

# **EDUCATION ECOSYSTEM FOR SPECIALLY ABLED STUDENTS**

*A*

*Report*

*Submitted in partial fulfilment of the  
Requirements for the award of the Degree of*

**BACHELOR OF ENGINEERING  
IN  
INFORMATION TECHNOLOGY  
By**

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# ABSTRACT

This project aims to identify provisions and improvements that are needed in the education ecosystem for specially abled students to ensure compliance governance, and conduct. The project will involve conducting research and analysis to understand the current state of the education system for specially abled students, including policies, infrastructure, programs. Based on this analysis, recommendations will be made to improve compliance with regulations. The ultimate goal is to create a more inclusive and supportive education environment for students with disabilities, enabling them to achieve their full potential.

## Requirement Analysis

### List of Tables:

- 1.STUDENT
- 2.FACULTY
- 3.ACCOMMODATION
- 4.COURSE
- 5.FACILITY

### List of attributes with their domain types:

#### Student:

- Student \_id number(20)
- Name varchar(20)
- Gender varchar(10)
- Disability Type varchar(200)
- Contact info Number(10)
- Enrollment\_id Integer

Faculty:

- Teacher id Integer
- Name varchar(25)
- Contact info Number(10)
- Specialisation varchar(200)

Course:

- 
- Course Id Integer
  - Course name varchar(30)
  - Faculty Id Integer

Accommodation:

- Student Id Integer
- Accommodation Type varchar(200)
- Course\_id INTEGER

Facilities:

- Student\_id Number(20)
- Disability type varchar(200)
- Facility id number(20)

# **DATABASE DESIGN**

## **Mapping Cardinality and Participation Constraints**

### **1.Student - Course:**

Cardinality: Many-to-Many( A student can be enrolled in many courses).

Participation Constraints: partial (since a student can exist without a particular disability)

### **2.Student-Facility:**

Cardinality: One-to-Many (since a student can have multiple disabilities)

Participation Constraints: Total (since every student have Disability)

### **3.Faculty-Course:**

Cardinality: One-to-Many (since a Faculty member can teach many courses)

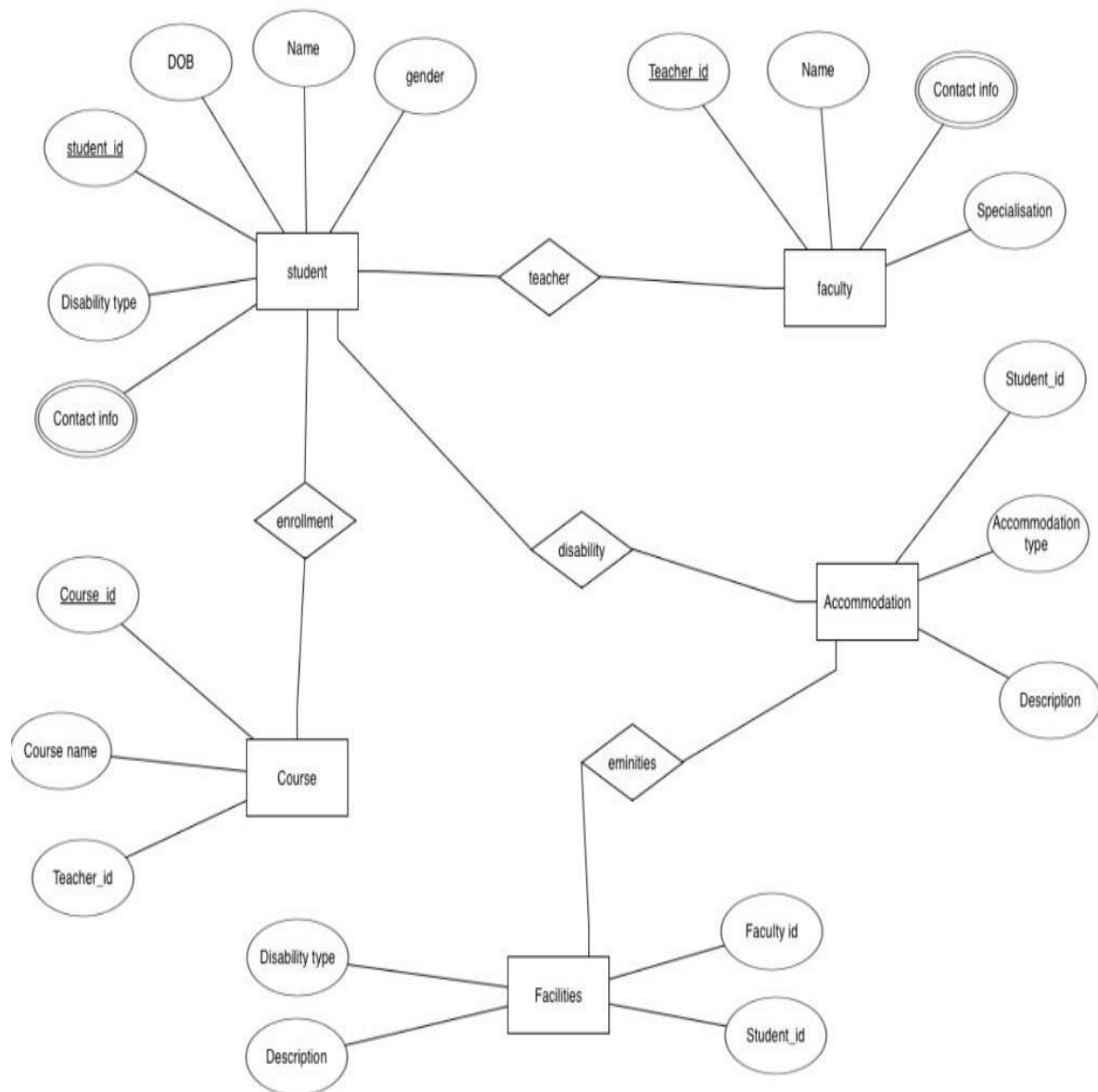
### **4. Student-Accommodation:**

Cardinality: One-to-Many (A student can have many accommodations)

### **5.Accommodation-Student:**

Cardinality: Many-to-One (An Accommodation can be provided to one student)

# Entity Relationship Diagram



# DDL Commands:

```
SQL> create table students_1(  
2 student_id NUMBER(10) PRIMARY KEY,  
3 Name varchar(15) NOT NULL,  
4 gender varchar(10) NOT NULL,  
5 Disability varchar(30) NOT NULL,  
6 contact_info NUMBER(10));
```

```
SQL> create table students_1(  
2 student_id NUMBER(10) PRIMARY KEY,  
3 Name varchar(15) NOT NULL,  
4 gender varchar(10) NOT NULL,  
5 Disability varchar(30) NOT NULL,  
6 contact_info NUMBER(10));  
  
Table created.
```

```
SQL> create table Faculty_1(  
2 Teacher_id INTEGER PRIMARY KEY,  
3 Name varchar(15) NOT NULL,  
4 contact_info NUMBER (10),  
5 specialization varchar (40) NOT NULL);
```

```
SQL> create table Faculty_1(  
2 Teacher_id INTEGER PRIMARY KEY,  
3 Name varchar(15) NOT NULL,  
4 contact_info NUMBER(10),  
5 specialization varchar(40) NOT NULL);  
  
Table created.
```

```
SQL> create table course_1(  
2 course_id INTEGER PRIMARY KEY,  
3 course_name varchar(25) NOT NULL);
```

```
SQL> create table course_1(  
  2  course_id INTEGER PRIMARY KEY,  
  3  course_name varchar(25) NOT NULL);  
  
Table created.
```

```
SQL> create table Accommodations_1(  
  
  2  studnt_id INTEGER NOT NULL,  
  
  3  Accommodation_type varchar2(30) NOT NULL,  
  
  4  Description varchar(38) NOT NULL,  
  
  5  course_id INTEGER NOT NULL,  
  
  6  FOREIGN KEY(student_id) REFERENCES students_1(student_id),  
  
  7  FOREIGN KEY(course_id) REFERENCES course_1(course_id));
```

```
SQL> create table Accommodations_1(  
  2  student_id INTEGER NOT NULL,  
  3  Accommodation_type varchar2(30) NOT NULL,  
  4  Description varchar(38) NOT NULL,  
  5  course_id INTEGER NOT NULL,  
  6  FOREIGN KEY(student_id) REFERENCES students_1(student_id),  
  7  FOREIGN KEY(course_id) REFERENCES course_1(course_id));  
  
Table created.
```

```
SQL> create table Facility(  
  
  2  student_id INTEGER NOT NULL,  
  
  3  Disability_type varchar(30) NOT NULL,  
  
  4  Facility_type varchar(30) NOT NULL);
```

```
SQL> create table Facility(  
  2  student_id INTEGER NOT NULL,  
  3  Disability_type varchar(30) NOT NULL,  
  4  Facility_type varchar(30) NOT NULL);  
  
Table created.
```

# TABLES:

```
SQL> desc students_1;
```

Name	Null?	Type
STUDENT_ID	NOT NULL	NUMBER(10)
NAME	NOT NULL	VARCHAR2(15)
GENDER	NOT NULL	VARCHAR2(10)
DISABILITY	NOT NULL	VARCHAR2(25)
CONTACT_INFO		NUMBER(10)

```
SQL> desc Faculty_1;
```

Name	Null?	Type
TEACHER_ID	NOT NULL	NUMBER(38)
NAME	NOT NULL	VARCHAR2(15)
CONTACT_INFO		NUMBER(10)
SPECIALIZATION	NOT NULL	VARCHAR2(40)

```
SQL> desc course_1;
```

Name	Null?	Type
COURSE_ID	NOT NULL	NUMBER(38)
COURSE_NAME	NOT NULL	VARCHAR2(25)

```
SQL> desc Accommodations_1;
```

Name	Null?	Type
STUDENT_ID	NOT NULL	NUMBER(38)
ACCOMMODATION_TYPE	NOT NULL	VARCHAR2(30)
DESCRIPTION	NOT NULL	VARCHAR2(38)
COURSE_ID	NOT NULL	NUMBER(38)

```
SQL> desc Facility;
```

Name	Null?	Type
STUDENT_ID	NOT NULL	NUMBER(38)
DISABILITY_TYPE	NOT NULL	VARCHAR2(30)
FACILITY_TYPE	NOT NULL	VARCHAR2(30)

```
SQL>
```



# DML COMMANDS:

```
SQL> insert into students_1 values(&student_id,&'Name',&'gender',&'Disability',&contact_info);
```

```
SQL> insert into students_1 values(&student_id,&'Name',&'gender',&'Disability',&contact_info);
Enter value for student_id: 701
Enter value for name: Rohit
Enter value for gender: Male
Enter value for disability: Hearing Impairment
Enter value for contact_info: 777222
old 1: insert into students_1 values(&student_id,&'Name',&'gender',&'Disability',&contact_info)
new 1: insert into students_1 values(701,'Rohit','Male','Hearing Impairment',777222)

1 row created.
```

```
SQL> insert into students_1 values(&student_id,&'Name',&'gender',&'Disability',&contact_info);
Enter value for student_id: 702
Enter value for name: srija
Enter value for gender: female
Enter value for disability: physical disability
Enter value for contact_info: 777111
old 1: insert into students_1 values(&student_id,&'Name',&'gender',&'Disability',&contact_info)
new 1: insert into students_1 values(702,'srija','female','physical disability',777111)

1 row created.
```

```
SQL> insert into students_1 values(&student_id,&'Name',&'gender',&'Disability',&contact_info);
Enter value for student_id: 700
Enter value for name: Rahul
Enter value for gender: male
Enter value for disability: Visual Impairment
Enter value for contact_info: 777666
old 1: insert into students_1 values(&student_id,&'Name',&'gender',&'Disability',&contact_info)
new 1: insert into students_1 values(700,'Rahul','male','Visual Impairment',777666)

1 row created.
```

```
SQL> select * from students_1;
```

STUDENT_ID	NAME	GENDER	DISABILITY	CONTACT_INFO
737	Rahul	Male	Visual Impairment	77755
736	Rohit	Male	Hearing Impairment	77766
735	Srija	Female	Physical disability	77744
700	Rahul	male	Visual Impairment	777666
701	Rohit	Male	Hearing Impairment	777222
702	srija	female	physical disability	777111

```
6 rows selected.
```

```
SQL> insert into Faculty_1 values(&Teacher_id,&'Name',&contact_info,&specialization');
```

```

SQL> insert into Faculty_1 values(&Teacher_id,&Name,&contact_info,&specialization');
Enter value for teacher_id: 123
Enter value for name: rama rao
Enter value for contact_info: 777111
Enter value for specialization: PhD in psychology
old 1: insert into Faculty_1 values(&Teacher_id,&Name,&contact_info,&specialization')
new 1: insert into Faculty_1 values(123,'rama rao',777111,'PhD in psychology')

1 row created.

SQL> insert into Faculty_1 values(&Teacher_id,&Name,&contact_info,&specialization');
Enter value for teacher_id: 124
Enter value for name: srihas
Enter value for contact_info: 777333
Enter value for specialization: PhD in special Education
old 1: insert into Faculty_1 values(&Teacher_id,&Name,&contact_info,&specialization')
new 1: insert into Faculty_1 values(124,'srihas',777333,'PhD in special Education')

1 row created.

SQL> insert into Faculty_1 values(&Teacher_id,&Name,&contact_info,&specialization');
Enter value for teacher_id: 125
Enter value for name: sai
Enter value for contact_info: 777444
Enter value for specialization: PhD in Education
old 1: insert into Faculty_1 values(&Teacher_id,&Name,&contact_info,&specialization')
new 1: insert into Faculty_1 values(125,'sai',777444,'PhD in Education')

1 row created.

SQL> select * from Faculty_1;

TEACHER_ID NAME                CONTACT_INFO SPECIALIZATION
-----
123 rama rao                    777111 PhD in psychology
124 srihas                      777333 PhD in special Education
125 sai                         777444 PhD in Education

SQL>

```

SQL> insert into course\_1 values(&course\_id,&course\_name');

```

SQL> insert into course_1 values(&course_id,&course_name');
Enter value for course_id: 888
Enter value for course_name: Psychology
old 1: insert into course_1 values(&course_id,&course_name')
new 1: insert into course_1 values(888,'Psychology')

1 row created.

```

```

SQL> select * from course_1;

COURSE_ID COURSE_NAME
-----
666 Disability studies
777 Assistive Technology
888 Psychology

```

SQL>insert into Accommodations\_1 values(&student\_id,&Accommodation\_type,&course\_id)

```
SQL> insert into Accommodations_1 values(&student_id,&Accommodation_type,&course_id);
Enter value for student_id: 737
Enter value for accommodation_type: Braille display
Enter value for course_id: 666
old 1: insert into Accommodations_1 values(&student_id,&Accommodation_type,&course_id)
new 1: insert into Accommodations_1 values(737,'Braille display',666)
```

1 row created.

```
SQL> insert into Accommodations_1 values(&student_id,&Accommodation_type,&course_id);
Enter value for student_id: 736
Enter value for accommodation_type: sign language Interpreter
Enter value for course_id: 777
old 1: insert into Accommodations_1 values(&student_id,&Accommodation_type,&course_id)
new 1: insert into Accommodations_1 values(736,'sign language Interpreter',777)
```

1 row created.

SQL> select \* from Accommodations\_1;

STUDENT_ID	ACCOMMODATION_TYPE	COURSE_ID
736	sign language Interpreter	777
737	Braille display	666

SQL> insert into Facility values(&student\_id,&Disability\_type,&Facility\_type');

```
SQL> insert into Facility values(&student_id,&Disability_type,&Facility_type');
Enter value for student_id: 737
Enter value for disability_type: Visual Impairment
Enter value for facility_type: Braille Display
old 1: insert into Facility values(&student_id,&Disability_type,&Facility_type')
new 1: insert into Facility values(737,'Visual Impairment','Braille Display')
```

1 row created.

```
SQL> insert into Facility values(&student_id,&Disability_type,&Facility_type');
Enter value for student_id: 736
Enter value for disability_type: deaf and hard of hearing
Enter value for facility_type: auditory learning
old 1: insert into Facility values(&student_id,&Disability_type,&Facility_type')
new 1: insert into Facility values(736,'deaf and hard of hearing','auditory learning')
```

1 row created.

SQL> select \* from Facility;

STUDENT_ID	DISABILITY_TYPE	FACILITY_TYPE
737	Visual Impairment	Braille Display
736	deaf and hard of hearing	auditory learning

# IMPLEMENTATION

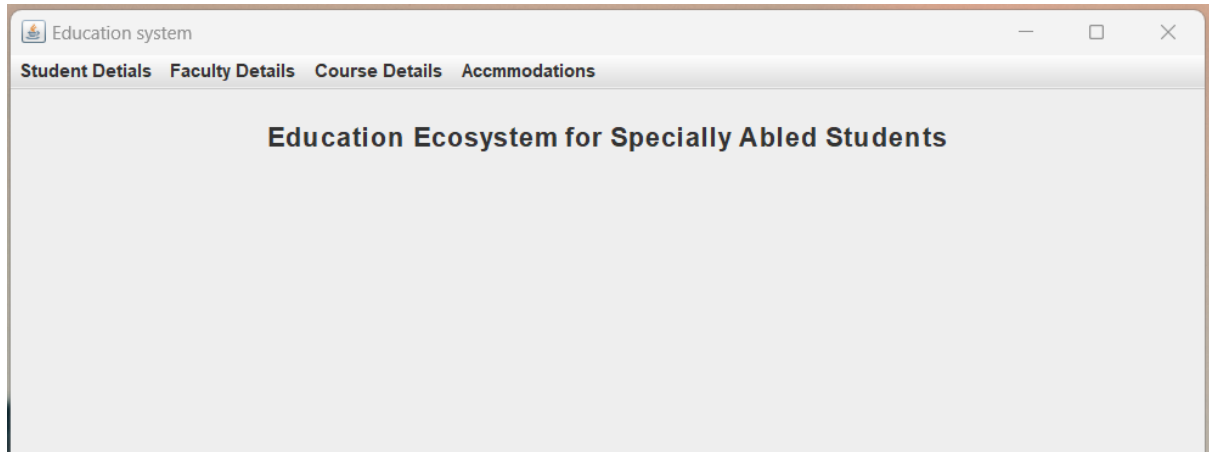
## JAVA-SQL Connectivity using JDBC:

Java Database Connectivity (JDBC) is an application programming interface (API) for the programming language Java, which defines how a client may access a database. It is a Java-based data access technology used for Java database connectivity. It is part of the Java Standard Edition platform, from Oracle Corporation. It provides methods to query and update data in a database and is oriented towards relational databases. The connection to the database can be performed using Java programming (JDBC API) as:

```
{ DriverManager.registerDriver (new oracle.jdbc.driver.OracleDriver()); //
Connect to Oracle Database Connection con =
DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:XE"
,"vinay","vinay"); Statement statement = con.createStatement() String query =
"UPDATE SKILLS SET SS1=" + "" + jTextField3.getText() + "",SS2=" + "" +
jTextField5.getText() + "", AOI ="+" "" + jTextField2.getText() + "" WHERE SID =" +
jTextField4.getText(); ResultSet rs = statement.executeQuery(query);
JOptionPane.showMessageDialog(new JFrame(),
"Updated Successfully", "INFORMATION",
JOptionPane.INFORMATION_MESSAGE); rs.close(); statement.close();
con.close(); }
```

# Front-end Programs (User Interfaces) Home Page:

## 1.Main Page



```
package EducationSystem;

import javax.swing.*;
import javax.swing.ImageIcon;
import javax.swing.table.DefaultTableModel;
import java.awt.*;
import java.util.ArrayList;
import java.util.List;

import java.awt.event.*;

public class MainPage extends JFrame {
    private static final long serialVersionUID = 1L;

    public MainPage() {

        setTitle("Education system");
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

        JLabel welcomeLabel = new JLabel("Education Ecosystem
for Specially Abled Students");
        welcomeLabel.setFont(new Font("Arial", Font.BOLD,
18));

        welcomeLabel.setHorizontalAlignment(SwingConstants.CENTER);
```

```
welcomeLabel.setBorder(BorderFactory.createEmptyBorder(20, 0, 20, 0));
```

```
add(welcomeLabel, BorderLayout.NORTH);
```

```
JMenuBar menuBar = new JMenuBar();
```

```
JMenu StudentMenu = new JMenu("Student Details");
```

```
JMenu FacultyMenu = new JMenu("Faculty Details");
```

```
JMenu CourseMenu = new JMenu("Course Details");
```

```
JMenu AccoMenu = new JMenu("Accommodations");
```

```
JMenuItem Viewstudentdetails = new JMenuItem("View student details");
```

```
Viewstudentdetails.addActionListener(new ActionListener() {  
    public void actionPerformed(ActionEvent e) {  
        new StudentTableGUI();  
    }  
});
```

```
JMenuItem viewFacultydetails = new JMenuItem("View Faculty details");
```

```
viewFacultydetails.addActionListener(new ActionListener() {  
    public void actionPerformed(ActionEvent e) {  
        new Faculty();  
    }  
});
```

```
JMenuItem viewCoursedetails = new JMenuItem("View Course Details");
```

```
viewCoursedetails.addActionListener(new ActionListener() {  
    public void actionPerformed(ActionEvent e) {  
        new Course();  
    }  
});
```

```
JMenuItem viewAccommodationsdetails = new JMenuItem("View Accommodations Details");
```

```
viewAccommodationsdetails.addActionListener(new ActionListener() {  
    public void actionPerformed(ActionEvent e) {  
        new Accommodations();  
    }  
});
```

```

    });

    StudentMenu.add(Viewstudentdetails);
    FacultyMenu.add(viewFacultydetails);
    CourseMenu.add(viewCoursedetails);
    AccoMenu.add(viewAccommodationsdetails);
    //bankMenu.add(viewbankDetails);

    menuBar.add(StudentMenu);
    menuBar.add(FacultyMenu);
    menuBar.add(CourseMenu);
    menuBar.add(AccoMenu);

    setJMenuBar(menuBar);

    addWindowStateListener(new WindowStateListener() {
        public void windowStateChanged(WindowEvent e) {
            if ((e.getNewState() & Frame.MAXIMIZED_BOTH)
== Frame.MAXIMIZED_BOTH) {
                System.out.println("Window maximized");
            } else {
                System.out.println("Window not
maximized");
            }
        }
    });

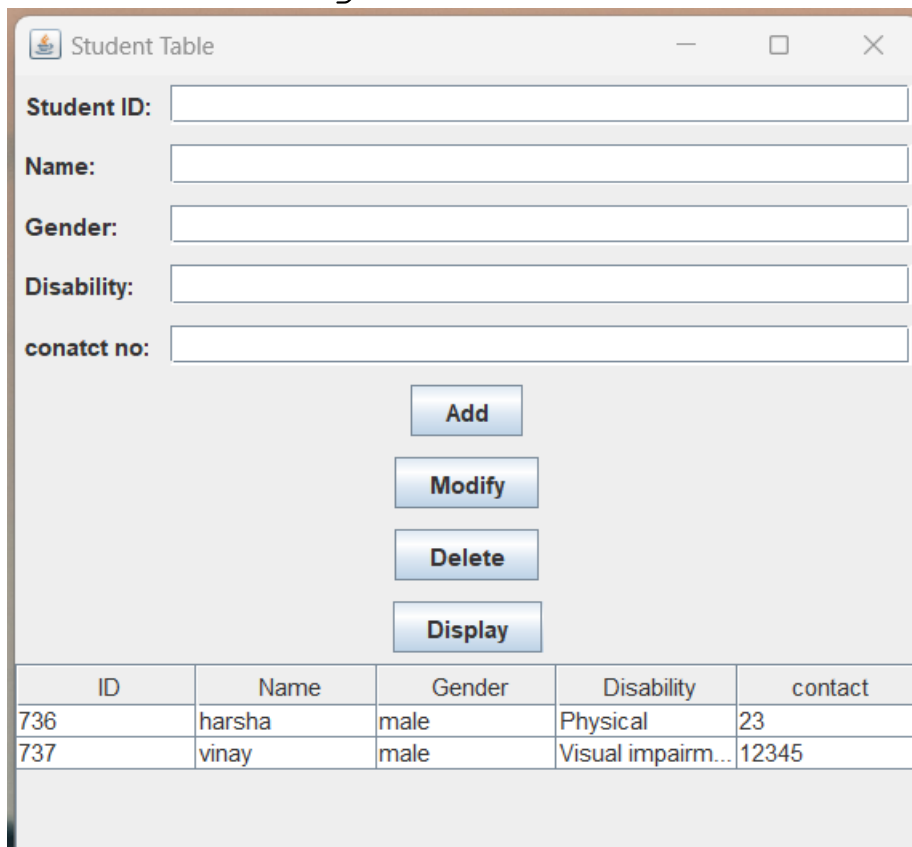
    setSize(800, 600);
    setVisible(true);
}

public static void main(String[] args) {

    new MainPage();
}
}

```

## Student Page:



Student Table

Student ID:

Name:

Gender:

Disability:

contact no:

Add

Modify

Delete

Display

ID	Name	Gender	Disability	contact
736	harsha	male	Physical	23
737	vinay	male	Visual impairm...	12345

```
package EducationSystem;

import javax.swing.*.*;

import javax.swing.table.DefaultTableModel;

import java.awt.*.*;

import java.sql.*.*;

import java.util.ArrayList;

import java.util.List;

public class StudentTableGUI extends JFrame {

    /**
     *
     */
}
```



```

        */

        private static final long serialVersionUID = 1L;

        private JTextField txtId, txtName, txtgender, txtDisability,
txtcontact;

        private JTable tblStudent;

        private JButton btnAdd, btnModify, btnDelete, btnDisplay;


        private Connection connection;

        private String gender;

        private String Disability;


        public void Student(String id, String name, String gender2,
String disability2, String aadharNo) {

            // TODO Auto-generated constructor stub

        }


        public StudentTableGUI() {

            //this.MainPage = MainPage;

            initializeUI();

            connectToDatabase();

            displayStudents();

        }


        private void initializeUI() {

            txtId = new JTextField();

            txtName = new JTextField();

```

```
txtgender = new JTextField();

txtDisability = new JTextField();

txtcontact = new JTextField();


tblStudent = new JTable();

tblStudent.setSelectionMode(ListSelectionModel.SINGLE_SELECTION);

tblStudent.getSelectionModel().addListSelectionListener(e ->
selectStudent());


JScrollPane scrollPane = new JScrollPane(tblStudent);


btnAdd = new JButton("Add");

btnModify = new JButton("Modify");

btnDelete = new JButton("Delete");

btnDisplay = new JButton("Display");


JPanel panel = new JPanel(new GridBagLayout());

GridBagConstraints gbc = new GridBagConstraints();

gbc.gridx = 0;

gbc.gridy = 0;

gbc.anchor = GridBagConstraints.WEST;

gbc.insets = new Insets(5, 5, 5, 5);

panel.add(new JLabel("Student ID:"), gbc);

gbc.gridy++;
```

```
panel.add(new JLabel("Name:"), gbc);

gbc.gridy++;

panel.add(new JLabel("Gender:"), gbc);

gbc.gridy++;

panel.add(new JLabel("Disability:"), gbc);

gbc.gridy++;

panel.add(new JLabel("conatct no:"), gbc);

gbc.gridy++;

gbc.gridx = 1;

gbc.gridy = 0;

gbc.fill = GridBagConstraints.HORIZONTAL;

gbc.weightx = 1;


panel.add(txtId, gbc);

gbc.gridy++;

panel.add(txtName, gbc);

gbc.gridy++;

panel.add(txtgender, gbc);

gbc.gridy++;

panel.add(txtDisability, gbc);

gbc.gridy++;

panel.add(txtcontact, gbc);

gbc.gridy++;


gbc.gridx = 0;
```

```
gbc.gridy++;

gbc.gridwidth = 2;

gbc.fill = GridBagConstraints.NONE;

gbc.anchor = GridBagConstraints.CENTER;

gbc.weightx = 0;


panel.add(btnAdd, gbc);

gbc.gridy++;

panel.add(btnModify, gbc);

gbc.gridy++;

panel.add(btnDelete, gbc);

gbc.gridy++;

panel.add(btnDisplay, gbc);


setLayout(new BorderLayout());

add(panel, BorderLayout.NORTH);

add(scrollPane, BorderLayout.CENTER);


btnAdd.addActionListener(e -> insertStudents());


btnModify.addActionListener(e -> modifyStudents());


btnDelete.addActionListener(e -> deleteStudents());


btnDisplay.addActionListener(e -> displayStudents());
```

```

        setTitle("Customer Table App");

        pack();

        setLocationRelativeTo(null);

        setVisible(true);
    }

    private void connectToDatabase() {

        String url = "jdbc:oracle:thin:@localhost:1521:xe";

        String username = "vinay";

        String password = "vinay";

        try {

            connection = DriverManager.getConnection(url, username,
password);

        } catch (SQLException e) {

            e.printStackTrace();

        }

    }

    private void insertStudents() {

        String id = txtId.getText();

        String name = txtName.getText();

        String gender = txtgender.getText();

        String Disability = txtDisability.getText();

        String contact = txtcontact.getTextt();

        try {

```

```
String query = "INSERT INTO student (student_id, Name, gender, Disability, contact_info) VALUES (?, ?, ?, ?, ?)";
```

```
PreparedStatement statement = connection.prepareStatement(query);
```

```
statement.setString(1, id);
```

```
statement.setString(2, name);
```

```
statement.setString(3, gender);
```

```
statement.setString(4, Disability);
```

```
statement.setString(5, contact);
```

```
statement.executeUpdate();
```

```
clearFields();
```

```
displayStudents();
```

```
} catch (SQLException e) {
```

```
    e.printStackTrace();
```

```
}
```

```
}
```

```
private void modifyStudents() {
```

```
    int selectedRow = tblStudent.getSelectedRow();
```

```
    if (selectedRow >= 0) {
```

```
        String id = txtId.getText();
```

```
        String name = txtName.getText();
```

```
        String gender = txtgender.getText();
```

```
        String Disability = txtDisability.getText();
```

```

        String contact = txtcontact.getText();

        try {

            String query = "UPDATE student SET Name=?, gender=?,
Disability=?, contact_info=? WHERE student_id=?";

            PreparedStatement statement =
connection.prepareStatement(query);

            statement.setString(1, name);

            statement.setString(2, gender);

            statement.setString(3, Disability);

            statement.setString(4, contact);


            statement.setString(5, id);

            statement.executeUpdate();

            clearFields();

            displayStudents();

        } catch (SQLException e) {

            e.printStackTrace();

        }

    } else {

        JOptionPane.showMessageDialog(this, "Please select a
student details to modify.");

    }

}

private void deleteStudents() {

    int selectedRow = tblStudent.getSelectedRow();

```

```

        if (selectedRow >= 0) {

            String id = tblStudent.getValueAt(selectedRow,
0).toString();

            int option = JOptionPane.showConfirmDialog(this, "Are
you sure you want to delete this customer?", "Confirmation",
JOptionPane.YES_NO_OPTION);

            if (option == JOptionPane.YES_OPTION) {

                try {

                    String query = "DELETE FROM student WHERE
student_id=?";

                    PreparedStatement statement =
connection.prepareStatement(query);

                    statement.setString(1, id);

                    statement.executeUpdate();

                    clearFields();

                    displayStudents();

                } catch (SQLException e) {

                    e.printStackTrace();

                }

            } else {

                JOptionPane.showMessageDialog(this, "Please select a
student to delete.");

            }

        }

        private void displayStudents() {

            try {

```



```

String query = "SELECT * FROM student";

Statement statement = connection.createStatement();

ResultSet resultSet = statement.executeQuery(query);

List<Student> student = new ArrayList<>();

while (resultSet.next()) {

    String id = resultSet.getString("student_id");

    String name = resultSet.getString("Name");

    String gender = resultSet.getString("gender");

    String Disability =
resultSet.getString("Disability");

    String contact =
resultSet.getString("contact_info");

                                student.add(new Student(id, name, gender,
Disability, contact));

    }

DefaultTableModel model = new DefaultTableModel();

    model.setColumnIdentifiers(new String[]{"ID", "Name",
"Gender", "Disability", "contact"});

    for (Student students : student) {

        model.addRow(new String[]{students.getId(),
students.getName(), students.getgender(),

                                students.getDisability(),
students.getcontact()});

    }

```

```

        tblStudent.setModel(model);

    } catch (SQLException e) {

        e.printStackTrace();

    }

}

private void selectStudent() {

    int selectedRow = tblStudent.getSelectedRow();

    if (selectedRow >= 0) {

        String id = tblStudent.getValueAt(selectedRow,
0).toString();

        String name = tblStudent.getValueAt(selectedRow,
1).toString();

        String address = tblStudent.getValueAt(selectedRow,
2).toString();

        String contactNo = tblStudent.getValueAt(selectedRow,
3).toString();

        String aadharNo = tblStudent.getValueAt(selectedRow,
4).toString();

        txtId.setText(id);

        txtName.setText(name);

        txtgender.setText(address);

        txtDisability.setText(contactNo);

        txtcontact.setText(aadharNo);

    }

}

```

```
private void clearFields() {

    txtId.setText("");

    txtName.setText("");

    txtgender.setText("");

    txtDisability.setText("");

    txtcontact.setText("");

}


public static void main(String[] args) {

    SwingUtilities.invokeLater(StudentTableGUI::new);

}


private class Student {

    private String id;

    private String name;

    private String gender;

    private String Disability;

    private String contact;


    public Student(String id, String name, String gender, String
Disability, String contact) {

        this.id = id;

        this.name = name;

        this.gender = gender;
```

```
        this.Disability = Disability;

        this.contact = contact;

    }
```

```
    public String getId() {

        return id;

    }
```

```
    public String getName() {

        return name;

    }
```

```
    public String getgender() {

        return gender;

    }
```

```
    public String getDisability() {

        return Disability;

    }
```

```
    public String getcontact() {

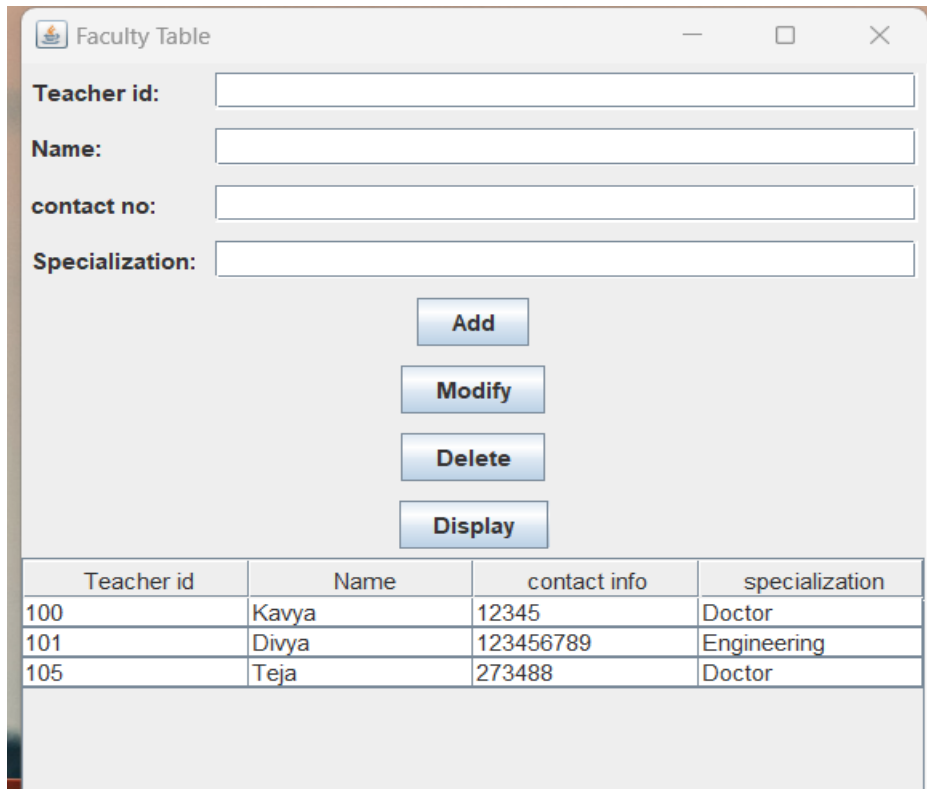
        return contact;

    }
```

```
}
```

```
}
```

## Faculty Table:



Teacher id	Name	contact info	specialization
100	Kavya	12345	Doctor
101	Divya	123456789	Engineering
105	Teja	273488	Doctor

```
package EducationSystem;
import javax.swing.*;
import javax.swing.table.DefaultTableModel;
import java.awt.*;
import java.sql.*;
import java.util.ArrayList;
import java.util.List;

public class Faculty extends JFrame {
    /**
     *
     */
    private static final long serialVersionUID = 1L;
    private JTextField txtTeacher, txtName, txtcontact,
    txtspecialization;
    private JTable tblFaculty;
    private JButton btnAdd, btnModify, btnDelete, btnDisplay;

    private Connection connection;

    public Faculty() {
        initializeUI();
        connectToDatabase();
        displayFaculty();
    }

    private void initializeUI() {
```

```

txtTeacher = new JTextField();
txtName = new JTextField();
txtcontact = new JTextField();
txtspecialization = new JTextField();

tblFaculty = new JTable();
tblFaculty.setSelectionMode(ListSelectionModel.SINGLE_SELECTION);
tblFaculty.getSelectionModel().addListSelectionListener(e ->
selectAccount());

JScrollPane scrollPane = new JScrollPane(tblFaculty);

btnAdd = new JButton("Add");
btnModify = new JButton("Modify");
btnDelete = new JButton("Delete");
btnDisplay = new JButton("Display");

JPanel panel = new JPanel(new GridBagLayout());
GridBagConstraints gbc = new GridBagConstraints();
gbc.gridx = 0;
gbc.gridy = 0;
gbc.anchor = GridBagConstraints.WEST;
gbc.insets = new Insets(5, 5, 5, 5);

panel.add(new JLabel("Teacher id:"), gbc);
gbc.gridy++;
panel.add(new JLabel("Name:"), gbc);
gbc.gridy++;
panel.add(new JLabel("contact no:"), gbc);
gbc.gridy++;
panel.add(new JLabel("Specialization:"), gbc);

gbc.gridx = 1;
gbc.gridy = 0;
gbc.fill = GridBagConstraints.HORIZONTAL;
gbc.weightx = 1;

panel.add(txtTeacher, gbc);
gbc.gridy++;
panel.add(txtName, gbc);
gbc.gridy++;
panel.add(txtcontact, gbc);
gbc.gridy++;
panel.add(txtspecialization, gbc);

gbc.gridx = 0;
gbc.gridy++;
gbc.gridwidth = 2;
gbc.fill = GridBagConstraints.NONE;
gbc.anchor = GridBagConstraints.CENTER;
gbc.weightx = 0;

panel.add(btnAdd, gbc);
gbc.gridy++;
panel.add(btnModify, gbc);
gbc.gridy++;
panel.add(btnDelete, gbc);
gbc.gridy++;
panel.add(btnDisplay, gbc);

setLayout(new BorderLayout());

```

```

add(panel, BorderLayout.NORTH);
add(scrollPane, BorderLayout.CENTER);

btnAdd.addActionListener(e -> insertFaculty());

btnModify.addActionListener(e -> modifyFaculty());

btnDelete.addActionListener(e -> deleteFaculty());

btnDisplay.addActionListener(e -> displayFaculty());

setTitle("Faculty Table");
pack();
setLocationRelativeTo(null);
setVisible(true);
}

private void connectToDatabase() {
    String url = "jdbc:oracle:thin:@localhost:1521:xe";
    String username = "vinay";
    String password = "vinay";

    try {
        connection = DriverManager.getConnection(url, username,
password);
    } catch (SQLException e) {
        e.printStackTrace();
    }
}

private void insertFaculty() {
    String Teacherid = txtTeacher.getText();
    String Name = txtName.getText();
    String contact = txtcontact.getText();
    String specialization = txtspecialization.getText();

    try {
        String query = "INSERT INTO Faculty (Teacher_id, Name,
contact_info, specialization) VALUES (?, ?, ?, ?)";
        PreparedStatement statement =
connection.prepareStatement(query);
        statement.setString(1, Teacherid);
        statement.setString(2, Name);
        statement.setString(3, contact);
        statement.setString(4, specialization);
        statement.executeUpdate();

        clearFields();
        displayFaculty();
    } catch (SQLException e) {
        JOptionPane.showMessageDialog(this, "please enter the values");
    }
}

private void modifyFaculty() {
    int selectedRow = tblFaculty.getSelectedRow();
    if (selectedRow >= 0) {
        String teacher = txtTeacher.getText();
        String name = txtName.getText();
        String contact = txtcontact.getText();
    }
}

```

```

String specialization = txtspecialization.getText();

    try {
        String query = "UPDATE Faculty SET Name=?, contact_info=?,
specialization=? WHERE Teacher_id=?";
        PreparedStatement statement =
connection.prepareStatement(query);
        statement.setString(1, name);
        statement.setString(2, contact);
        statement.setString(3, specialization);
        statement.setString(4, teacher);
        statement.executeUpdate();

        clearFields();
        displayFaculty();
    } catch (SQLException e) {
        e.printStackTrace();
    }
} else {
    JOptionPane.showMessageDialog(this, "Please select an Teacher
to modify.");
}

}

private void deleteFaculty() {
    int selectedRow = tblFaculty.getSelectedRow();
    if (selectedRow >= 0) {
        String Teacher = tblFaculty.getValueAt(selectedRow,
0).toString();

        int option = JOptionPane.showConfirmDialog(this, "Are you sure
you want to delete this Information?", "Confirmation",
JOptionPane.YES_NO_OPTION);
        if (option == JOptionPane.YES_OPTION) {
            try {
                String query = "DELETE FROM Faculty WHERE
Teacher_id=?";

                PreparedStatement statement =
connection.prepareStatement(query);
                statement.setString(1, Teacher);
                statement.executeUpdate();

                clearFields();
                displayFaculty();
            } catch (SQLException e) {
                e.printStackTrace();
            }
        }
    } else {
        JOptionPane.showMessageDialog(this, "Please select an Teacher
id to delete.");
    }
}

private void displayFaculty() {
    try {
        String query = "SELECT * FROM Faculty";
        Statement statement = connection.createStatement();
        ResultSet resultSet = statement.executeQuery(query);

        List<Faculty1> Facul = new ArrayList<>();
    }
}

```



```

        while (resultSet.next()) {
            String Teacher = resultSet.getString("Teacher_id");
            String Name = resultSet.getString("Name");
            String contact = resultSet.getString("contact_info");
            String specialization =
resultSet.getString("specialization");
            Facul.add(new Faculty1(Teacher, Name, contact,
specialization));
        }

        DefaultTableModel model = new DefaultTableModel();
        model.setColumnIdentifiers(new String[]{"Teacher id", "Name",
"contact info", "specialization"});

        for (Faculty1 facul : Facul) {
            model.addRow(new String[]{ facul.getTeacher(),
facul.getName(), facul.getcontact(), facul.getspecialization()});
        }

        tblFaculty.setModel(model);
    } catch (SQLException e) {
        e.printStackTrace();
    }
}

private void selectAccount() {
    int selectedRow = tblFaculty.getSelectedRow();
    if (selectedRow >= 0) {
        String Teacher = tblFaculty.getValueAt(selectedRow,
0).toString();
        String Name = tblFaculty.getValueAt(selectedRow, 1).toString();
        String contact = tblFaculty.getValueAt(selectedRow,
2).toString();
        String specialization = tblFaculty.getValueAt(selectedRow,
3).toString();

        txtTeacher.setText(Teacher);
        txtName.setText(Name);
        txtcontact.setText(contact);
        txtspecialization.setText(specialization);
    }
}

private void clearFields() {
    txtTeacher.setText("");
    txtName.setText("");
    txtcontact.setText("");
    txtspecialization.setText("");
}

public static void main(String[] args) {
    SwingUtilities.invokeLater(Faculty::new);
}

private class Faculty1{
    private String Teacher;
    private String Name;
    private String contact;
    private String specialization;
}

```

```

        public Faculty1(String Teacher, String Name, String contact, String
specialization) {
            this.Teacher = Teacher;
            this.Name= Name;
            this.contact = contact;
            this.specialization = specialization;
        }

        public String getTeacher() {
            return Teacher;
        }

        public String getName() {
            return Name;
        }

        public String getcontact() {
            return contact;
        }

        public String getspecialization() {
            return specialization;
        }
    }
}

```

Course Table:

courses

Course id:

course name:

Disability:

student\_id:

Add

Modify

Delete

Display

course id	course name	Disability	Student id
500	Disabilities	visual impairment	737
501	Disabilities	Physical	736

```

package EducationSystem;
import javax.swing.*.*;
import javax.swing.table.DefaultTableModel;
import java.awt.*.*;
import java.sql.*.*;
import java.util.ArrayList;
import java.util.List;

public class Course extends JFrame {
    /**
     *
     */
    private static final long serialVersionUID = 1L;
    private JTextField txtcourse, txtname, txtdis, txtsid;
    private JTable tblcourse;
    private JButton btnAdd, btnModify, btnDelete, btnDisplay;

    private Connection connection;

    public Course() {
        initializeUI();
        connectToDatabase();
        displaycourse();
    }

    private void initializeUI() {
        txtcourse = new JTextField();
        txtname = new JTextField();
        txtdis = new JTextField();
        txtsid = new JTextField();

        tblcourse = new JTable();
        tblcourse.setSelectionMode(ListSelectionModel.SINGLE_SELECTION);
        tblcourse.getSelectionModel().addListSelectionListener(e ->
selectAtm());

        JScrollPane scrollPane = new JScrollPane(tblcourse);

        btnAdd = new JButton("Add");
        btnModify = new JButton("Modify");
        btnDelete = new JButton("Delete");
        btnDisplay = new JButton("Display");

        JPanel panel = new JPanel(new GridBagLayout());
        GridBagConstraints gbc = new GridBagConstraints();
        gbc.gridx = 0;
        gbc.gridy = 0;
        gbc.anchor = GridBagConstraints.WEST;
        gbc.insets = new Insets(5, 5, 5, 5);

        panel.add(new JLabel("Course id:"), gbc);
        gbc.gridy++;
        panel.add(new JLabel("course name:"), gbc);
        gbc.gridy++;
        panel.add(new JLabel("Disability:"), gbc);
        gbc.gridy++;
        panel.add(new JLabel("student_id:"), gbc);
    }

```

```

gbc.gridx = 1;
gbc.gridy = 0;
gbc.fill = GridBagConstraints.HORIZONTAL;
gbc.weightx = 1;

panel.add(txtcourse, gbc);
gbc.gridy++;
panel.add(txtname, gbc);
gbc.gridy++;
panel.add(txtdis, gbc);
gbc.gridy++;
panel.add(txtsid, gbc);

gbc.gridx = 0;
gbc.gridy++;
gbc.gridwidth = 2;
gbc.fill = GridBagConstraints.NONE;
gbc.anchor = GridBagConstraints.CENTER;
gbc.weightx = 0;

panel.add(btnAdd, gbc);
gbc.gridy++;
panel.add(btnModify, gbc);
gbc.gridy++;
panel.add(btnDelete, gbc);
gbc.gridy++;
panel.add(btnDisplay, gbc);

setLayout(new BorderLayout());
add(panel, BorderLayout.NORTH);
add(scrollPane, BorderLayout.CENTER);

btnAdd.addActionListener(e -> insertcourse());

btnModify.addActionListener(e -> modifycourse());

btnDelete.addActionListener(e -> deletecourse());

btnDisplay.addActionListener(e -> displaycourse());

setTitle("courses");
pack();
setLocationRelativeTo(null);
setVisible(true);
}

private void connectToDatabase() {
    String url = "jdbc:oracle:thin:@localhost:1521:xe";
    String username = "vinay";
    String password = "vinay";

    try {
        connection = DriverManager.getConnection(url, username,
password);
    } catch (SQLException e) {
        e.printStackTrace();
    }
}
}

```

```

private void insertcourse() {
    String course = txtcourse.getText();
    String name = txtname.getText();
    String dis = txtdis.getText();
    String sid=txtsid.getText();

    try {
        String query = "INSERT INTO course (course_id, course_name,
Disability_type,student_id) VALUES (?, ?, ?,?)";
        PreparedStatement statement =
connection.prepareStatement(query);
        statement.setString(1, course);
        statement.setString(2, name);
        statement.setString(3, dis);
        statement.setString(4,sid);
        statement.executeUpdate();

        clearFields();
        displaycourse();
    } catch (SQLException e) {
        e.printStackTrace();
    }
}

private void modifycourse() {
    int selectedRow = tblcourse.getSelectedRow();
    if (selectedRow >= 0) {
        String course = txtcourse.getText();
        String name = txtname.getText();
        String dis = txtdis.getText();
        String sid=txtsid.getText();

        try {
            String query = "UPDATE course SET
course_name=?,Disability_type=?,student_id=? WHERE course_id=?";
            PreparedStatement statement =
connection.prepareStatement(query);
            statement.setString(1, name);
            statement.setString(2, dis);
            statement.setString(3, sid);
            statement.setString(4,course);
            statement.executeUpdate();

            clearFields();
            displaycourse();
        } catch (SQLException e) {
            e.printStackTrace();
        }
    } else {
        JOptionPane.showMessageDialog(this, "Please select an course to
modify.");
    }
}

private void deletecourse() {
    int selectedRow = tblcourse.getSelectedRow();
    if (selectedRow >= 0) {
        String course = tblcourse.getValueAt(selectedRow,
0).toString();
    }
}

```

```

        int option = JOptionPane.showConfirmDialog(this, "Are you sure
you want to delete this course?", "Confirmation",
JOptionPane.YES_NO_OPTION);
        if (option == JOptionPane.YES_OPTION) {
            try {
                String query = "DELETE FROM course WHERE course_id=?";
                PreparedStatement statement =
connection.prepareStatement(query);
                statement.setString(1, course);
                statement.executeUpdate();

                clearFields();
                displaycourse();
            } catch (SQLException e) {
                e.printStackTrace();
            }
        } else {
            JOptionPane.showMessageDialog(this, "Please select an course to
delete.");
        }
    }

    private void displaycourse() {
        try {
            String query = "SELECT * FROM course";
            Statement statement = connection.createStatement();
            ResultSet resultSet = statement.executeQuery(query);

            List<course> courses = new ArrayList<>();
            while (resultSet.next()) {
                String course = resultSet.getString("course_id");
                String name = resultSet.getString("course_name");
                String dis = resultSet.getString("Disability_type");
                String sid = resultSet.getString("student_id");

                courses.add(new course(course, name, dis,sid));
            }

            DefaultTableModel model = new DefaultTableModel();
            model.setColumnIdentifiers(new String[]{"course id", "course
name", "Disability", "Student id"});

            for (course cou : courses) {
                model.addRow(new String[]{cou.getcourse(), cou.getname(),
cou.getdis(),cou.getsid()});
            }

            tblcourse.setModel(model);
        } catch (SQLException e) {
            e.printStackTrace();
        }
    }

    private void selectAtm() {
        int selectedRow = tblcourse.getSelectedRow();
        if (selectedRow >= 0) {
            String course = tblcourse.getValueAt(selectedRow,
0).toString();
            String name = tblcourse.getValueAt(selectedRow, 1).toString();
            String dis = tblcourse.getValueAt(selectedRow, 2).toString();

```

```

        String sid = tblcourse.getValueAt(selectedRow, 3).toString();

        txtcourse.setText(course);
        txtname.setText(name);
        txtdis.setText(dis);
        txtsid.setText(sid);
    }
}

private void clearFields() {
    txtcourse.setText("");
    txtname.setText("");
    txtdis.setText("");
    txtsid.setText("");
}

public static void main(String[] args) {
    SwingUtilities.invokeLater(Course::new);
}

private class course {
    private String course;
    private String name;
    private String dis;
    private String sid;

    public course(String course, String name, String dis,String sid) {
        this.course = course;
        this.name = name;
        this.dis = dis;
        this.sid=sid;
    }

    public String getcourse() {
        return course;
    }

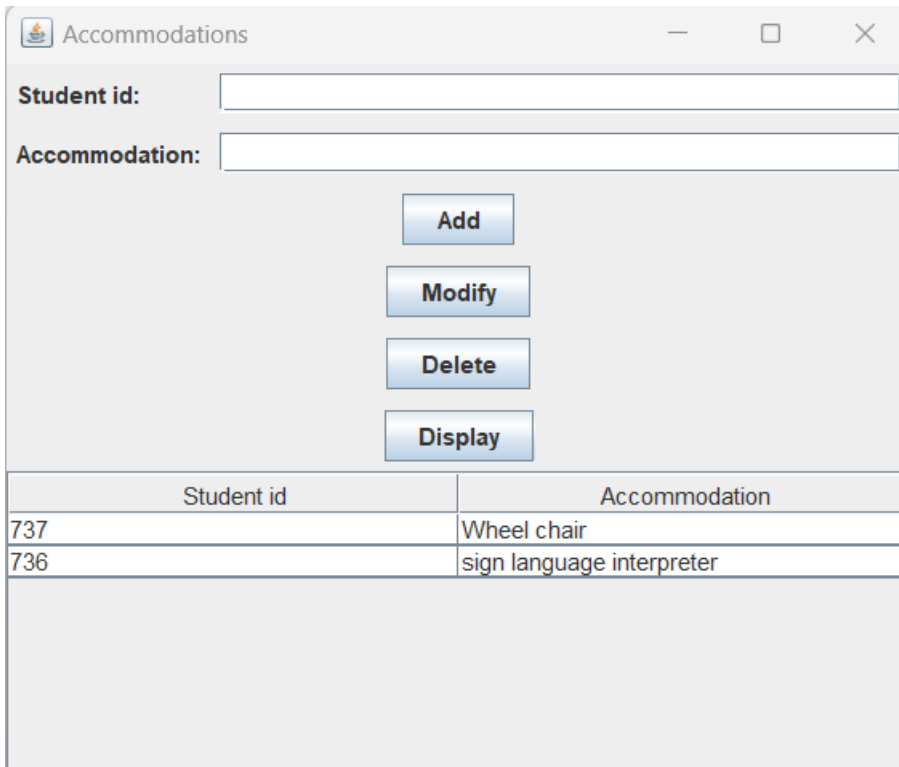
    public String getname() {
        return name;
    }

    public String getdis() {
        return dis;
    }

    public String getsid() {
        return sid;
    }
}
}

```

## Accommodations Table:



Student id	Accommodation
737	Wheel chair
736	sign language interpreter

```
package EducationSystem;
import javax.swing.*;
import javax.swing.table.DefaultTableModel;
import java.awt.*;
import java.sql.*;
import java.util.ArrayList;
import java.util.List;

public class Accommodations extends JFrame {
    /**
     *
     */
    private static final long serialVersionUID = 1L;
    private JTextField txtsid, txtacc;
    private JTable tblAcc;
    private JButton btnAdd, btnModify, btnDelete, btnDisplay;

    private Connection connection;

    public Accommodations() {
        initializeUI();
        connectToDatabase();
        displayAcc();
    }

    private void initializeUI() {
        txtsid = new JTextField();
        txtacc = new JTextField();

        tblAcc = new JTable();
        tblAcc.setSelectionMode(ListSelectionModel.SINGLE_SELECTION);
    }
}
```



```

tblAcc.getSelectionModel().addListSelectionListener(e ->
selectAtm());

JScrollPane scrollPane = new JScrollPane(tblAcc);

btnAdd = new JButton("Add");
btnModify = new JButton("Modify");
btnDelete = new JButton("Delete");
btnDisplay = new JButton("Display");

JPanel panel = new JPanel(new GridBagLayout());
GridBagConstraints gbc = new GridBagConstraints();
gbc.gridx = 0;
gbc.gridy = 0;
gbc.anchor = GridBagConstraints.WEST;
gbc.insets = new Insets(5, 5, 5, 5);

panel.add(new JLabel("Student id:"), gbc);
gbc.gridy++;
panel.add(new JLabel("Accommodation:"), gbc);

gbc.gridx = 1;
gbc.gridy = 0;
gbc.fill = GridBagConstraints.HORIZONTAL;
gbc.weightx = 1;

panel.add(txtsid, gbc);
gbc.gridy++;
panel.add(txtacc, gbc);

gbc.gridx = 0;
gbc.gridy++;
gbc.gridwidth = 2;
gbc.fill = GridBagConstraints.NONE;
gbc.anchor = GridBagConstraints.CENTER;
gbc.weightx = 0;

panel.add(btnAdd, gbc);
gbc.gridy++;
panel.add(btnModify, gbc);
gbc.gridy++;
panel.add(btnDelete, gbc);
gbc.gridy++;
panel.add(btnDisplay, gbc);

setLayout(new BorderLayout());
add(panel, BorderLayout.NORTH);
add(scrollPane, BorderLayout.CENTER);

btnAdd.addActionListener(e -> insertAcc());

btnModify.addActionListener(e -> modifyAcc());

btnDelete.addActionListener(e -> deleteAcc());

btnDisplay.addActionListener(e -> displayAcc());

setTitle("Accommodations");
pack();

```

```

        setLocationRelativeTo(null);
        setVisible(true);
    }

    private void connectToDatabase() {
        String url = "jdbc:oracle:thin:@localhost:1521:xe";
        String username = "vinay";
        String password = "vinay";

        try {
            connection = DriverManager.getConnection(url, username,
password);
        } catch (SQLException e) {
            e.printStackTrace();
        }
    }

    private void insertAcc() {
        String student = txtsid.getText();
        String accommo = txtacc.getText();

        try {
            String query = "INSERT INTO Accommodations (student_id,
Accommodation_type) VALUES (?, ?)";
            PreparedStatement statement =
connection.prepareStatement(query);
            statement.setString(1, student );
            statement.setString(2, accommo);

            statement.executeUpdate();

            clearFields();
            displayAcc();
        } catch (SQLException e) {
            e.printStackTrace();
        }
    }

    private void modifyAcc() {
        int selectedRow = tblAcc.getSelectedRow();
        if (selectedRow >= 0) {
            String stuid = txtsid.getText();
            String acc = txtacc.getText();

            try {
                String query = "UPDATE Accommodations SET
Accommodation_type=? WHERE student_id=?";
                PreparedStatement statement =
connection.prepareStatement(query);
                statement.setString(1, acc);
                statement.setString(2, stuid);

                statement.executeUpdate();

                clearFields();
                displayAcc();
            } catch (SQLException e) {
                e.printStackTrace();
            }
        }
    }

```

```

        } else {
            JOptionPane.showMessageDialog(this, "Please select an student
to modify.");
        }
    }

    private void deleteAcc() {
        int selectedRow = tblAcc.getSelectedRow();
        if (selectedRow >= 0) {
            String acc = tblAcc.getValueAt(selectedRow, 0).toString();

            int option = JOptionPane.showConfirmDialog(this, "Are you sure
you want to delete this ?", "Confirmation", JOptionPane.YES_NO_OPTION);
            if (option == JOptionPane.YES_OPTION) {
                try {
                    String query = "DELETE FROM Accommodations WHERE
student_id=?";
                    PreparedStatement statement =
connection.prepareStatement(query);
                    statement.setString(1, acc);
                    statement.executeUpdate();

                    clearFields();
                    displayAcc();
                } catch (SQLException e) {
                    e.printStackTrace();
                }
            } else {
                JOptionPane.showMessageDialog(this, "Please select an student
to delete.");
            }
        }
    }

    private void displayAcc() {
        try {
            String query = "SELECT * FROM Accommodations";
            Statement statement = connection.createStatement();
            ResultSet resultSet = statement.executeQuery(query);

            List<Accommodations1> accs = new ArrayList<>();
            while (resultSet.next()) {
                String stuId = resultSet.getString("student_id");
                String acc = resultSet.getString("Accommodation_type");

                accs.add(new Accommodations1(stuId, acc));
            }

            DefaultTableModel model = new DefaultTableModel();
            model.setColumnIdentifiers(new String[]{"Student id",
"Accommodation"});

            for (Accommodations1 acc : accs) {
                model.addRow(new String[]{acc.getstdId(), acc.getacc()});
            }

            tblAcc.setModel(model);
        } catch (SQLException e) {
            e.printStackTrace();
        }
    }
}

```

```

private void selectAtm() {
    int selectedRow = tblAcc.getSelectedRow();
    if (selectedRow >= 0) {
        String stuId = tblAcc.getValueAt(selectedRow, 0).toString();
        String acc = tblAcc.getValueAt(selectedRow, 1).toString();

        txtsid.setText(stuId);
        txtacc.setText(acc);
    }
}

private void clearFields() {
    txtsid.setText("");
    txtacc.setText("");
}

public static void main(String[] args) {
    SwingUtilities.invokeLater(Accommodations::new);
}

private class Accommodations1 {
    private String stdId;
    private String acc;

    public Accommodations1(String stdId, String acc) {
        this.stdId = stdId;
        this.acc = acc;
    }

    public String getstdId() {
        return stdId;
    }

    public String getacc() {
        return acc;
    }
}
}

```

# TESTING

## STUDENT PAGE

Student Table

Student ID: 735

Name: Anurag

Gender: Male

Disability: Hearing Impairment

conatct no: 99865732

Add

Modify

Delete

Display

ID	Name	Gender	Disability	contact
736	harsha	male	Physical	23
737	vinay	male	Visual impairm...	12345

After Insertion:

Student Table

Student ID:

Name:

Gender:

Disability:

conatct no:

Message

i

Successfully inserted.

OK

Display

ID	Name	Gender	Disability	contact
736	harsha	male	Physical	23
737	vinay	male	Visual impairm...	12345
735	Anurag	Male	Hearing Impair...	99865732

Student Table

Student ID:

Name:

Gender:

Disability:

conatct no:

Message

Please select a student details to modify.

OK

ID	Name	Gender	Disability	contact
736	harsha	male	Physical	23
737	vinay	male	Visual impairm...	12345
735	Anurag	Male	Hearing Impair...	99865732

## After Modifying

Student Table

Student ID:

Name:

Gender:

Disability:

conatct no:

Message

successfully modified

OK

Display

ID	Name	Gender	Disability	contact
736	Nagaraju	male	Hearing Impair...	2367239
737	vinay	male	Visual impairm...	12345
735	Anurag	Male	Hearing Impair...	99865732

Student Table

Student ID:

Name:

Gender:

Disability:

contact no:

Add

Modify

Delete

Message

Please select a student to delete.

OK

ID	Name	Gender	Disability	contact
736	Nagaraju	male	Hearing Impairment	2367239
737	vinay	male	Visual impairment	12345
735	Anurag	Male	Hearing Impairment	99865732

Student Table

Student ID:

Name:

Gender:

Disability:

contact no:

Add

Modify

Delete

Display

ID	Name	Gender	Disability	contact
736	Nagaraju	male	Hearing Impairment	2367239
737	vinay	male	Visual impairment	12345
735	Anurag	Male	Hearing Impairment	99865732

After deleting:

Student Table

Student ID:


Name:

Gender:

Disability:

contact no:

Message

 Successfully deleted

OK

Display

ID	Name	Gender	Disability	contact
737	vinay	male	Visual impairm...	12345
735	Anurag	Male	Hearing Impair...	99865732

## COURSE TABLE:

courses

Course id:

course name:

Disability:

student\_id:

Add

Modify

Delete

Display

course id	course name	Disability	Student id
500	Disabilities	visual impairment	737

After insertion:



courses

Course id:

course name:

Disability:

student\_id:

Message

**Successfully inserted**

OK

Display

course id	course name	Disability	Student id
500	Disabilities	visual impairment	737
5001	Emotional Stability	Hearing Impairment	735

courses

Course id:

course name:

Disability:

student\_id:

Add

Modify

Delete

Display

Message

**Please select an course to modify.**

OK

course id	course name	Disability	Student id
500	Disabilities	visual impairment	737
5001	Emotional Stability	Hearing Impairment	735

After modifying:

courses

Course id:

course name:

Disability:

student\_id:

Message

**Successfully modified**

OK

Display

course id	course name	Disability	Student id
500	Disabilities	visual impairment	737
5001	Disabilities	Hearing Impairment	735

courses

Course id:

course name:

Disability:

student\_id:

Add

Modify

Delete

Display

course id	course name	Disability	Student id
500	Disabilities	visual impairment	737
5001	Disabilities	Hearing Impairment	735

After deleting:

courses

Course id: 5001

course name: Disabilities

Disability: Hearing Impairment

student\_id: 735

Add

Modify

Delete

Display

Confirmation

Are you sure you want to delete this course?

Yes No

course id	course name	Disability	Student id
500			
5001	Disabilities	Hearing Impairment	735

courses

Course id:

course name:

Disability:

student\_id:

Add

Modify

Delete

Display

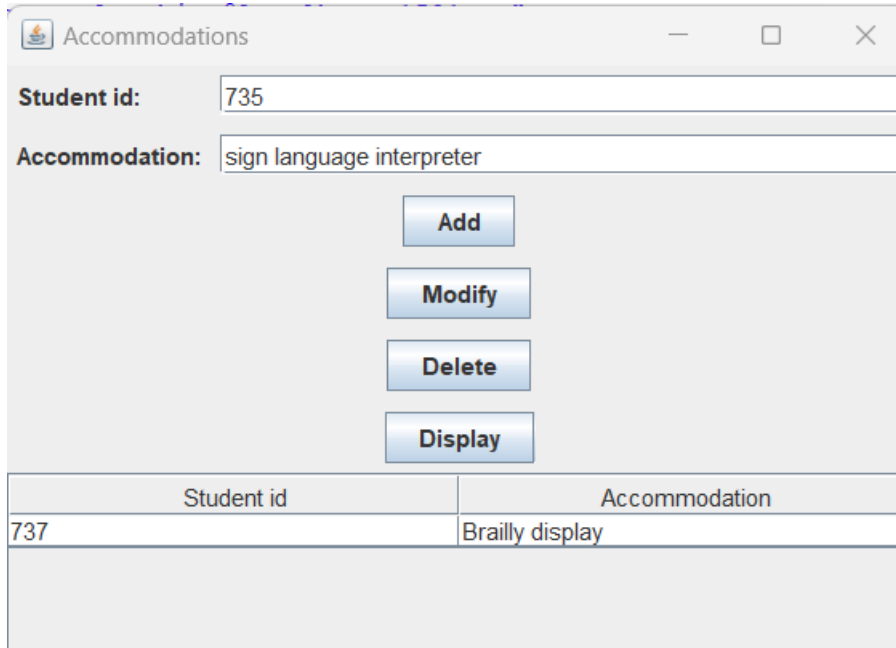
Message

Deleted successfully.

OK

course id	course name	Disability	Student id
500			

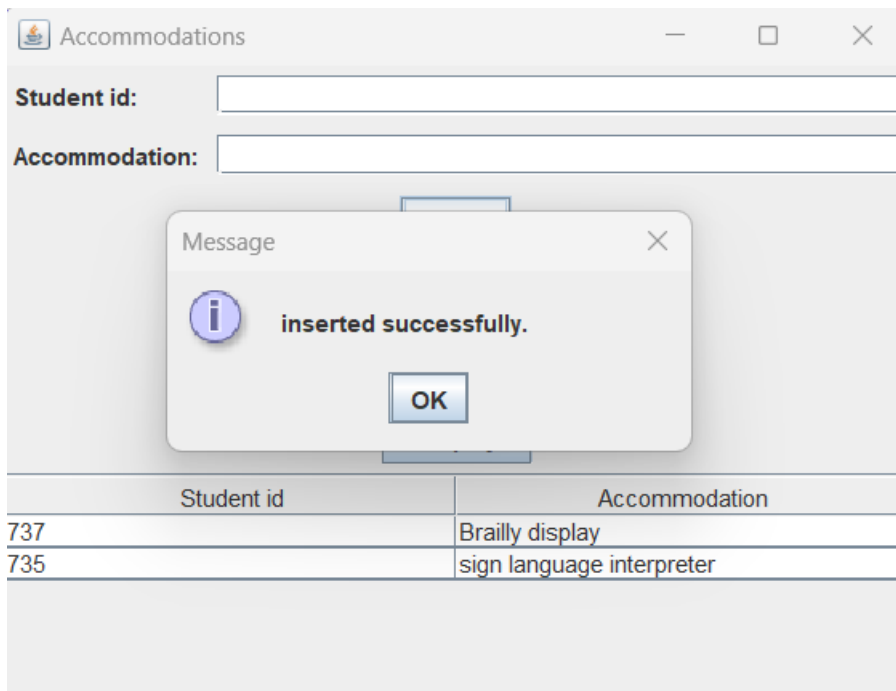
## Accommodations Table:



The screenshot shows the 'Accommodations' application window. At the top, there are two input fields: 'Student id:' with the value '735' and 'Accommodation:' with the value 'sign language interpreter'. Below these fields are four buttons: 'Add', 'Modify', 'Delete', and 'Display'. At the bottom, there is a table with two columns: 'Student id' and 'Accommodation'. The table contains one row with the values '737' and 'Brailly display'.

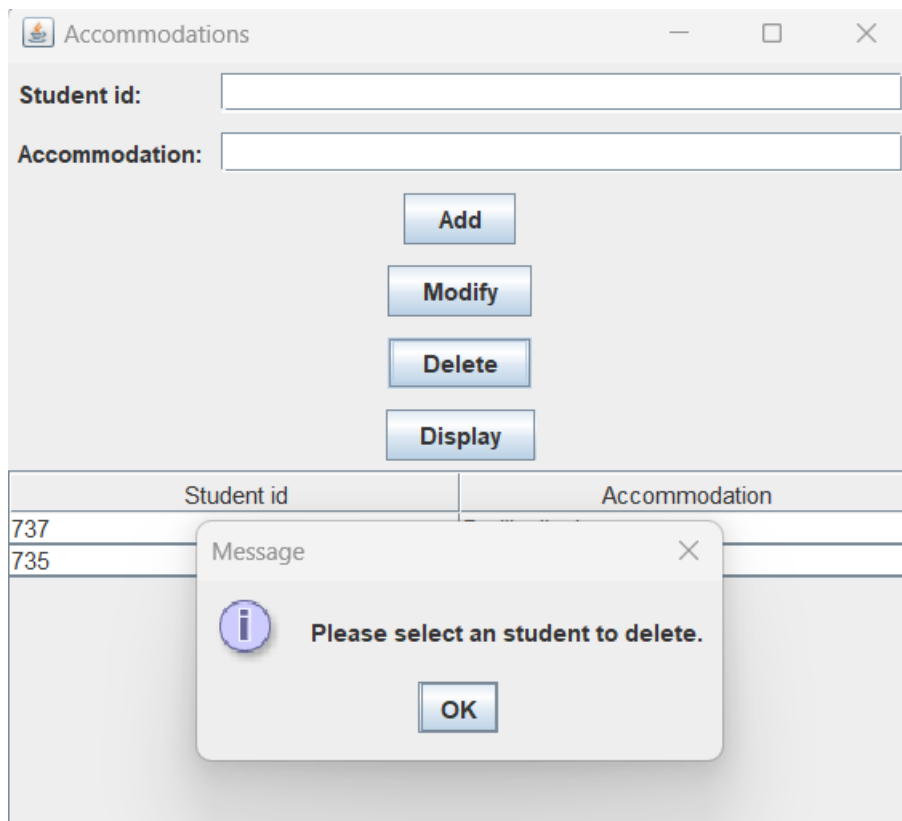
Student id	Accommodation
737	Brailly display

## After insertion:

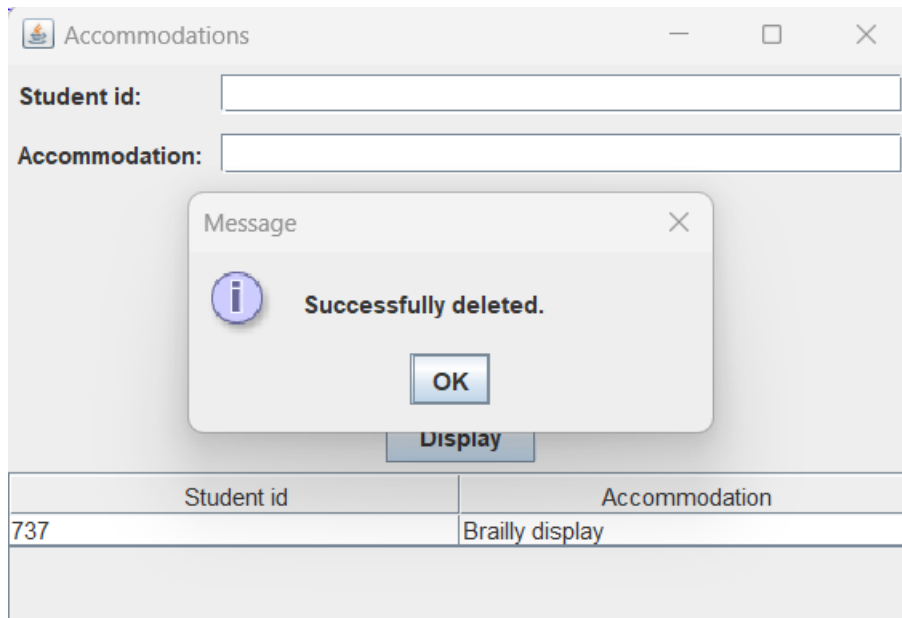


The screenshot shows the 'Accommodations' application window after a successful insertion. A message dialog box is displayed in the center, with the text 'inserted successfully.' and an 'OK' button. The input fields for 'Student id' and 'Accommodation' are now empty. The table at the bottom now contains two rows: '737' with 'Brailly display' and '735' with 'sign language interpreter'.

Student id	Accommodation
737	Brailly display
735	sign language interpreter



After deletion:



## GITHUB LINKS AND FOLDER STRUCTURE:

<https://github.com/vinay6135/StudentDisabilitySystem>

The screenshot displays the GitHub interface for the repository `StudentDisabilitySystem` by user `vinay6135`. The browser address bar shows the URL `https://github.com/vinay6135/StudentDisabilitySystem/tree/main/EducationSystem/src/EducationSystem`. The repository's file structure is visible on the left sidebar, with the path `main > EducationSystem > src > EducationSystem` selected. The main content area shows a table of recent commits, all made by `vinay6135` with the message "Add files via upload".

Name	Last commit message	Last commit date
..		
Accommodations.java	Add files via upload	1 minute ago
Course.java	Add files via upload	1 minute ago
Faculty.java	<a href="#">Add files via upload</a>	1 minute ago
MainPage.java	Add files via upload	1 minute ago
StudentTableGUI.java	Add files via upload	1 minute ago

The URL at the bottom of the page is `https://github.com/vinay6135/StudentDisabilitySystem/commit/1855a75ef5260388f163d8ae7551f05067595bce`.

## Result:

I have successfully completed my DBMS Project “Education Ecosystem for Specially abled students”.

## **DISCUSSION AND FUTURE WORK :**

This project stores the details of the specially abled students ,based on the data provided by the them, government will provide appropriate assistive technologies based on individual students needs.

## References:

- <https://docs.oracle.com/javase/7/docs/api/>
- <https://www.javatpoint.com/java-swing>
- <https://stackoverflow.com/>