**JAVA AWT BASED- COLLEGE PROJECTS MANAGEMENT SYSTEM - SQL CONNECTIVITY USING JDBC**

***DBMS Project Report***

***Submitted in partial fulfilment of the***

***Requirements for the award of the Degree of***

**BACHELOR OF ENGINEERING**

IN

**INFORMATION TECHNOLOGY**

BY

**<M.Pavan Kalyan><1602-20-737-027>**



Department of Information Technology

Vasavi College of Engineering (Autonomous)

(Affiliated to Osmania University)

Ibrahimbagh, Hyderabad-312020

**DECLARATION BY THE CANDIDATE**

We, **M.Pavan Kalyan**, bearing hall ticket numbers, **1602-20-737-027**, hereby declare that the project report entitled **”COLLEGE PROJECTS MANAGEMENT SYSTEM”** Department of Information Technology, Vasavi College of Engineering, Hyderabad, is submitted in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Information Technology

This is a record of bonafide work carried out by me and the results embodied in this project report have not been submitted to any other university or institute for the award of any other degree or diploma.

**M.Pavan Kalyan**

**1602-20-737-027**

**(Faculty In-Charge) (Head,Dept of IT)**

ABSTRACT

Engineering students are often expected to design a project to help understand and learn a course better. Computer science students of a particular college make projects for multiple courses during their time at the college. They come up with many exciting ideas and implement interesting features. This DBMS project is a collection of all those amazing projects. The college managements system helps Faculty and students of a college to access the projects made by the students for various courses. Once logged in, faculty members will be able to score the projects and delete or add projects. Students can use the application to add their projects, view their scores, search for projects made by students who learned the courses before them using different attributes. An interesting feature is that the implementation is only visible to faculty. The application is overall an easy way to access all the projects at a place according to the users needs.

**INTRODUCTION**

REQUIREMENTS –

* Students

Thestudents table has the details of all the students in the college with their ID number, name, password to access the application which they are assumed to know.

* Faculty

The faculty table has the details of all faculty members in the college with their ID number, names, passwords to access the application and the course they took up for which projects were made.

* Projects

The projects table is the central table used in the application and contains the information about all the projects that students made and all the details about them including its name, description, date, course, code and the score awarded by the faculty member.

**AIM AND PRIORITY OF THE PROJECT** –

To create a Java GUI based management system for projects made by students in a particular college. All the values are to be updated and handled in the database using JDBC connectivity .

**ARCHITECTURE AND TECHNOLOGY USED –**

Java Eclipse, Oracle 11g Database, Java SE version 8, SQL Developer.

SQL developer is an Oracle Database utility, commonly used by users, administrators and programmers.

The interface of SQLDeveloper is used for creating the database. DDL and DML commands are implemented for operations being executed. The details of students and faculty, their logins, projects are

stored in the form of tables in the database.

Eclipse is an integrated development environment (IDE) used in computer programming. It contains a base workspace and an extensible plug-in system for customizing the environment.

Eclipse is written mostly in java and its primary use is for developing java applications, but it may also be used to develop applications in other programming languages via plug-ins, including Erlang, JavaScript etc.

The front-end application code is written in “Java” using eclipse. The portal for front end application is designed through Eclipse, runs and has the capacity to connect with the database which has data inserted using SQL.

Java AWT (Abstract Window Toolkit) is an API to develop GUI or window

based applications in java.

Java AWT components are platform-dependent i.e., components are displayed according to the view of operating system. AWT is heavyweight i.e., its components are using the resources of OS.

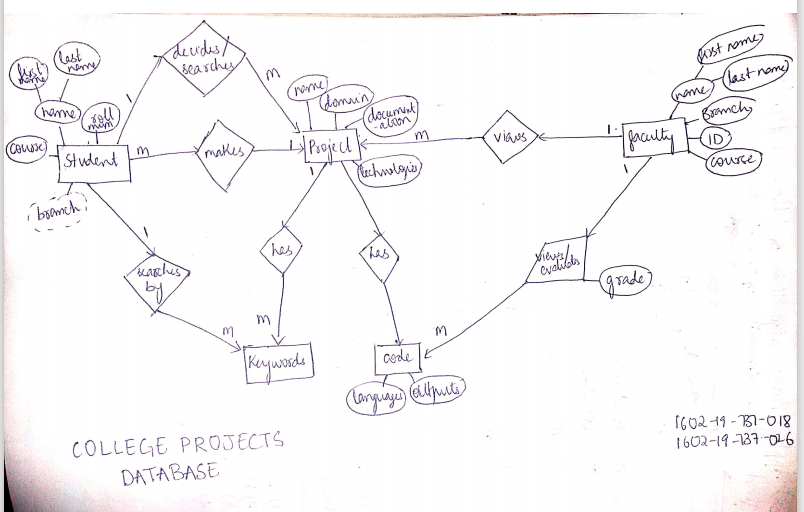
The java.awt package provides classes for AWT API such as TextField, Label, TextArea, RadioButton, CheckBox, Choice, List etc.

Java-SQL Connectivity using JDBC

Java Database Connectivity (JDBC) is an application programming interface (API) for theprogramming language Java, which defines how a client may access a database. It is a Java-baseddata access technology used for Java database connectivity. It is part of the Java Standard Editionplatform, from Oracle Corporation. It provides methods to query and update data in a databaseand is oriented towards relational databases.

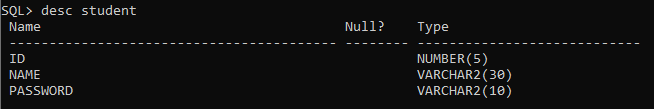
**DESIGN**

**Entity Relationship Diagram**

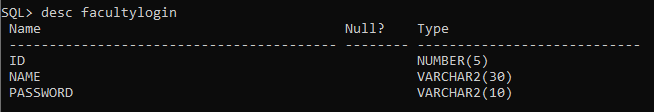


**Database design –**

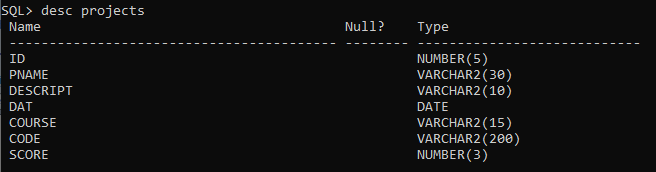
CREATE TABLE STUDENT(id NUMBER(5),name VARCHAR2(30),password VARCHAR2(10));



CREATE TABLE FACULTYLOGIN(id NUMBER(5),name VARCHAR2(30),password VARCHAR2(10));



CREATE TABLE PROJECTS(id NUMBER(5),pname VARCHAR2(30),descript VARCHAR2(10),dat date,course VARCHAR2(15),code VARCHAR2(200),score NUMBER(3));



**Constraints**

ALTER TABLE STUDENT ADD PRIMARY KEY (id);

ALTER TABLE FACULTYLOGIN ADD PRIMARY KEY (id);

ALTER TABLE PROJECTS ADD UNIQUE(descript);

IMPLEMENTATION –

Home.java

**import**java.awt.event.ActionEvent;

**import**java.awt.event.ActionListener;

**import**javax.swing.JButton;

**import**javax.swing.JFrame;

**import**javax.swing.\*;

**import**java.awt.\*;

**publicclass** home{

**publicstaticvoid** main(String[] args) {

**new**Gui();

}

}

**class**Gui

{

**public**Gui(){

JFrameframe = **new**JFrame("Home");

//JPanel panel = new JPanel();

// Font f1 = new Font(Font.DIALOG\_INPUT, Font.BOLD, 17);

// Font f3 = new Font(Font.DIALOG\_INPUT, Font.PLAIN, 14);

// ColorlightBlue = new Color(164, 206, 237);

ColorBlue = **new**Color(187, 255, 153);

JLabelheading = **new**JLabel("COLLEGE PROJECTS MANAGEMENT SYSTEM");

heading.setBounds(15,30,290,30);

frame.add(heading);

// heading.setFont(f1);

frame.getContentPane().setBackground(Blue);

JLabellb = **new**JLabel("Login as : ");

lb.setBounds(110, 70,80,30);

JButtonbutton1 = **new**JButton("Student");

button1.setBounds(50,110,80,30);

JButtonbutton2 = **new**JButton("Faculty");

button2.setBounds(150,110,80,30);

frame.add(heading);

frame.add(lb);

frame.add(button1);

frame.add(button2);

//frame.add(panel);

button1.addActionListener(**new** ActionListener() {

**publicvoid**actionPerformed(ActionEventae) {

frame.dispose();

**new**SecondFrame();

}

});

button2.addActionListener(**new** ActionListener() {

**publicvoid**actionPerformed(ActionEventae) {

frame.dispose();

**new**clickListener();

}

});

// ActionListener listener = new clickListener();

// button1.addActionListener(listener);

// ActionListener listener2 = new clickListener();

// button2.addActionListener(listener2);

//panel.setBackground(Color.cyan);

frame.setLayout(**null**);

frame.setSize(300, 300);

frame.setDefaultCloseOperation(JFrame.***EXIT\_ON\_CLOSE***);

frame.setVisible(**true**);

}

Facultyopts.java

**import**javax.swing.JButton;

**import**javax.swing.JFrame;

**import**java.awt.Color;

**import**java.awt.event.ActionEvent;

**import**java.awt.event.ActionListener;

**import**javax.swing.\*;

**publicclass**facultyopts{

**private**JFramef = **new**JFrame("Faculty");

**private**JButtonadd = **new**JButton("Add a Project");

**private**JButtonmodify = **new**JButton("Score/modify a project");

**private**JButtondelete = **new**JButton("Delete a Project");

//private JLabel name = new JLabel()

**public**facultyopts(String name){

add.setBounds(30, 130, 220,30);

modify.setBounds(30, 170, 220, 30);

delete.setBounds(30, 210, 220, 30);

ColorBlue = **new**Color(187, 255, 153);

f.getContentPane().setBackground(Blue);

JLabellabel = **new**JLabel("Hi, " + name);

JLabelmenu = **new**JLabel("MENU");

menu.setBounds(125, 80, 80,30);

f.add(menu);

label.setBounds(115,24, 80, 30);

f.add(label);

f.add(add);

f.add(modify);

f.add(delete);

f.setLayout(**null**);

f.setDefaultCloseOperation(JFrame.***EXIT\_ON\_CLOSE***);

f.setSize(300,300);

f.setVisible(**true**);

add.addActionListener(**new** ActionListener() {

**publicvoid**actionPerformed(ActionEvente) {

f.dispose();

**new** insert(name);

}

});

delete.addActionListener(**new** ActionListener() {

**publicvoid**actionPerformed(ActionEvente) {

f.dispose();

**new** delete(name);

}

});

modify.addActionListener(**new** ActionListener() {

**publicvoid**actionPerformed(ActionEvente) {

f.dispose();

**new** update();

}

});

}

}

Studentopts.java

//import java.awt.\*;

//import java.awt.event.ActionEvent;

//import java.awt.event.ActionListener;

**import**javax.swing.JButton;

**import**javax.swing.JFrame;

**import**java.awt.Color;

**import**java.awt.event.ActionEvent;

**import**java.awt.event.ActionListener;

**import**javax.swing.\*;

**publicclass**studentopts{

**private**JFramef = **new**JFrame("Student");

**private**JButtonall = **new**JButton("View All Projects");

**private**JButtonmy = **new**JButton("View my projects");

**private**JButtoninsert = **new**JButton("Add my project");

**private**JButtonsearch = **new**JButton("Search for a Project");

//private JButton modify = new JButton("Modify a Project");

//private JLabel name = new JLabel()

**public**studentopts(String name, **int**id){

all.setBounds(30, 130, 220,30);

my.setBounds(30, 170, 220, 30);

insert.setBounds(30,210,220,30);

search.setBounds(30,250,220,30);

// modify.setBounds(200, 140, 80, 30);

ColorBlue = **new**Color(187, 255, 153);

f.getContentPane().setBackground(Blue);

JLabellabel = **new**JLabel("Hi, " + name);

JLabelmenu = **new**JLabel("MENU");

menu.setBounds(125, 60, 80,30);

f.add(menu);

label.setBounds(110,24, 80, 30);

f.add(label);

f.add(all);

f.add(my);

f.add(search);

f.add(insert);

//f.add(modify);

f.setLayout(**null**);

f.setDefaultCloseOperation(JFrame.***EXIT\_ON\_CLOSE***);

f.setSize(300,400);

f.setVisible(**true**);

all.addActionListener(**new** ActionListener() {

**publicvoid**actionPerformed(ActionEvente) {

f.dispose();

**new**viewall();

}

});

insert.addActionListener(**new** ActionListener() {

**publicvoid**actionPerformed(ActionEvente) {

f.dispose();

**new**insertmy(name, id);

}

});

my.addActionListener(**new** ActionListener() {

**publicvoid**actionPerformed(ActionEvente) {

f.dispose();

**new**viewmy(id);

}

});

search.addActionListener(**new** ActionListener() {

**publicvoid**actionPerformed(ActionEvente) {

f.dispose();

**new** search();

}

});

}

}

Insert.java

import java.awt.\*;

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;

import java.sql.Connection;

import java.sql.DriverManager;

//import java.sql.ResultSet;

import java.sql.SQLException;

import java.sql.Statement;

import javax.swing.\*;

public class insert

{

JFrame frame = new JFrame("Insert");

JLabel heading = new JLabel("ADD A PROJECT");

JLabel Id = new JLabel("Enter id of student : ");

JLabelpName = new JLabel("Enter project name :");

JLabel des = new JLabel("Description : ");

JLabeldat = new JLabel("Date : ");

JLabel course = new JLabel("Enter Course : ");

JLabel code = new JLabel("Code(link) : ");

JLabel score = new JLabel("Enter the score: ");

JLabelgo\_to = new JLabel("GOTO");

JTextFieldtpId = new JTextField();

JTextFieldtpName = new JTextField();

JTextFieldtscore = new JTextField();

JTextField date = new JTextField();

JTextFieldtcourse = new JTextField();

JTextFieldtcode = new JTextField();

JTextFieldtDescription = new JTextField();

JTextArearesultText = new JTextArea();

JButton home = new JButton("Home");

JButton insert = new JButton("Submit");

JButton back = new JButton("Back");

Statement stmt;

public void connDb() {

try{

//Class.forName("oracle.jdbc.driver.OracleDriver");

Connection con = DriverManager.getConnection("jdbc:oracle:thin:@218.248.0.7:1521:rdbms","it19737018","vasavi");

stmt = con.createStatement();

System.out.println("connection successful");

// con.close();

}

catch(SQLException e){

System.out.println(e);

}

}

public insert(String name){

connDb();

Color Blue = new Color(187, 255, 153);

frame.getContentPane().setBackground(Blue);

heading.setBounds(50, 50, 100, 20);

Id.setBounds(50, 100, 130, 30);

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

tpId.setBounds(250, 100, 150, 30);

tpName.setBounds(250, 150, 150, 30);

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

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

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

date.setBounds(250, 250,150, 30);

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

tcourse.setBounds(250, 300, 150, 30);

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

tcode.setBounds(250, 350, 150, 30);

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

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

resultText.setBounds(250, 450, 200, 150);

insert.setBounds(50, 450, 100, 30);

go\_to.setBounds(50, 500, 100, 30);

home.setBounds(50, 550, 100, 30);

back.setBounds(50, 600, 100, 30);

frame.add(heading);

frame.add(Id);

frame.add(pName);

frame.add(tpId);

frame.add(tpName);

frame.add(dat);

frame.add(date);

frame.add(des);

frame.add(tDescription);

frame.add(course);

frame.add(tcourse);

frame.add(code);

frame.add(tcode);

frame.add(score);

frame.add(tscore);

frame.add(insert);

frame.add(go\_to);

frame.add(home);

frame.add(resultText);

frame.add(back);

frame.setLayout(null);

frame.setVisible(true);

frame.setBounds(10, 10, 500, 700);

frame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

frame.setResizable(false);

insert.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent ae) {

try {

String query= "INSERT INTO projects VALUES(" + tpId.getText() + ",'" + tpName.getText() + "','" + tDescription.getText() + "','" + date.getText() + "','" + tcourse.getText() + "','" + tcode.getText() + "'," + tscore.getText() +" )";

int i = stmt.executeUpdate(query);

resultText.append("\nInserted " + i + " rows successfully");

//ResultSetrs = stmt.executeQuery(sql);

//while(rs.next()){

// System.out.println(rs.getInt(1) + " " + rs.getString(2));

// }

}

catch(SQLException e){

System.out.println(e);

}

// frame.dispose();

// new customerLogin();

}});

home.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent ae) {

frame.dispose();

new Gui();

// new clickListener();

}});

back.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent ae) {

frame.dispose();

new facultyopts(name);

// new clickListener();

}});

}

}

Update.java

import javax.swing.\*;

import java.awt.\*;

import java.awt.event.\*;

import java.sql.\*;

public class update

{

JFrame frame = new JFrame("Update/Score Project");

JLabel heading = new JLabel("UPDATE PROJECT");

JLabelpId = new JLabel("Enter Student id : ");

JLabelpName = new JLabel("Enter project name : ");

JLabel stock = new JLabel("Enter Description : ");

JLabel price = new JLabel("Enter Date : ");

JLabel type = new JLabel("Enter Course : ");

JLabel brand = new JLabel("Enter Code(link) : ");

JLabel description = new JLabel("Enter score : ");

JLabelgo\_to = new JLabel("GOTO");

List ids = new List(15);

JTextFieldtpId = new JTextField();

JTextFieldtpName = new JTextField();

JTextFieldtStock = new JTextField();

JTextFieldtPrice = new JTextField();

JTextFieldtType = new JTextField();

JTextFieldtBrand = new JTextField();

JTextFieldtDescription = new JTextField();

JTextArearesultText = new JTextArea();

JButton home = new JButton("Home");

JButton update = new JButton("MODIFY");

JButton back = new JButton("Back");

Statement stmt;

public void connDb() {

try{

//Class.forName("oracle.jdbc.driver.OracleDriver");

Connection con = DriverManager.getConnection("jdbc:oracle:thin:@218.248.0.7:1521:rdbms","it19737018","vasavi");

stmt = con.createStatement();

System.out.println("connection successful");

// con.close();

}

catch(SQLException e){

System.out.println(e);

}

}

public void loadProducts(){

try

{

ResultSetrs;

rs = stmt.executeQuery("SELECT ID FROM projects");

while (rs.next())

{

ids.add(rs.getString(1));

}

}

catch (SQLException e)

{

displaySQLErrors(e);

}

}

private void displaySQLErrors(SQLException e)

{

JOptionPane.showMessageDialog(frame,"Enter valid data types");

resultText.append("\nSQLException: " + e.getMessage() + "\n");

resultText.append("SQLState: " + e.getSQLState() + "\n");

resultText.append("VendorError: " + e.getErrorCode() + "\n");

}

public update(){

connDb();

loadProducts();

ids.setBounds(50, 100, 200, 350);

heading.setBounds(150, 50, 100, 20);

pId.setBounds(300, 100, 100, 30);

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

tpId.setBounds(450, 100, 150, 30); //1

tpName.setBounds(450, 150, 150, 30);//2

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

tStock.setBounds(450, 200, 150, 30);//3

price.setBounds(300, 250, 150, 30);

tPrice.setBounds(450, 250,150, 30);//4

brand.setBounds(300, 300, 150, 30);

tBrand.setBounds(450, 300, 150, 30);//5

type.setBounds(300, 350, 150, 30);

tType.setBounds(450, 350, 150, 30);//6

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

tDescription.setBounds(450, 400, 150, 30);//7

resultText.setBounds(300, 450, 200, 150);

update.setBounds(50, 470, 100, 30);

go\_to.setBounds(50, 500, 100, 30);

home.setBounds(50, 550, 100, 30);

back.setBounds(50, 600, 100, 30);

Color Blue = new Color(187, 255, 153);

frame.getContentPane().setBackground(Blue);

frame.add(ids);

frame.add(heading);

frame.add(pId);

frame.add(pName);

frame.add(tpId);

frame.add(tpName);

frame.add(stock);

frame.add(price);

frame.add(brand);

frame.add(type);

frame.add(description);

frame.add(tStock);

frame.add(tPrice);

frame.add(tBrand);

frame.add(tType);

frame.add(tDescription);

frame.add(update);

frame.add(go\_to);

frame.add(home);

frame.add(resultText);

frame.add(back);

frame.setLayout(null);

frame.setVisible(true);

frame.setBounds(10, 10, 700, 700);

frame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

frame.setResizable(false);

ids.addItemListener(new ItemListener() {

public void itemStateChanged(ItemEvent ae) {

try

{

ResultSetrs;

rs = stmt.executeQuery("SELECT \* FROM projects where ID ="+ids.getSelectedItem());

rs.next();

tpId.setText(rs.getString(1));

tpName.setText(rs.getString(2));

tStock.setText(rs.getString(3));

tPrice.setText(rs.getString(4));

tType.setText(rs.getString(6));

tBrand.setText(rs.getString(5));

tDescription.setText(rs.getString(7));

}

catch (SQLExceptionselectException)

{

displaySQLErrors(selectException);

}

}});

update.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent ae) {

try

{

// Statement statement = con.createStatement();

int i = stmt.executeUpdate("UPDATE projects "

+ "SET ID=" + tpId.getText() + ", "

+ "PNAME='" + tpName.getText() + "', "

+ "descript= '" + tStock.getText() + "', "

+ "dat='" + tPrice.getText() + "', "

+ "Course='" + tBrand.getText() + "', "

+ "code='" + tType.getText() + "', "

+ "score ="+ tDescription.getText() + " WHERE id = "

+ ids.getSelectedItem());

resultText.append("\nUpdated " + i + " rows successfully");

ids.removeAll();

loadProducts();

}

catch (SQLExceptioninsertException)

{

displaySQLErrors(insertException);

}

}});

home.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent ae) {

frame.dispose();

new Gui();

// new clickListener();

}});

back.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent ae) {

frame.dispose();

//new admChoice();

// new clickListener();

}});

}

}

Delete.java

import javax.swing.\*;

import java.awt.\*;

import java.awt.event.\*;

import java.sql.\*;

public class delete

{

JFrame frame = new JFrame("Delete Project");

JLabel heading = new JLabel("DELETE PROJECT");

JLabel Id = new JLabel("Enter id of student : ");

JLabelpName = new JLabel("Enter project name :");

JLabel des = new JLabel("Description : ");

JLabeldat = new JLabel("Date : ");

JLabel course = new JLabel("Enter Course : ");

JLabel code = new JLabel("Code(link) : ");

JLabel score = new JLabel("Enter the score: ");

JLabelgo\_to = new JLabel("GOTO");

List ids = new List(15);

JTextFieldtpId = new JTextField();

JTextFieldtpName = new JTextField();

JTextFieldtscore = new JTextField();

JTextField date = new JTextField();

JTextFieldtcourse = new JTextField();

JTextFieldtcode = new JTextField();

JTextFieldtDescription = new JTextField();

JTextArearesultText = new JTextArea();

JButton home = new JButton("Home");

JButton delete = new JButton("DELETE");

JButton back = new JButton("Back");

Statement stmt;

public void connDb() {

try{

//Class.forName("oracle.jdbc.driver.OracleDriver");

Connection con = DriverManager.getConnection("jdbc:oracle:thin:@218.248.0.7:1521:rdbms","it19737018","vasavi");

stmt = con.createStatement();

System.out.println("connection successful");

// con.close();

}

catch(SQLException e){

System.out.println(e);

}

}

public void loadProducts(){

try

{

ResultSetrs;

rs = stmt.executeQuery("SELECT ID FROM projects");

while (rs.next())

{

ids.add(rs.getString(1));

}

}

catch (SQLException e)

{

displaySQLErrors(e);

}

}

private void displaySQLErrors(SQLException e)

{

JOptionPane.showMessageDialog(frame,"Enter valid data types");

resultText.append("\nSQLException: " + e.getMessage() + "\n");

resultText.append("SQLState: " + e.getSQLState() + "\n");

resultText.append("VendorError: " + e.getErrorCode() + "\n");

}

public delete(String name){

connDb();

loadProducts();

// heading.setBounds(50, 50, 100, 20);

// Id.setBounds(50, 100, 130, 30);

// pName.setBounds(50, 150, 200, 30);

// tpId.setBounds(250, 100, 150, 30);

// tpName.setBounds(250, 150, 150, 30);

// des.setBounds(50, 200, 150, 30);

// tDescription.setBounds(250, 200, 150, 30);

// dat.setBounds(50, 250, 150, 30);

// date.setBounds(250, 250,150, 30);

// course.setBounds(50, 300, 150, 30);

// tcourse.setBounds(250, 300, 150, 30);

// code.setBounds(50, 350, 150, 30);

// tcode.setBounds(250, 350, 150, 30);

// score.setBounds(50, 400, 150, 30);

// tscore.setBounds(250, 400, 150, 30);

ids.setBounds(50, 100, 200, 350);

heading.setBounds(150, 50, 100, 20);

Id.setBounds(300, 100, 100, 30);

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

tpId.setBounds(450, 100, 150, 30);

tpName.setBounds(450, 150, 150, 30);

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

tDescription.setBounds(450, 200, 150, 30);

dat.setBounds(300, 250, 150, 30);

date.setBounds(450, 250,150, 30);

course.setBounds(300, 300, 150, 30);

tcourse.setBounds(450, 300, 150, 30);

code.setBounds(300, 350, 150, 30);

tcode.setBounds(450, 350, 150, 30);

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

tscore.setBounds(450, 400, 150, 30);

resultText.setBounds(300, 450, 300, 150);

resultText.setBounds(300, 450, 300, 150);

delete.setBounds(50, 470, 100, 30);

go\_to.setBounds(50, 500, 100, 30);

home.setBounds(50, 550, 100, 30);

back.setBounds(50, 600, 100, 30);

Color Blue = new Color(187, 255, 153);

frame.getContentPane().setBackground(Blue);

frame.add(ids);

frame.add(heading);

frame.add(Id);

frame.add(pName);

frame.add(tpId);

frame.add(tpName);

frame.add(dat);

frame.add(date);

frame.add(des);

frame.add(tDescription);

frame.add(course);

frame.add(tcourse);

frame.add(code);

frame.add(tcode);

frame.add(score);

frame.add(tscore);

frame.add(delete);

frame.add(go\_to);

frame.add(home);

frame.add(resultText);

frame.add(back);

frame.setLayout(null);

frame.setVisible(true);

frame.setBounds(10, 10, 700, 700);

frame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

frame.setResizable(false);

ids.addItemListener(new ItemListener() {

public void itemStateChanged(ItemEvent ae) {

try

{

ResultSetrs;

rs = stmt.executeQuery("SELECT \* FROM projects where ID ='"+ids.getSelectedItem()+"'");

rs.next();

tpId.setText(rs.getString(1));

tpName.setText(rs.getString(2));

tDescription.setText(rs.getString(3));

date.setText(rs.getString(4));

tcourse.setText(rs.getString(6));

tcode.setText(rs.getString(5));

tscore.setText(rs.getString(7));

}

catch (SQLExceptionselectException)

{

displaySQLErrors(selectException);

}

}});

delete.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent ae) {

try

{

int i = stmt.executeUpdate("DELETE FROM projects WHERE ID = " + ids.getSelectedItem());

resultText.append("\nDeleted " + i + " rows successfully");

ids.removeAll();

loadProducts();

}

catch (SQLExceptioninsertException)

{

displaySQLErrors(insertException);

}

}});

home.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent ae) {

frame.dispose();

new Gui();

// new clickListener();

}});

back.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent ae) {

frame.dispose();

// new admChoice();

// new clickListener();

new facultyopts(name);

}});

}

}

secondFrame.java

import javax.swing.\*;

import java.awt.\*;

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;

import java.sql.\*;

public class SecondFrame {

private JFrame f = new JFrame("Student Login");

//JPanel panel = new JPanel();

private JLabel l1 = new JLabel("Welcome!!");

private JLabel l2 = new JLabel("Password: ");

private JLabel l3 = new JLabel("User ID: ");

private TextField id = new TextField();

private JPasswordField value = new JPasswordField();

private JButton b = new JButton("Login");

private JLabel go = new JLabel("GOTO: ");

private JButton h = new JButton("Home");

public SecondFrame() {

l1.setBounds(120,20,80,30);

l3.setBounds(20,60, 80,30);

l2.setBounds(20, 110, 80,30);

id.setBounds(100,60,100,30);

value.setBounds(100,110,100,30);

b.setBounds(120, 160, 80, 30);

go.setBounds(5,210, 80, 30);

h.setBounds(100,210,100, 30);

Color Blue = new Color(187, 255, 153);

f.getContentPane().setBackground(Blue);

// l2.setBounds(20,100, 80,30);

// value.setBounds(100,100,100,30);

f.add(l1);

f.add(l2);

f.add(value);

f.add(b);

f.add(l3);

f.add(id);

f.add(go);

f.add(h);

//f.add(panel);

f.setLayout(null);

f.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

f.setSize(300,300);

f.setVisible(true);

h.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent e) {

f.dispose();

new Gui();

}

});

b.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent ae) {

String userName = id.getText();

char[] temp\_pwd=value.getPassword();

String pwd=null;

pwd=String.copyValueOf(temp\_pwd);

// String password = value.getText();

String dburl ="jdbc:oracle:thin:@218.248.07:1521:rdbms";

String us = "it19737018";

String pas ="vasavi";

try {

Connection conn=DriverManager.getConnection(dburl,us,pas);

System.out.println("Connected");

Statement stmt =conn.createStatement();

String sql = "select \* from login where id ="+ userName;

try {

ResultSetrs = stmt.executeQuery(sql);

while(rs.next()){

System.out.println(rs.getInt(1) + " " + rs.getString(2));

//System.out.println(pwdText);

if(rs.getString(3).equals(pwd)) {

JOptionPane.showMessageDialog(f, "Login Successful");

String abc = rs.getString(2);

int id = rs.getInt(1);

f.dispose();

new studentopts(abc, id);

}

else {

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

}

}

}

catch(SQLException e){

System.out.println(e);

}

}

catch (SQLExceptionsqlException) {

sqlException.printStackTrace();

}

}});

}

}

clickListener.java

import javax.swing.\*;

import java.awt.\*;

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.sql.Statement;

public class clickListener

{

private JFrame f = new JFrame("Faculty Login");

//JPanel panel = new JPanel();

private JLabel l1 = new JLabel("Welcome!!");

private JLabel l2 = new JLabel("Password: ");

private JLabel l3 = new JLabel("User ID: ");

private TextField id = new TextField();

private JPasswordField value = new JPasswordField();

private JButton b = new JButton("Login");

private JLabel go = new JLabel("GOTO: ");

private JButton h = new JButton("Home");

public clickListener() {

l1.setBounds(120,20,80,30);

l3.setBounds(20,60, 80,30);

l2.setBounds(20, 110, 80,30);

id.setBounds(100,60,100,30);

value.setBounds(100,110,100,30);

b.setBounds(120, 160, 80, 30);

go.setBounds(5,210, 80, 30);

h.setBounds(100,210,100, 30);

// l2.setBounds(20,100, 80,30);

// value.setBounds(100,100,100,30);

Color Blue = new Color(187, 255, 153);

f.getContentPane().setBackground(Blue);

f.add(l1);

f.add(l2);

f.add(value);

f.add(b);

f.add(l3);

f.add(id);

f.add(go);

f.add(h);

//f.add(panel);

f.setLayout(null);

f.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

f.setSize(300,300);

f.setVisible(true);

h.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent e) {

f.dispose();

new Gui();

}

});

b.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent ae) {

String userName = id.getText();

char[] temp\_pwd=value.getPassword();

String pwd=null;

pwd=String.copyValueOf(temp\_pwd);

// String password = value.getText();

String dburl ="jdbc:oracle:thin:@218.248.07:1521:rdbms";

String us = "it19737018";

String pas ="vasavi";

try {

Connection conn=DriverManager.getConnection(dburl,us,pas);

System.out.println("Connected");

Statement stmt =conn.createStatement();

String sql = "select \* from facultylogin where id ="+ userName;

try {

ResultSetrs = stmt.executeQuery(sql);

while(rs.next()){

System.out.println(rs.getInt(1) + " " + rs.getString(2));

//System.out.println(pwdText);

if(rs.getString(3).equals(pwd)) {

JOptionPane.showMessageDialog(f, "Login Successful");

String abc = rs.getString(2);

//int id = rs.getInt(1);

f.dispose();

new facultyopts(abc);

}

else {

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

}

}

}

catch(SQLException e){

System.out.println(e);

}

}

catch (SQLExceptionsqlException) {

sqlException.printStackTrace();

}

}});

}

}

Viewall.java

import java.awt.\*;

import javax.swing.\*;

public class viewall {

viewall(){

JFrame frame = new list();

frame.setTitle("All Projects");

Color Blue = new Color(187, 255, 153);

frame.getContentPane().setBackground(Blue);

frame.setSize(500, 300);

frame.setLocationRelativeTo(null);

frame.setVisible(true);

frame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

}

}

List.java

import javax.swing.\*;

import java.awt.\*;

import javax.swing.table.DefaultTableModel;

import java.sql.\*;

public class list extends JFrame {

DefaultTableModel model = new DefaultTableModel();

//Container cnt = this.getContentPane();

Container cnt = new Container();

JTablejtbl = new JTable(model);

public list() {

cnt.setLayout(new FlowLayout(FlowLayout.LEFT));

model.addColumn("ID");

model.addColumn("Project name");

model.addColumn("Description");

model.addColumn("Date");

model.addColumn("Course");

model.addColumn("Score");

//model.addColumn("Create");

String dburl ="jdbc:oracle:thin:@218.248.07:1521:rdbms";

String us = "it19737018";

String pas ="vasavi";

try {

Connection conn=DriverManager.getConnection(dburl,us,pas);

System.out.println("Connected");

// Class.forName("com.mysql.jdbc.Driver");

//Connection con = DriverManager.getConnection("jdbc:mysql://localhost/java\_db", "root", "");

PreparedStatementpstm = conn.prepareStatement("SELECT \* FROM projects");

ResultSet Rs = pstm.executeQuery();

while(Rs.next()){

model.addRow(new Object[]{Rs.getInt(1), Rs.getString(2),Rs.getString(3),Rs.getString(4),Rs.getString(5),Rs.getInt(7)});

}

} catch (Exception e) {

System.out.println(e.getMessage());

}

JScrollPanepg = new JScrollPane(jtbl);

pg.setBounds(10,10,180,180);

pg.createHorizontalScrollBar();

pg.createVerticalScrollBar();

cnt.add(pg);

//this.pack();

this.add(cnt);

}

}

Byid.java

import javax.swing.\*;

import java.awt.event.\*;

import java.awt.\*;

import java.sql.\*;

public class byid{

//Initializing Components

private JFrame f = new JFrame("Search by ID");

JLabel lb, lb1, lb2, lb3, lb4, lb5;

JTextField tf1, tf2, tf3, tf4, tf5;

JButtonbtn;

//Creating Constructor for initializing JFrame components

byid() {

//Providing Title

Color Blue = new Color(187, 255, 153);

f.getContentPane().setBackground(Blue);

lb5 = new JLabel("Enter ID:");

lb5.setBounds(20, 20, 100, 20);

tf5 = new JTextField(20);

tf5.setBounds(130, 20, 200, 20);

btn = new JButton("Submit");

btn.setBounds(50, 50, 100, 20);

// btn.addActionListener(this);

lb = new JLabel("Fetching Project Information");

lb.setBounds(30, 80, 450, 30);

// lb.setForeground(Color.red);

lb.setFont(new Font("Serif", Font.BOLD, 20));

f.setVisible(true);

f.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

f.setSize(500, 500);

lb1 = new JLabel("Project Name:");

lb1.setBounds(20, 120, 100, 20);

tf1 = new JTextField(50);

tf1.setBounds(130, 120, 200, 20);

lb2 = new JLabel("Description:");

lb2.setBounds(20, 150, 100, 20);

tf2 = new JTextField(100);

tf2.setBounds(130, 150, 200, 20);

lb3 = new JLabel("Date:");

lb3.setBounds(20, 180, 100, 20);

tf3 = new JTextField(50);

tf3.setBounds(130, 180, 200, 20);

lb4 = new JLabel("Course:");

lb4.setBounds(20, 210, 100, 20);

tf4 = new JTextField(50);

tf4.setBounds(130, 210, 100, 20);

f.setLayout(null);

//Add components to the JFrame

f.add(lb5);

f.add(tf5);

f.add(btn);

f.add(lb);

f.add(lb1);

f.add(tf1);

f.add(lb2);

f.add(tf2);

f.add(lb3);

f.add(tf3);

f.add(lb4);

f.add(tf4);

//Set TextField Editable False

tf1.setEditable(false);

tf2.setEditable(false);

tf3.setEditable(false);

tf4.setEditable(false);

btn.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent e) {

String dburl ="jdbc:oracle:thin:@218.248.07:1521:rdbms";

String us = "it19737018";

String pas ="vasavi";

//Create DataBaseCoonection and Fetching Records

try {

String str = tf5.getText();

Connection conn=DriverManager.getConnection(dburl,us,pas);

System.out.println("Connected");

//Statement stmt =conn.createStatement();

PreparedStatementst = conn.prepareStatement("select \* from projects where id=?");

st.setString(1, str);

//Excuting Query

ResultSetrs = st.executeQuery();

if (rs.next()) {

String s = rs.getString(2);

String s1 = rs.getString(3);

String s2 = rs.getString(4);

String s3 = rs.getString(5);

//Sets Records in TextFields.

tf1.setText(s);

tf2.setText(s1);

tf3.setText(s2);

tf4.setText(s3);

} else {

JOptionPane.showMessageDialog(null, "Name not Found");

}

//Create Exception Handler

} catch (Exception ex) {

System.out.println(ex);

}

}

});

}

}

Insertmy.java

import java.awt.\*;

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;

import java.sql.Connection;

import java.sql.DriverManager;

//import java.sql.ResultSet;

import java.sql.SQLException;

import java.sql.Statement;

import javax.swing.\*;

public class insertmy

{

JFrame frame = new JFrame("Insert");

JLabel heading = new JLabel("ADD MY PROJECT");

JLabel Id = new JLabel("Enter id of student : ");

JLabelpName = new JLabel("Enter project name :");

JLabel des = new JLabel("Description : ");

JLabeldat = new JLabel("Date : ");

JLabel course = new JLabel("Enter Course : ");

JLabel code = new JLabel("Code(link) : ");

JLabel score = new JLabel("Enter the score: ");

JLabelgo\_to = new JLabel("GOTO");

JTextFieldtpId = new JTextField();

JTextFieldtpName = new JTextField();

JTextFieldtscore = new JTextField();

JTextField date = new JTextField();

JTextFieldtcourse = new JTextField();

JTextFieldtcode = new JTextField();

JTextFieldtDescription = new JTextField();

JTextArearesultText = new JTextArea();

JButton home = new JButton("Home");

JButton insert = new JButton("Submit");

JButton back = new JButton("Back");

Statement stmt;

public void connDb() {

try{

//Class.forName("oracle.jdbc.driver.OracleDriver");

Connection con = DriverManager.getConnection("jdbc:oracle:thin:@218.248.0.7:1521:rdbms","it19737018","vasavi");

stmt = con.createStatement();

System.out.println("connection successful");

// con.close();

}

catch(SQLException e){

System.out.println(e);

}

}

public insertmy(String name, int id){

connDb();

Color Blue = new Color(187, 255, 153);

frame.getContentPane().setBackground(Blue);

heading.setBounds(50, 50, 100, 20);

Id.setBounds(50, 100, 130, 30);

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

tpId.setBounds(250, 100, 150, 30);

tpId.setEditable(false);

tpId.setText(Integer.toString(id));

tpName.setBounds(250, 150, 150, 30);

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

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

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

date.setBounds(250, 250,150, 30);

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

tcourse.setBounds(250, 300, 150, 30);

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

tcode.setBounds(250, 350, 150, 30);

// score.setBounds(50, 400, 150, 30);

// tscore.setBounds(250, 400, 150, 30);

resultText.setBounds(250, 450, 200, 150);

insert.setBounds(50, 450, 100, 30);

go\_to.setBounds(50, 500, 100, 30);

home.setBounds(50, 550, 100, 30);

back.setBounds(50, 600, 100, 30);

frame.add(heading);

frame.add(Id);

frame.add(pName);

frame.add(tpId);

frame.add(tpName);

frame.add(dat);

frame.add(date);

frame.add(des);

frame.add(tDescription);

frame.add(course);

frame.add(tcourse);

frame.add(code);

frame.add(tcode);

// frame.add(score);

// frame.add(tscore);

frame.add(insert);

frame.add(go\_to);

frame.add(home);

frame.add(resultText);

frame.add(back);

frame.setLayout(null);

frame.setVisible(true);

frame.setBounds(10, 10, 500, 700);

frame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

frame.setResizable(false);

insert.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent ae) {

try {

String query= "INSERT INTO projects VALUES(" + tpId.getText() + ",'" + tpName.getText() + "','" + tDescription.getText() + "','" + date.getText() + "','" + tcourse.getText() + "','" + tcode.getText() + "'," + tscore.getText() +" )";

int i = stmt.executeUpdate(query);

resultText.append("\nInserted " + i + " rows successfully");

//ResultSetrs = stmt.executeQuery(sql);

//while(rs.next()){

// System.out.println(rs.getInt(1) + " " + rs.getString(2));

// }

}

catch(SQLException e){

System.out.println(e);

}

// frame.dispose();

// new customerLogin();

}});

home.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent ae) {

frame.dispose();

new Gui();

// new clickListener();

}});

back.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent ae) {

frame.dispose();

new facultyopts(name);

// new clickListener();

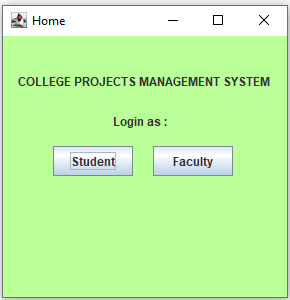
}});

}

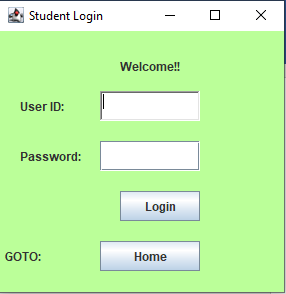
}

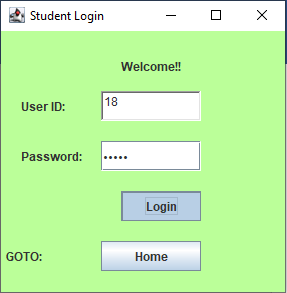
**OUTPUTS AND TESTING –**

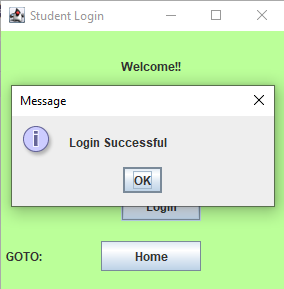
As the application is launched, the home page appears.



We then have to login as either a student or a faculty member.



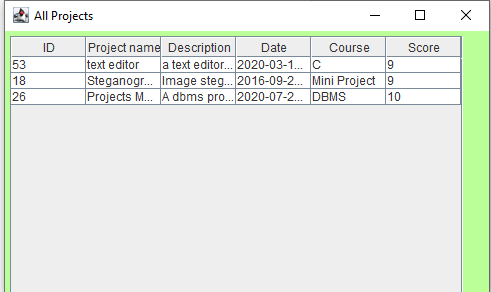




After successful login, the menu for the specific user is displayed.

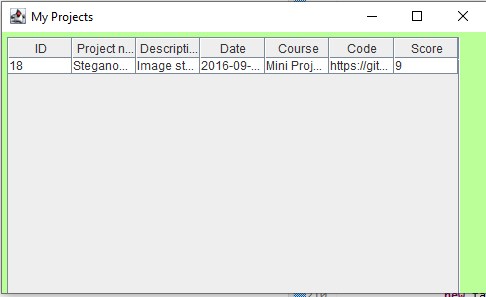
The following screens appear based on what is selected in the menu –

1)



For a student, the code for the project is not available whereas a faculty member can access it.

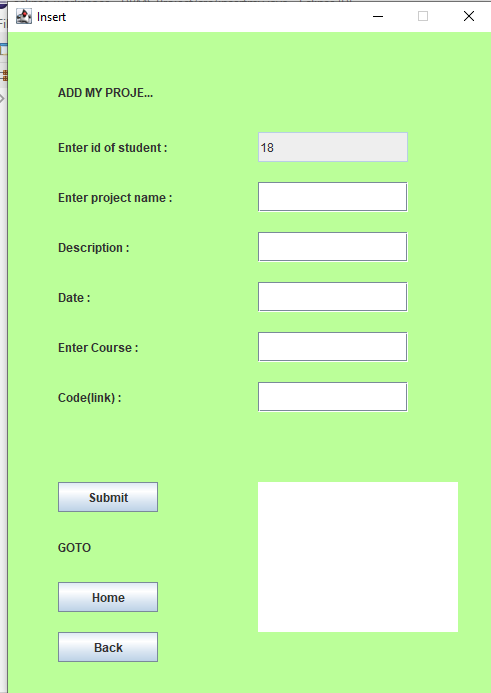
2)



A student can view his projects and check updated scores.

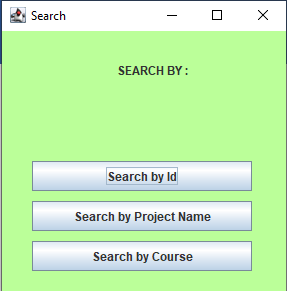
3)

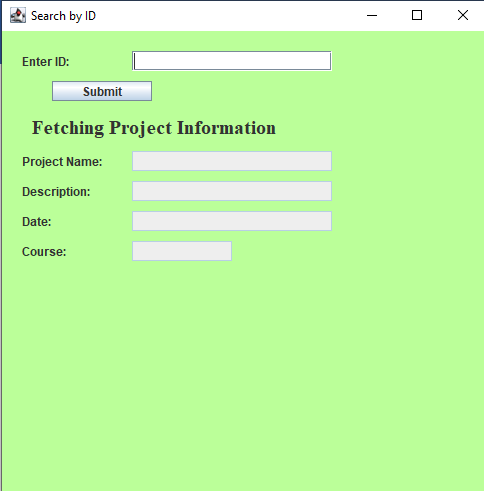
A student can submit his/her project through this window.

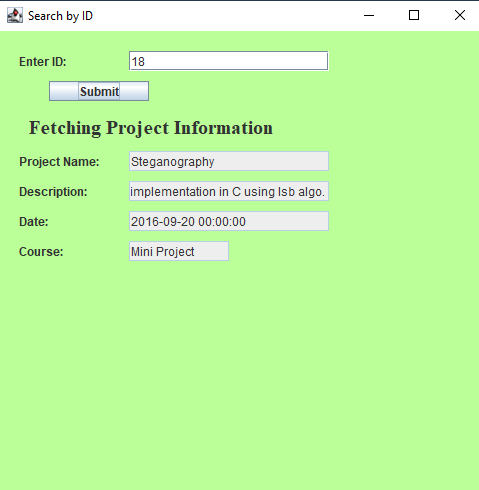


4)

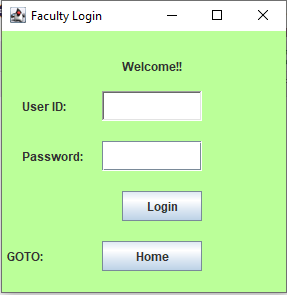
A student can use this feature to find a project for either for inspiration or reference.

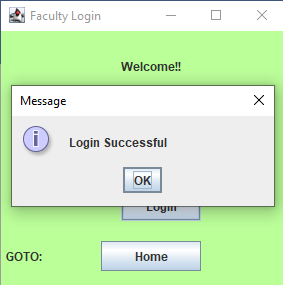


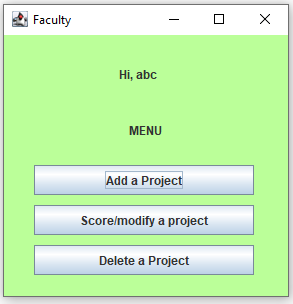




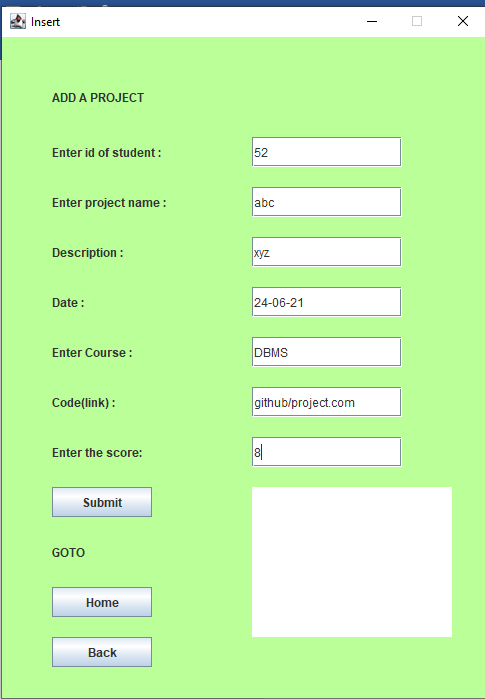
* When a faculty member of the college logs in

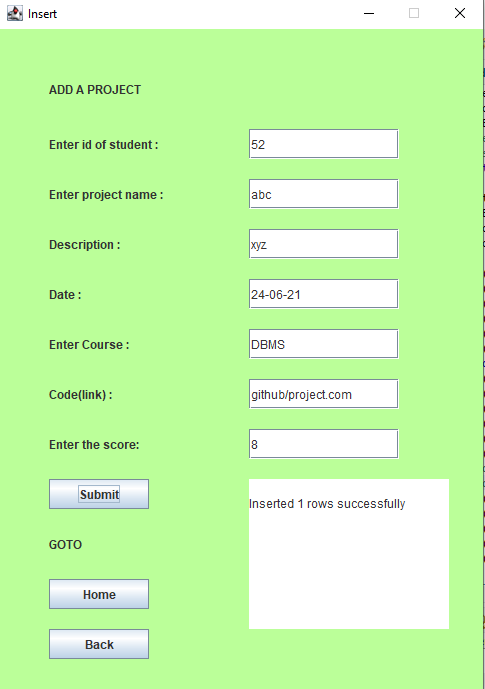




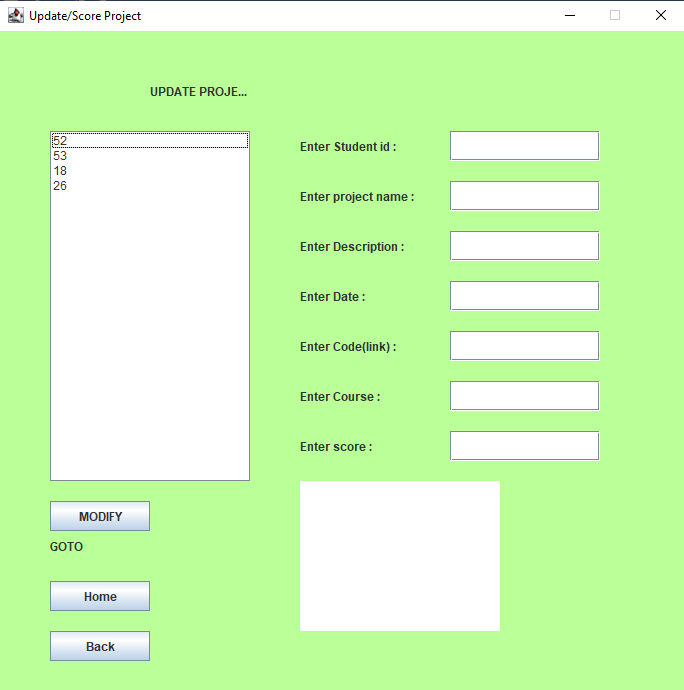


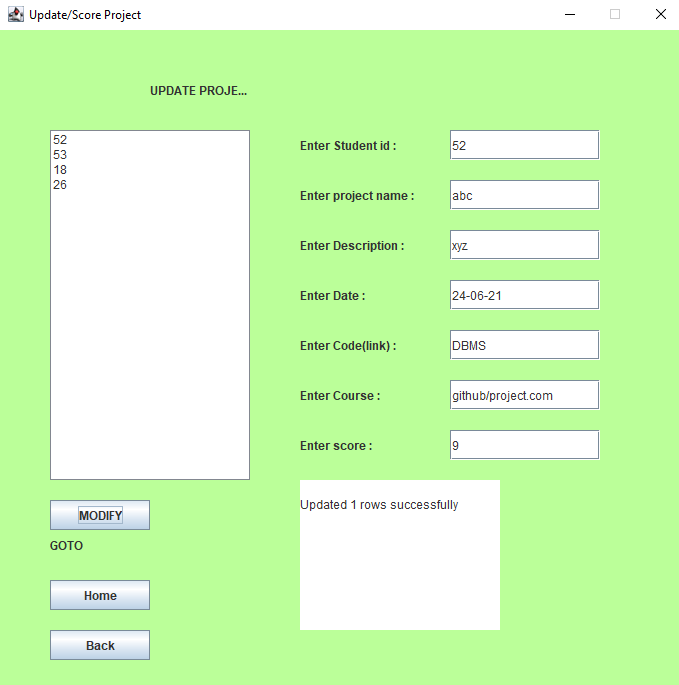
To insert a project:



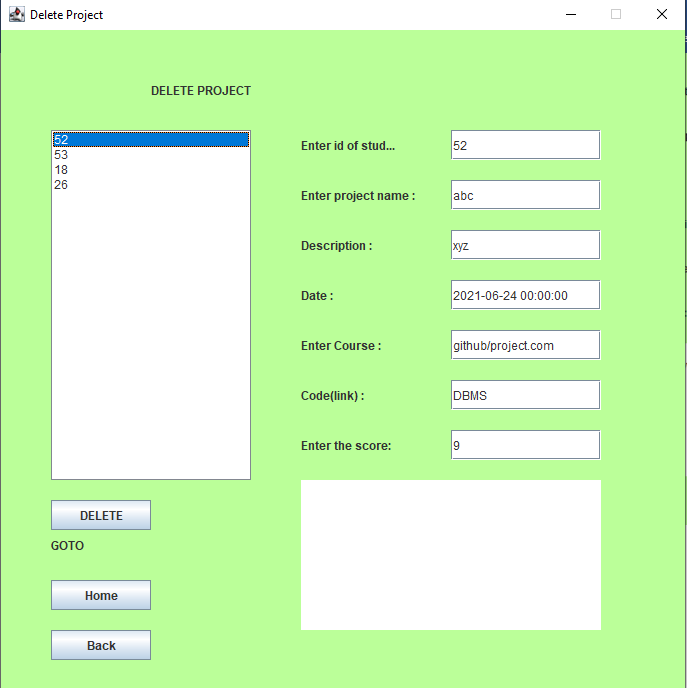
****

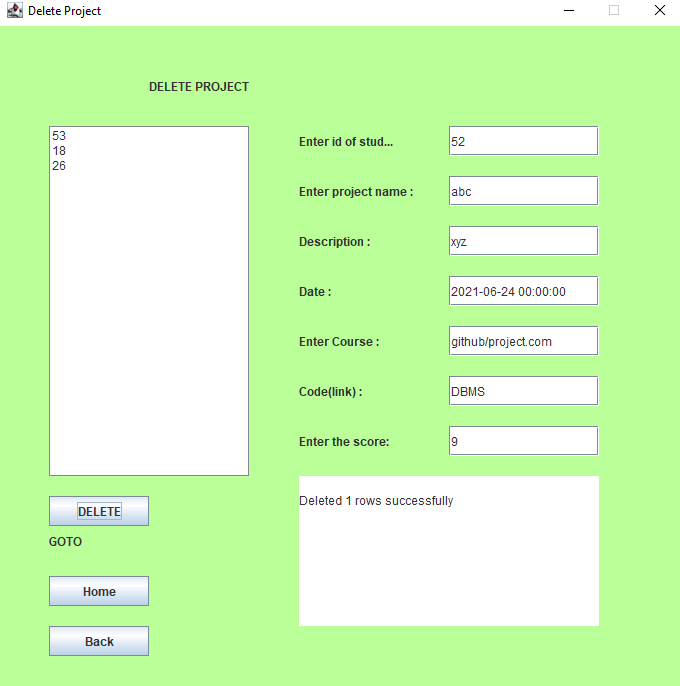
To update scores/ project –





TO delete a project –





FUTURE WORK –

In the future we aim to add better search features using many other parameters and add other attributes in the projects table too.

REFERENCES –

<https://docs.oracle.com/javase/7/docs/api/>

<https://www.geeksforgeeks.org/establishing-jdbc-connection-in-java/>

<https://www.javatpoint.com/java-awt>

**THANK YOU**