College of Engg. & Tech ,Mathura

ACKNOWLEDGEMENT

We take this opportunity to express our deep sense of gratitude to our project supervisor, **Mr. Amit Verma** project coordinator, in the Department of MCA Engineering, B.S.A. College of Engineering & Technology, Mathura for his constant guidance and insightful comments during the course of work. We shall always cherish our association with them for their constant encouragement and freedom to thought and action that rendered to our throughout the project work.

We are grateful to Head of Department **Mrs. Durgapuja** for his encouragement, valuable suggestions during our project work. We would like to thank Project Supervisor **Mr. Amit Verma** and all the faculty members of the Department of MCA at B.S.A. College of Engineering & Technology, Mathura, for maintaining a congenial research environment.

We would like to express our special gratitude and thanks to **Mr. Amit Verma** give us such attention and time. We are also thankful to all our friends for their constant help and encouragement for our successful completion of project work.

We are obliged to our parents for their constant and generous support for our MCA study and career goals.

Finally, we deem it a great pleasure to thank Lord Krishna, who blessed us to complete the project work successfully.

Ravan Rathore

(2000650140012)

TABLE OF CONTENT

INTRODUCTION

The title of the project is “School Management system”. This project will handle whole the activities of the school. SMS has most of the facilities that a modern school requires to computerize its day-to-day jobs. It provides facilities to keep the records of student, fees, teaching and non-teaching staff with all their required details along with all required transaction handling. It has facilities to generate various types’ o f reports, which are required by the management during normal business operations to operate the business effectively.

School ERP software is a robust, time-tested educational ERP system integrated with the advanced modules to enable faculty & educators to digitize the daily work processes of educational institutions. Also referred to as a school management system, the smart school ERP software simplifies the complex administrative & non-administrative tasks including online admission, online fees management, examination management, assessments, timetable, schedule planning, teaching-learning, etc. Thus, the benefits of the school management system are numerous in terms of improving productivity, efficiency & ROI.

School management software is designed to track and record the administrative work of schools and educational institutions. It has all the modules that help faculty and staff to maintain all student records like managing academic records, fees management, timetable management, and all other required information of the institution. Overall it is specially designed to manage all the administrative work of schools and institutions.

Master Soft’s School Management ERP aims at easing administrative hassles and enhancing efficiency, and productivity. The solution is cloud based and supports various modern technologies such as – Online payment gateway, RFID smart cards, biometric, mobile apps, email alerts, etc. School management software is agile and can be tailored according to the requirements of the institution.

OBJECTIVES

This project is based on the RDBMS technology; the main objective of this project is to computerize the manual system & reduce the time consumption.

In other words we can say that our project has the following objectives: - Make all the system computerize

- Reduce time consumption
- Reduce error scope
- All system managements are automated
- Centralized database management
- Easy operations for operator of the system
- No paper work requirement
- To reflect and conserver basic values
- To carry out educational futures
- To manage social change
- To profit by experience
- To carry out modernization
- To propagate science
- To adopt technology
- To realize National Integration

HARDWARE & SOFTWARE REQUIREMENT

HARDWARE:

Processor	Pentium-II or higher
Processor Speed	533 MHZ
Hard Disk Space	20 GB (min.)
Ram Memory	32 MB (64 MB recommended)

SOFTWARE:

Operating System	Windows 95/98/NT/2000/win 7 home
Database Server	MYSQL
Front end	NetBeans IDE 8.2

DATABASE DESIGN

Database Design in most important in any project. We are using the following table to store the information related to staff of school.

1. STUDENT

Field Name	NULL	Type
REGNO	NOT NULL	NUMBER (5)
ROLLNO	NOTNULL	NUMBER (5)
CLASS		VARCHAR (4)
NAME		VARCHAR (25)
FNAME		VARCHAR (25)
LNAME		VARCHAR (25)
DOB		DATE
ADDRESS		VARCHAR (30)
GENDER		VARCHAR (30)

2. TEACHER

Field Name	NULL	Type
EMPNO	Not Null	NUMBER (5)
EMPNAME		VARCHAR (30)
ADDRESS		VARCHAR (30)
CITY		VARCHAR (15)
PIN		VARCHAR (6)
STATE		VARCHAR (15)

Field Name	NULL	Type
PHONE		VARCHAR (15)
MOBILE		VARCHAR (13)
EMAIL		VARCHAR (30)

SYSTEM DESIGN

System Design is the solution to the creation of a new system. This is the important aspect made up of several steps. The complete, efficient and successful system should provide the following in succession: -

- From where should we start
- Where we have to go
- Where should we stop

If the project is to be successful, we will need answer these question. The answer of these questions is schema manner and is known as system design.

A systematic manner will be followed so as to achieve beneficial result at the end. It involves starting with a vague idea and ultimately developing it up into a useful system. The design phase is transition from a user oriented to a document oriented to the programmers.

Software report can be broken into a series of steps starting with the basic ideas and ending with the finished project.

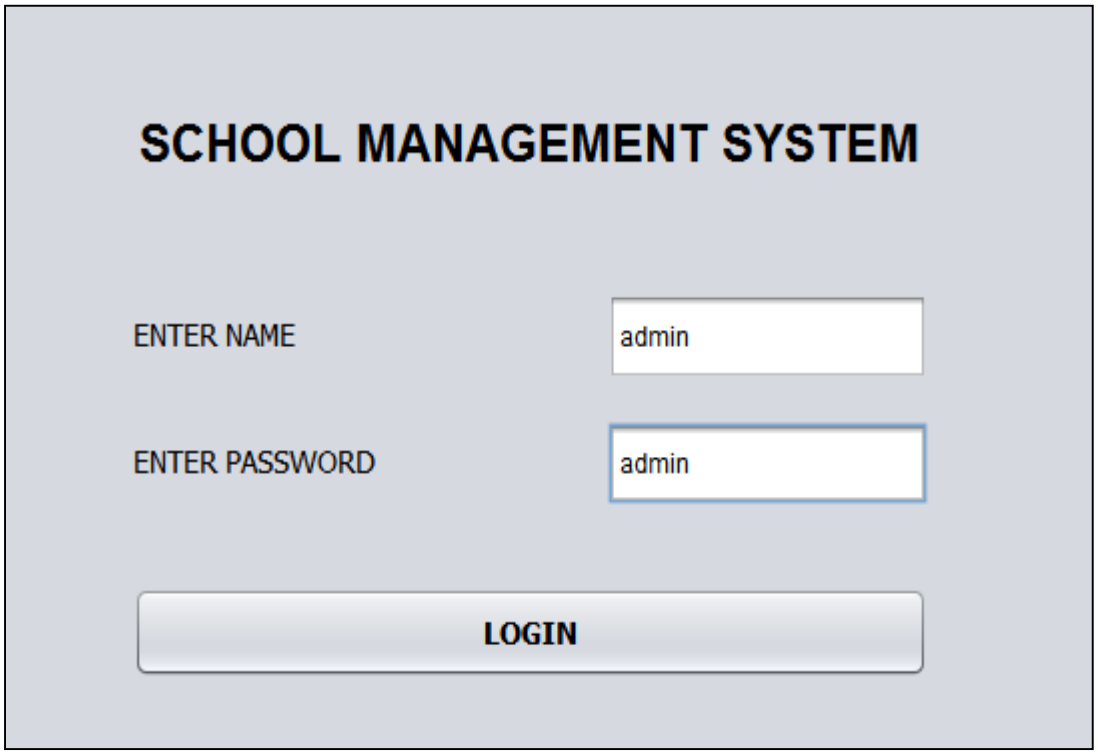
The steps for the successful project are as follows: -

- ✓ We should define problem completely and the goals should be known before our destination
- ✓ In the next step, we should specify inputs and outputs of our interest
- ✓ Then the structure of various database should be designed which will be used during the programming
- ✓ Next, we should design our programs of user friendly nature and always provide a way to the user to read back the origin if he/she find any complex problem at any stage
- ✓ We should know the function of each and every program which will leads us to or helps us to read at the specified goal.
- ✓ Then we write these individual programs which later on joining solve our problem
- ✓ Next step involve then testing of these programs and correction – if necessary
- ✓ At last, linking all the programs in a well-specified manner and combining in the form of a menu, submenu etc. will be our defined problem.

Out of these defined steps, few of the major steps will respect to Project

"School Management System"

Create Login page in NetBean IDE 8.2



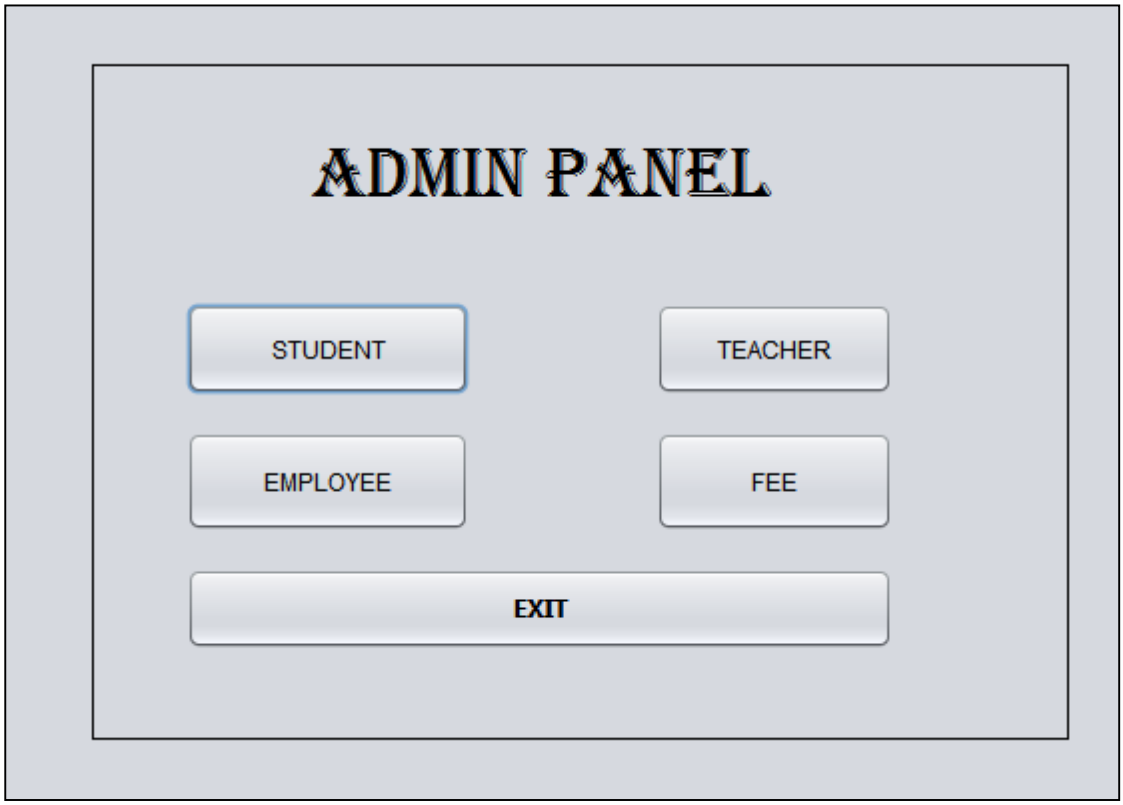
Coding for this login page in netbean IDE 8.2

```
package school_management;

import java.sql.*;

import javax.swing.*;

public class adminpanel extends javax.swing.JFrame {

   Connection con;

   Statement stmt;

   ResultSet rs;

   public adminpanel() {

      initComponents();

      connect();

   }
```

```
public void connect()
  {
     try {
        con=DriverManager.getConnection ("jdbc:mysql://localhost:3306/student_management","root","");
        stmt=con.createStatement();
     }
     catch (SQLException ex) {
        JOptionPane.showMessageDialog(this,ex.getMessage());
     }
  }
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
     //login Button
     try {
        String sql ="select * from admin where adminname ='"+jTextField1.getText()+"' and password
='"+jTextField2.getText()+"'";
        rs=stmt.executeQuery(sql);
        int i=0;
        while (rs.next())
        {
           i++;
        }
     if(i==1)
     {
      JOptionPane.showMessageDialog(this,"Login successfull");
```

```
    panel obj=new panel();
    obj.setSize(1000,700);
    obj.setVisible(true);
   }
   else
      JOptionPane.showMessageDialog(this,"Invalid Login");
}
  catch (SQLException ex)
  {
     JOptionPane.showMessageDialog(this,ex.getMessage());
  }}
```

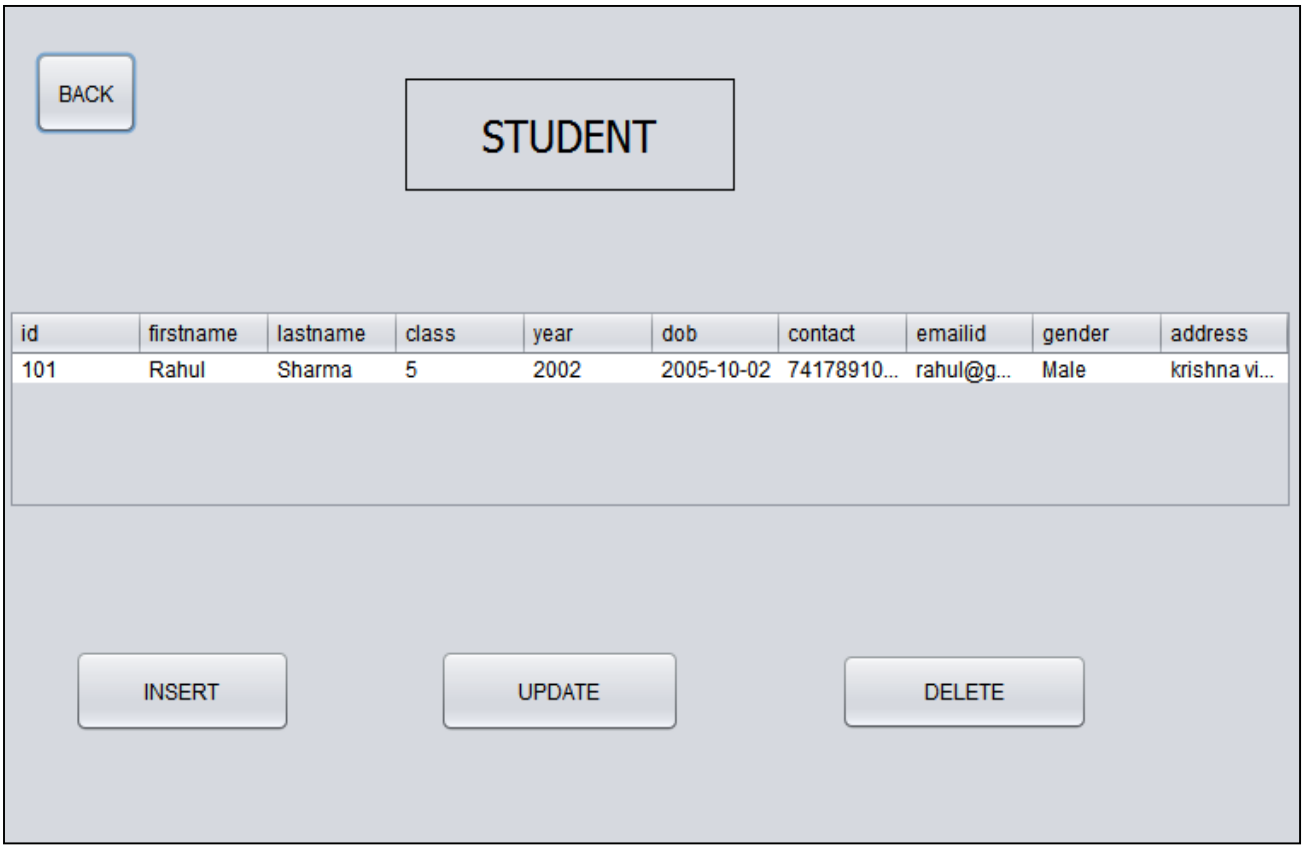
Create Admin panel page in NetBean IDE 8.2



Coding for this admin panel page in netbean IDE 8.2

```
package school_management;

public class panel extends javax.swing.JFrame {

   public panel() {

      initComponents();

   }

   private void initComponents() {

……….

……..

}



   private void jButton6ActionPerformed(java.awt.event.ActionEvent evt) {

     System.exit(0);

   }

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {

student obj=new student ();

obj.setSize(1000,700);

obj.setVisible(true);

      // TODO add your handling code here:    }

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

teacher obj=new teacher ();

obj.setSize(1000,700);

obj.setVisible(true);       // TODO add your handling code here   }
```

Create Student Panel page in NetBean IDE 8.2



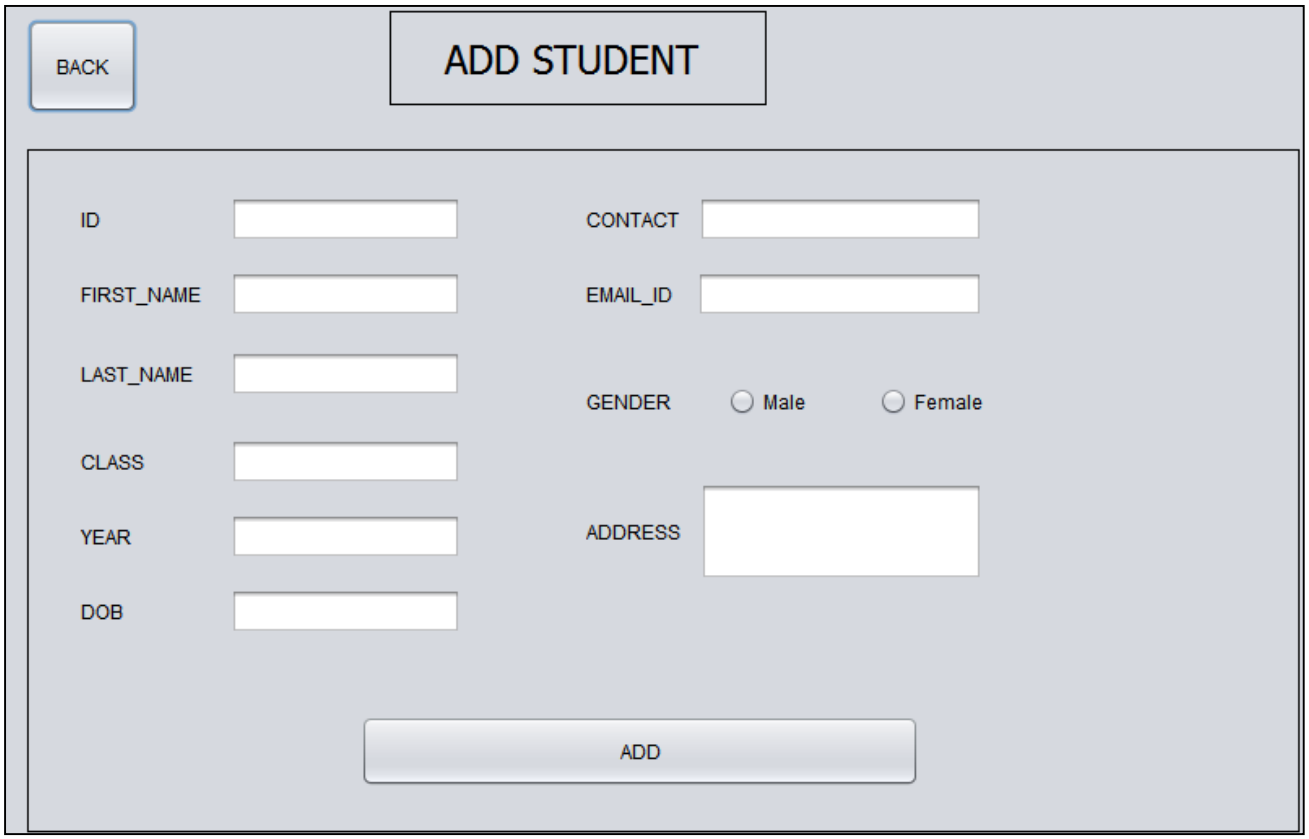
Coding for this Student Panel page in netbean IDE 8.2

```
package school_management;

import java.sql.*;

import javax.swing.*;

import javax.swing.table.DefaultTableModel;

public class student extends javax.swing.JFrame {

Connection con;

   Statement stmt;

   ResultSet rs;

   public student() {

      initComponents();
```

```
connect();
      loadData();
   }
public void connect()
   {
      try {
         con=DriverManager.getConnection ("jdbc:mysql://localhost:3306/student_management","root","");
         stmt=con.createStatement();
      }
      catch (SQLException ex) {
         JOptionPane.showMessageDialog(this,ex.getMessage());
      }
   }

public void loadData()
{
   try
{
      String sql = "select * from student";
      rs=stmt.executeQuery(sql);
      DefaultTableModel model=(DefaultTableModel)jTable1.getModel();
      model.setRowCount(0);
      while(rs.next())
      {
```

```
        model.addRow(new
Object[]{rs.getString("id"),rs.getString("firstname"),rs.getString("lastname"),rs.getString("class"),rs.getStrin
g("year"),rs.getString("dob"),rs.getString("contact"),rs.getString("emailid"),rs.getString("gender"),rs.getStri
ng("address")});
      }


   }
    catch (SQLException ex) {
        JOptionPane.showMessageDialog(this,ex.getMessage());
      }
}
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
      add obj = new add();
      obj.setSize(1000,700);
      obj.setVisible(true);
   }
  private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {
this.dispose();
   }


   private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
      // TODO add your handling code here:
      delete obj = new delete();
      obj.setSize(1000,700);
      obj.setVisible(true);    }
```

Create Student insert page in NetBean IDE 8.2

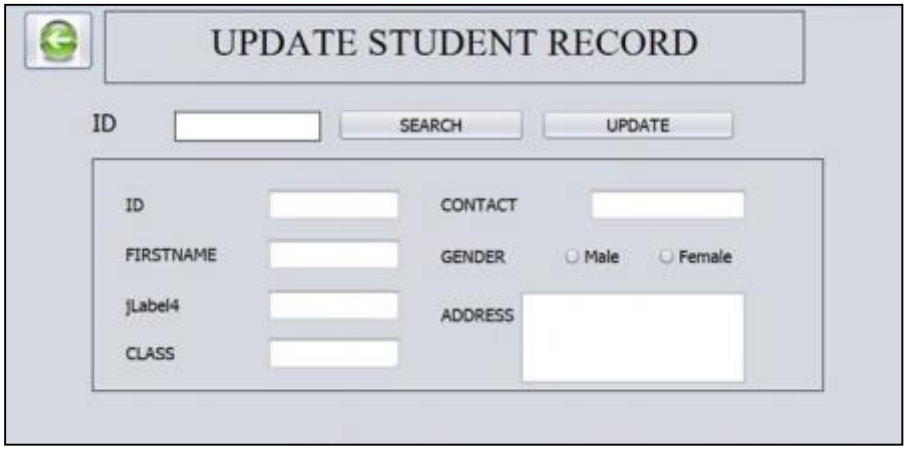


Coding for this Student insert page in netbean IDE 8.2

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {

    // TODO add your handling code here:

    String id =jTextField1.getText();

    String firstname=jTextField2.getText();

    String lastname=jTextField3.getText();

    String Class=jTextField4.getText();

    String year=jTextField5.getText();

    String dob=jTextField6.getText();

    String contact=jTextField7.getText();

    String emailid=jTextField8.getText();
```

```
String gender = " ";
      if(jRadioButton1.isSelected())
      {
         gender="Male";
      }
      else if (jRadioButton2.isSelected())
         {
         gender="Female";
      }
      String address= jTextField10.getText();
      try
      {
         String sql ="insert into student (id,firstname,lastname,class,year,
dob,contact,emailid,gender,address)values('"+id+"','"+firstname+"','"+lastname+"','"+Class+"','"+year+"','"+do
b+"','"+contact+"','"+emailid+"','"+gender+"','"+address+"')";
      stmt.executeUpdate(sql);
         JOptionPane.showMessageDialog(this,"record save successfully");
      }
      catch (SQLException ex) {
         JOptionPane.showMessageDialog(this,ex.getMessage());
      }

   }
```

Create Student update page in NetBean IDE 8.2



Coding for this Student Update page in netbean IDE 8.2

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {

String id =jTextField8.getText();

try{

String sql =”select *from student where id =’”+id+”’”;

rs=stmt.executeQuery(sql);

if(rs.next())

{

jTextField1.SetText(rs.getString(“id”));

jTextField2.SetText(rs.getString(“firstname”));

jTextField3.SetText(rs.getString(“lastname”));

jTextField4.SetText(rs.getString(“class”));

jTextField5.SetText(rs.getString(“contact”));

jTextField6.SetText(rs.getString(“address”));

String  gender =rs.getstring (“gender”);

If(gender.equals(“male”))
```

{

jRadioButton1.Setselected(true);

}

else

jRadioButton2.setselected(true);

}

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {

String id=TextField1.getText();

String firstname=TextField2.getText();

String lastname=TextField3.getText();

String class=TextField4.getText();

String contact=TextField5.getText();

String address=TextField6.getText();

String gender=" ";

If(jRadioButton1.isSelected())

Gender="male";

Elseif(jRadiButton2.isSelected())

Gender="female";

Try {

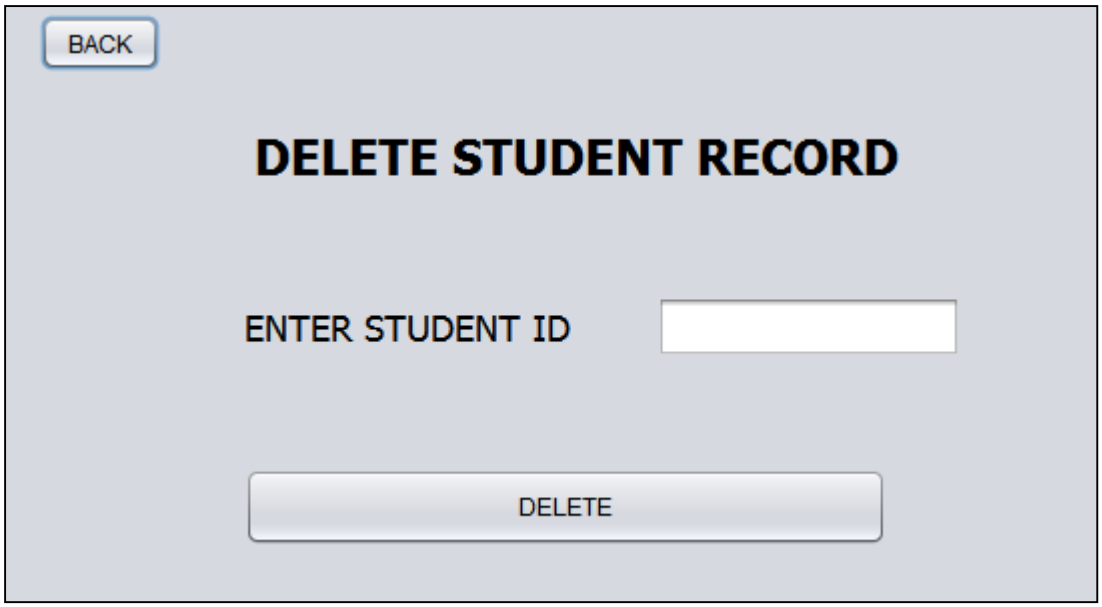
String sql="update student set id ="+id+",firstname='"+firstname+"', lastname='"+lastname+"'

,class='"+class+"', contact='"+contact+"', address='"+address+"'where id='"+jTextfield2.getText()+"'";

Stmt.executeupdate(sql);

```
JOptionPane.ShowMessageDialog(this,"Record updated successfully");

}

Catch(SQLException ex)

{

JOptionpane.ShowMessageDialog("this,ex.getMessage());

}

}
```

Create Student delete page in NetBean IDE 8.2

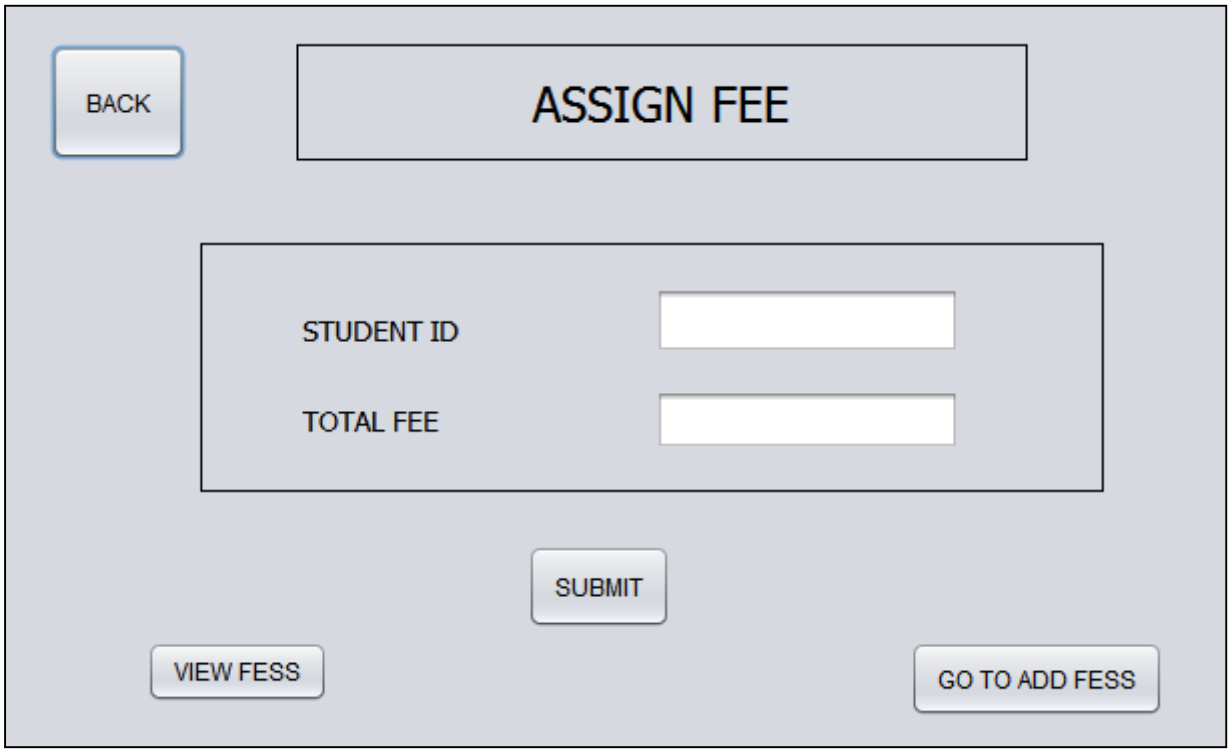


Coding for this Student delete page in netbean IDE 8.2

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {

    // TODO add your handling code here:

    String id=jTextField1.getText();

    try{
```

```
        String sql="delete from student where id='"+id+"'";
        stmt.executeUpdate(sql);
        JOptionPane.showMessageDialog(this,"Record remove successfully");


    }
     catch (SQLException ex)
    {
        JOptionPane.showMessageDialog(this,ex.getMessage());
    }
}
```

Create ASSIGN FEE PAGE in NetBean IDE 8.2



Coding for this Assign fee page in netbean IDE 8.2

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {

        String id=jTextField1.getText();

String totalfee=jTextField2.getText();

String remainingfee=jTextField2.getText();

String paidfee="0";

Try {

String sql ="insert into fee (Sid, totalfee,paidfee,remainingfee)"+"values('"+sid+"','"+totalfee+" ' , ' " paidfee+"
',' "+remainingfee+"')";

Stmt.executeUpdate(sql);

JOptionPane.showMessagedialog(this,"record Save successfully");

Catch(Exception ex)

{

JOptionPane.showMesssagedialog(this,ex.getMessage());
```

}}

Create Manage Fee Page in NetBean IDE 8.2

Coding for this manage fee page in netbean IDE 8.2

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {

String Sid=jTextField1.getText();

Try{

String sql =”select *from fee where Sid=’ “+Sid+” ‘ “;

Rs=stmt.executeQuery(sql);

If(rs.next())

{

jTextField2.setText(rs.getString(“remainingfee”));

jTextField3.setText(rs.getString(“paidfee”));

jTextField4.setText(rs.getstring(“totalfee”);

}

}

Catch(SQLException ex)

{

JOptionpane.ShowMessagedialog (this,ex.getMessage());

}

}

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {

int paynow = Integer.parseInt (jTextField5.getText());

int paidfee=paynow + Integer parseInt (jTextField3.getText());

jTextField3.setText(“ “+paidfee);

int remainingfee = Integer.parseInt (jTextField4.getText()) – paidfee;
```

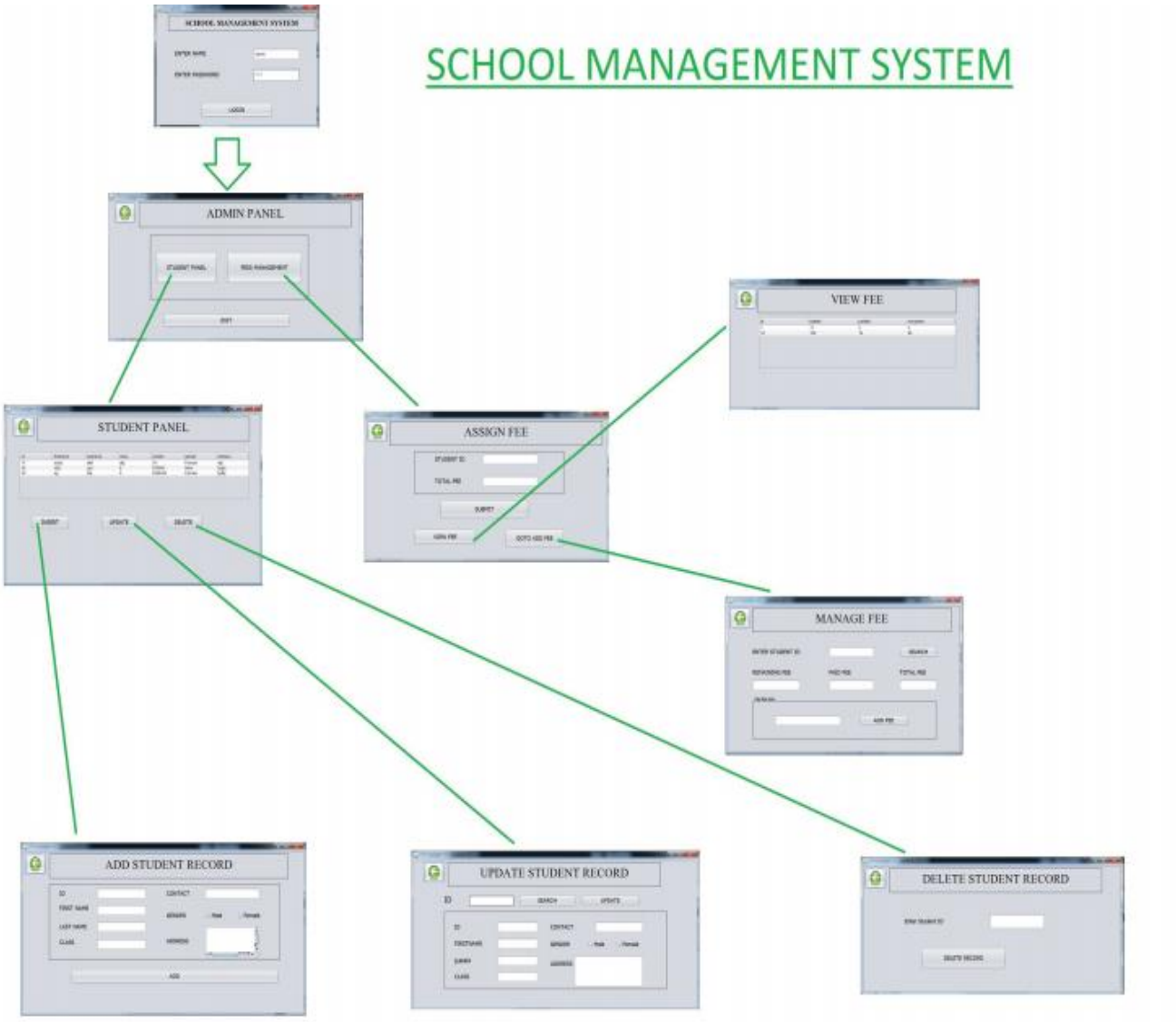
```
jTextField2.setText(" "+remainingfee);

try{

string sql ="update fee set paidfee = "+paidfee +"remainingfee="+remainingfee+" where sid='
"jTextField1.getText()" ') ";

stmt.excecuteUpdate(sql);

JOptionpane.ShowMessagedialog (this,"fee added successfully");

}

Catch(SQLException ex)

{

JOptionpane.ShowMessagedialog (this,ex.getMessage());

}

}
```

Create fee view Page in NetBean IDE 8.2

Coding for this fee view fee page in netbean IDE 8.2

```
Public void loaddata()

{

Try{

String sql=”select*from fee table”;

Rs=stmt.executequery(sql);

defaultTablemodel model = (defaultTablemodel) jTable1.getmodel();

model.setRowcount(0);



while(rs.next())

{

Model.addRow (new  object[] {rs.getString(“id”), rs.getString(“totalfee”), rs.getString(“paidfee”),
rs.getString(“remainingfee”)});

}

}

Catch(SQLException ex)

{

JOptionpane.ShowMessagedialog (this,ex.getMessage());

}

}
```

ALL FILES IN SCHOOL MANAGEMENT SYSTEM



FUTURE SCOPE OF THE PROJECT

Nothing is perfect in this world. So, we are also no exception. Although, we have tried our best to present the information effectively, yet, there can be further enhancement in the Application.

We have taken care of all the critical aspects, which need to take care of during the development of the Project.

Like the things this project also has some limitations and can further be enhances by someone, because there are certain drawbacks that do not permit the system to be 100% accurate.