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DBMS ASSIGNMENT 2

UNIVERSITY DORMITORY ALLOTMENT PORTAL

1.INSERTION

```
import java.awt.*;
import java.awt.event.*;
import java.sql.*;

public class insertstudent extends Frame
{
    Button insertstudentButton;
    TextField sid,sname,roll_number,gender,hostel_name,room_number;
    TextArea errorText;
    Connection connection;
    Statement statement;
    public insertstudent()
    {
        try
        {
            Class.forName("oracle.jdbc.driver.OracleDriver");
        }
        catch (Exception e)
        {
            System.err.println("Unable to find and load driver");
            System.exit(1);
        }
        connectToDB();
    }
    public void connectToDB()
    {
        try
```

```

{
Connection con =
DriverManager.getConnection("jdbc:oracle:thin:@218.248.0.7:1521:rdbms","it19737040","vasavi");

statement = con.createStatement();
System.out.println("connected");
}
catch (SQLException e)
{
System.out.println(e);
}
}

public void buildGUI()
{

insertstudentButton = new Button("Insert");
insertstudentButton.addActionListener(new ActionListener()
{
public void actionPerformed(ActionEvent e)
{
try
{

String query= "INSERT INTO student VALUES('"+sid.getText() + "','" + sname.getText() + "','" +
roll_number.getText() + "','" +gender.getText() + "','" +hostel_name.getText()+ "','"
+room_number.getText() + "'" + "'");

int i = statement.executeUpdate(query);
errorText.append("\nInserted " + i + " rows successfully");
}

catch (SQLException insertException)
{
displaySQLErrors(insertException);
}
}
}

```

```

}
}
});
sid = new TextField(15);
sname = new TextField(15);
roll_number = new TextField(15);
gender = new TextField(15);
hostel_name = new TextField(15);
room_number = new TextField(15);
errorText = new TextArea(10, 40);
errorText.setEditable(false);
Panel first = new Panel();
first.setLayout(new GridLayout(6, 2));
first.add(new Label("Sid : "));
first.add(sid);
first.add(new Label("Name : "));
first.add(sname);
first.add(new Label("Roll Number: "));
first.add(roll_number);
first.add(new Label("Gender : "));
first.add(gender);
first.add(new Label("hostel name: "));
first.add(hostel_name);
first.add(new Label("Room Number: "));
first.add(room_number);

first.setBounds(125,90,200,100);
Panel second = new Panel(new GridLayout(6, 1));
second.add(insertstudentButton);
second.setBounds(125,220,150,100);
Panel third = new Panel();

```

```

third.add(errorText);

third.setBounds(125,320,300,200);

setLayout(null);

add(first);

add(second);

add(third);

setTitle("Insert Gets");

setSize(500, 600);

setVisible(true);
}

private void displaySQLErrors(SQLException e)
{
    errorText.append("\nSQLException: " + e.getMessage() + "\n");
    errorText.append("SQLState: " + e.getSQLState() + "\n");
    errorText.append("VendorError: " + e.getErrorCode() + "\n");
}

public static void main(String[] args)
{
    insertstudent i = new insertstudent();
    i.addWindowListener(new WindowAdapter(){
        public void windowClosing(WindowEvent e)
        {
            System.exit(0);
        }
    });
    i.buildGUI();
}
}

```

 Insert Gets

Sid :	5
Name :	Kamal
Roll Number:	35
Gender :	male
hostel name:	hostel five
Room Number:	402

erted 1 rows successfully

 Insert Gets

Sid :	9
Name :	prasad
Roll Number:	22
Gender :	male
hostel name:	hostel six
Room Number:	45

erted 1 rows successfully

Insert Gets

Sid : 10
Name : prouh
Roll Number: 22
Gender : male
Hostel name: hostel seven
Room Number: 47

Insert

sted 1 rows successfully
sted 1 rows successfully

Insert Gets

Sid : 13
Name : Praneeh
Roll Number: 21
Gender : male
Hostel name: hostel eight
Room Number: 58

Insert

sted 1 rows successfully
sted 1 rows successfully
sted 1 rows successfully

2.UPDATE

```
import java.awt.*;
```

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

```
import java.sql.*;
```

```
public class updatestudent extends Frame
```

```
{
```

```
    Button updatestudentButton;
```

```
    List sidList;
```

```
    TextField sidText,snameText,roll_numberText,genderText,hostel_nameText,room_numberText;
```

```
    TextArea errorText;
```

```
    Connection connection;
```

```

Statement statement;

ResultSet rs;

public updatestudent()
{
    try
    {
        Class.forName("oracle.jdbc.driver.OracleDriver");
    }
    catch (Exception e)
    {
        System.err.println("Unable to find and load driver");
        System.exit(1);
    }
    connectToDB();
}

public void connectToDB()
{
    try
    {
        Connection con =
        DriverManager.getConnection("jdbc:oracle:thin:@218.248.0.7:1521:rdbms","it19737040","vasavi");
        statement = con.createStatement();
        System.out.println("connected");
    }
    catch (SQLException e)
    {
        System.out.println(e);
    }
}

private void loadstudent()
{

```

```

try
{
rs = statement.executeQuery("SELECT sid FROM student");
while (rs.next())
{
sidList.add(rs.getString("sid"));
}
}
catch (SQLException e)
{
displaySQLErrors(e);
}
}

public void buildGUI()
{
sidList = new List(10);
loadstudent();
add(sidList);
sidList.addItemListener(new ItemListener()
{
public void itemStateChanged(ItemEvent e)
{
try
{
rs = statement.executeQuery("SELECT * FROM student where sid='"+sidList.getSelectedItem()+"'");
rs.next();
sidText.setText(rs.getString("sid"));
snameText.setText(rs.getString("sname"));
roll_numberText.setText(rs.getString("roll_number"));
genderText.setText(rs.getString("gender"));
hostel_nameText.setText(rs.getString("hostel_name"));

```



```

room_numberText.setText(rs.getString("room_number"));
}
catch (SQLException selectException)
{
displaySQLErrors(selectException);
}
}
});

updatestudentButton = new Button("Update");
updatestudentButton.addActionListener(new ActionListener()
{
public void actionPerformed(ActionEvent e)
{
try
{

Connection con =
DriverManager.getConnection("jdbc:oracle:thin:@218.248.0.7:1521:rdbms","it19737040","vasavi");
Statement statement1 = con.createStatement();

int i = statement1.executeUpdate("UPDATE student " + "SET sname=" + snameText.getText() + " , " +
"roll_number=" + roll_numberText.getText() + " , " + "gender =" +
genderText.getText()+" , "+"hostel_name=" +hostel_nameText.getText()+" , "+"room_number="
+room_numberText.getText() + " WHERE sid= " + sidList.getSelectedItem()+"");

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

sidList.removeAll();

loadstudent();

}
catch (SQLException insertException)
{
displaySQLErrors(insertException);
}
}
}

```

```
});  
  
sidText = new TextField(15);  
sidText.setEditable(false);  
  
snameText = new TextField(15);  
  
roll_numberText = new TextField(15);  
  
genderText = new TextField(15);  
  
hostel_nameText = new TextField(15);  
  
room_numberText = new TextField(15);  
  
errorText = new TextArea(10, 40);  
errorText.setEditable(false);  
  
Panel first = new Panel();  
first.setLayout(new GridLayout(6, 2));  
first.add(new Label("Sid : "));  
first.add(sidText);  
first.add(new Label("Name : "));  
first.add(snameText);  
first.add(new Label("Roll Number: "));  
first.add(roll_numberText);  
first.add(new Label("Gender : "));  
first.add(genderText);  
first.add(new Label("hostel name: "));  
first.add(hostel_nameText);  
first.add(new Label("Room Number: "));  
first.add(room_numberText);  
  
Panel second = new Panel(new GridLayout(6, 1));  
second.add(updatestudentButton);  
  
Panel third = new Panel();  
third.add(errorText);  
  
add(first);  
  
add(second);  
  
add(third);
```

```
setTitle("Update student ");
setSize(500, 600);
setLayout(new FlowLayout());
setVisible(true);
}

private void displaySQLExceptions(SQLException e)
{
    errorText.append("\nSQLException: " + e.getMessage() + "\n");
    errorText.append("SQLState: " + e.getSQLState() + "\n");
    errorText.append("VendorError: " + e.getErrorCode() + "\n");
}

public static void main(String[] args)
{
    updatestudent ups = new updatestudent();
    ups.addWindowListener(new WindowAdapter(){
        public void windowClosing(WindowEvent e)
        {
            System.exit(0);
        }
    });
    ups.buildGUI();
}
```

Update student

9	Sid :	10	Update	Updated 1 rows successfully
4	Name :	houl		
10	Roll Number:	22		
13	Gender :	male		
1	hostel name:	hostel seven		
2	Room Number:	60		
3				
5				

Update student

9	Sid :	13	Update	Updated 1 rows successfully
4	Name :	Praneeth		
10	Roll Number:	28		
13	Gender :	male		
1	hostel name:	hosteleight		
2	Room Number:	50		
3				
5				

Update student

9	Sid :	1	Update	Updated 1 rows successfully Updated 1 rows successfully Updated 1 rows successfully
4	Name :	Dheeraj		
10	Roll Number:	10		
13	Gender :	Male		
1	hostel name:	hostelone		
2	Room Number:	105		
3				
5				

3.DELETE

```
import java.awt.*;
```

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

```
import java.sql.*;
```

```
public class deletestudent extends Frame
```

```
{
```

```
    Button deletestudentButton;
```

```
    List sidList;
```

```
    TextField sidText,snameText,roll_numberText,genderText,hostel_nameText,room_numberText;
```

```
    TextArea errorText;
```

```
    Connection connection;
```

```
    Statement statement;
```

```
    ResultSet rs;
```

```
    public deletestudent()
```

```
    {
```

```
        try
```

```
        {
```

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

```
        }
```

```
        catch (Exception e)
```

```

{
System.err.println("Unable to find and load driver");
System.exit(1);
}
connectToDB();
}
public void connectToDB()
{
try
{
Connection con =
DriverManager.getConnection("jdbc:oracle:thin:@218.248.0.7:1521:rdbms","it19737040","vasavi");
statement = con.createStatement();
System.out.println("connected");
}
catch (SQLException e)
{
System.out.println(e);
}
}
private void loadstudent()
{
try
{
rs = statement.executeQuery("SELECT * FROM student");
while (rs.next())
{
sidList.add(rs.getString("sid"));
}
}
catch (SQLException e)

```

```

{
displaySQLErrors(e);
}
}

public void buildGUI()
{
sidList = new List(10);
loadstudent();
add(sidList);
sidList.addItemListener(new ItemListener()
{
public void itemStateChanged(ItemEvent e)
{
try
{
rs = statement.executeQuery("SELECT * FROM student where sid = '"+sidList.getSelectedItem()+"");
while (rs.next())
{
if
(rs.getString("sid").equals(sidList.getSelectedItem()))
break;
}
if (!rs.isAfterLast())
{
sidText.setText(rs.getString("sid"));
snameText.setText(rs.getString("sname"));
roll_numberText.setText(rs.getString("roll_number"));
genderText.setText(rs.getString("gender"));
hostel_nameText.setText(rs.getString("hostel_name"));
room_numberText.setText(rs.getString("room_number"));
}
}
}

```

```

}

catch (SQLException selectException)

{

displaySQLErrors(selectException);

}

}

});

deletestudentButton = new Button("Delete student");

deletestudentButton.addActionListener(new ActionListener()

{

public void actionPerformed(ActionEvent e)

{

try

{

Connection con=
DriverManager.getConnection("jdbc:oracle:thin:@218.248.0.7:1521:rdbms","it19737040","vasavi");

Statement statement1 = con.createStatement();

int i = statement1.executeUpdate("DELETE FROM student WHERE sid =
 '"+sidList.getSelectedItem()+"' and sname='"+snameText.getText()+"' and
roll_number='"+roll_numberText.getText()+"' and gender='"+genderText.getText()+"' and
hostel_name='"+hostel_nameText.getText()+"' and
room_number='"+room_numberText.getText()+"'");

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

snameText.setText(null);

roll_numberText.setText(null);

genderText.setText(null);

hostel_nameText.setText(null);

room_numberText.setText(null);

sidList.removeAll();

loadstudent();

}

catch (SQLException insertException)

{

```



```
displaySQLErrors(insertException);
}
}
});

sidText = new TextField(15);
snameText = new TextField(15);
roll_numberText = new TextField(15);
genderText = new TextField(15);
hostel_nameText = new TextField(15);
room_numberText = new TextField(15);
errorText = new TextArea(10, 40);
errorText.setEditable(false);

Panel first = new Panel();
first.setLayout(new GridLayout(6, 2));
first.add(new Label("Sid : "));
first.add(sidText);
first.add(new Label("Name : "));
first.add(snameText);
first.add(new Label("Roll Number: "));
first.add(roll_numberText);
first.add(new Label("Gender : "));
first.add(genderText);
first.add(new Label("hostel name: "));
first.add(hostel_nameText);
first.add(new Label("Room Number: "));
first.add(room_numberText);

Panel second = new Panel(new GridLayout(6, 1));
second.add(deletestudentButton);

Panel third = new Panel();
third.add(errorText);
add(first);
```

```
add(second);
add(third);
setTitle("Remove student ");
setSize(450, 600);
setLayout(new FlowLayout());
setVisible(true);
}
private void displaySQLExceptions(SQLException e)
{
    errorText.append("\nSQLException: " + e.getMessage() + "\n");
    errorText.append("SQLState: " + e.getSQLState() + "\n");
    errorText.append("VendorError: " + e.getErrorCode() + "\n");
}
public static void main(String[] args)
{
    deletestudent del = new deletestudent();
    del.addWindowListener(new WindowAdapter(){
        public void windowClosing(WindowEvent e)
        {
            System.exit(0);
        }
    });
    del.buildGUI();
}
}
```

Remove student

9	Sid :	13	Delete student	Deleted 1 rows successfully
4	Name :			
10	Roll Number:			
1	Gender :			
2	hostel name:			
3	Room Number:			
5				

Remove student

9	Sid :	10	Delete student	Deleted 1 rows successfully Deleted 1 rows successfully
4	Name :			
1	Roll Number:			
2	Gender :			
3	hostel name:			
5	Room Number:			

Remove student

9	Sid :	5	Delete student	Deleted 1 rows successfully Deleted 1 rows successfully Deleted 1 rows successfully
4	Name :			
1	Roll Number:			
2	Gender :			
3	hostel name:			
	Room Number:			