VIRTUAL PIANO

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PROJECT REPORT ON

VIRTUAL PIANO

For

AISSCE 2020 Examination

[As a part of the Informatics Practices Course (265)]

SUBMITTED BY

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INDEX

Source Code

Back End Code
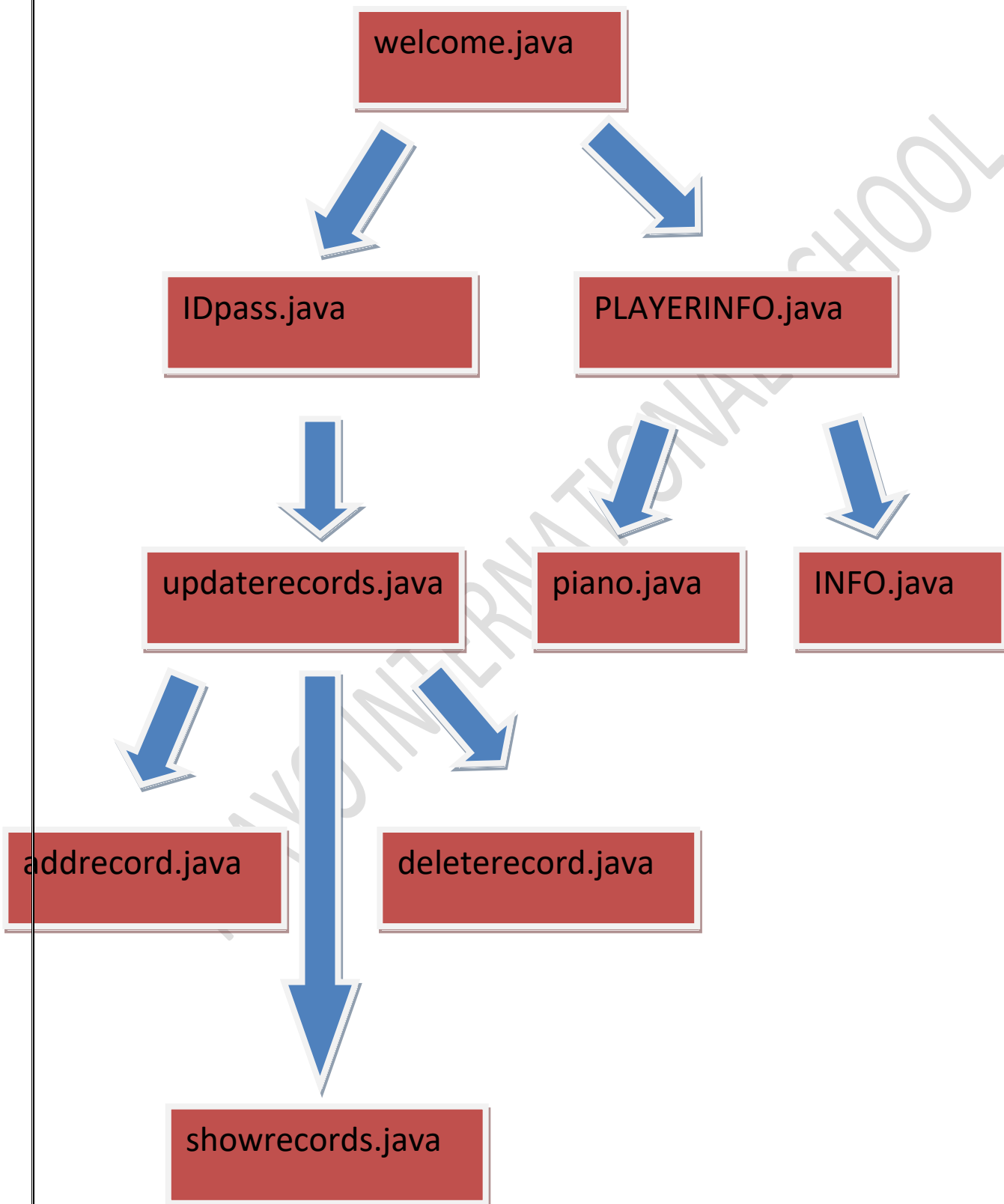
Sample Outputs

SOURCE CODE

Our project consist of 8 JFrame forms

1)welcome.java
2)PLAYERINFO.java
3)INFO.java
4)piano.java
5)IDpass.java
6)update_records
7)add_record
8)delete_record
9)show_records

```
welcome.java
    │
    ├──────────────┐
    ▼              ▼
IDpass.java     PLAYERINFO.java
    │              │
    ▼              ├──────────┐
updaterecords.java ▼          ▼
    │          piano.java   INFO.java
    ├──────┬──────┐
    ▼      │      ▼
addrecord.java │ deleterecord.java
           ▼
      showrecords.java
```

welcome.java

User button

this.setVisible(false);

new piano().setVisible(true);

Creater button

this.setVisible(false);

new INFO().setVisible(true);

PLAYERINFO.java

WELCOME

PLAY

HELP

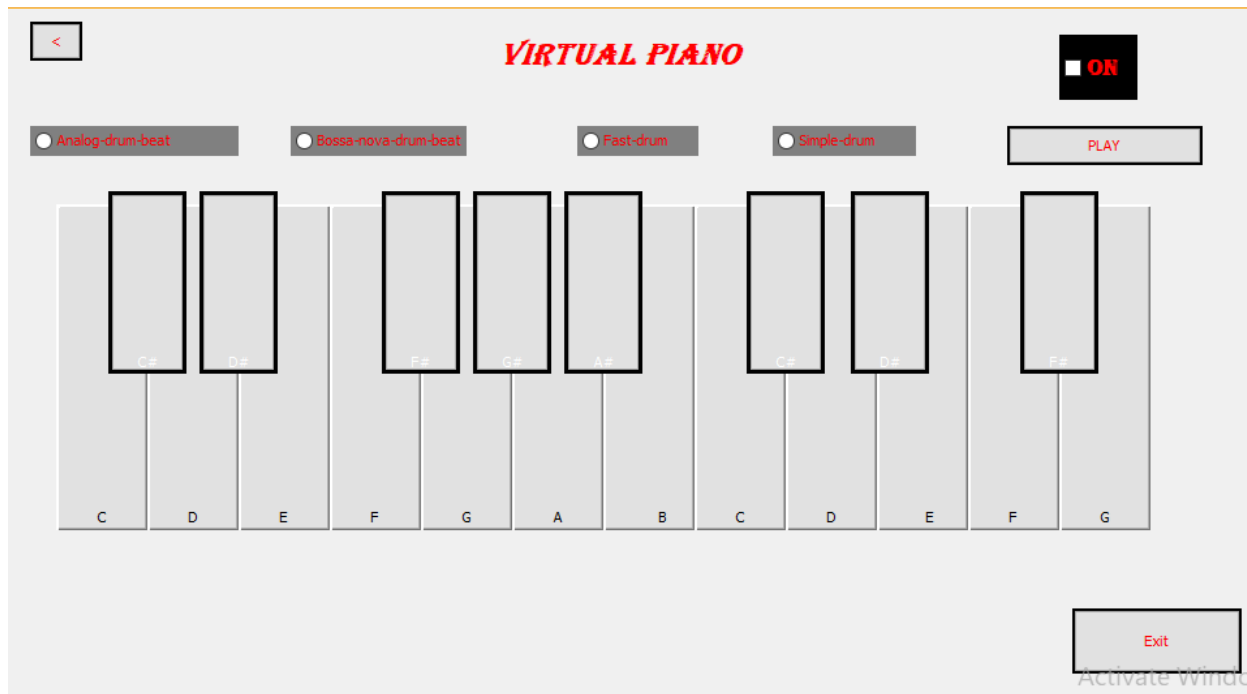# Play button

this.setVisible(false);

new piano().setVisible(true);

Help button

this.setVisible(false);

new INFO().setVisible(true);

< button

this.setVisible(false);

new welcome().setVisible(true);

Piano.java

Play button

InputStream iAudio;

if (r1.isSelected())

{

try{

iAudio=new FileInputStream(new File("C:\\Users\\Student\\Desktop\\Music_Note\\Analog-drum-beat-loop-122\\Analog-drum-beat-loop-122.wav"));

AudioStream iMusic = new AudioStream(iAudio);

AudioPlayer.player.start(iMusic);

}

```java
catch (IOException e){

   JOptionPane.showMessageDialog(null,e);

}
}

    else if  (r2.isSelected())

{

try{

iAudio=new FileInputStream(new File("C:\\Users\\Student\\Desktop\\Music_Note\\Bossa-nova-drum-beat-153-bpm\\Bossa-nova-drum-beat-153-bpm.wav") );

AudioStream iMusic = new AudioStream(iAudio);

AudioPlayer.player.start(iMusic);

}

catch (IOException e){

   JOptionPane.showMessageDialog(null,e);

}
}

    else if  (r3.isSelected())

{

try{

iAudio=new FileInputStream(new File("C:\\Users\\Student\\Desktop\\Music_Note\\Fast-drum-loop-140-bpm\\Fast-drum-loop-140-bpm.wav") );

AudioStream iMusic = new AudioStream(iAudio);

AudioPlayer.player.start(iMusic);

}

catch (IOException e){
```

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

}
}

        else if  (r4.isSelected())

{

try{

iAudio=new FileInputStream(new File("C:\\Users\\Student\\Desktop\\Music_Note\\Simple-drum-loop-116-bpm\\Simple-drum-loop-116-bpm.wav") );

AudioStream iMusic = new AudioStream(iAudio);

AudioPlayer.player.start(iMusic);

}

catch (IOException e){

    JOptionPane.showMessageDialog(null,e);

}
}


        r1.setSelected(false);
        r2.setSelected(false);
        r3.setSelected(false);
        r4.setSelected(false);
```

Music note button

```
InputStream iAudio;

if  (music.isSelected())

{

try{

iAudio=new FileInputStream(new File("C:\\Users\\Student\\Desktop\\Music_Note\\C.wav") );

AudioStream iMusic = new AudioStream(iAudio);

AudioPlayer.player.start(iMusic);

}

catch (IOException e){

    JOptionPane.showMessageDialog(null,e);

}

}
```

< button

```
this.setVisible(false);

new PLAYERINFO().setVisible(true);
```

Exit button

```
System.exit(0);
```

INFO.java

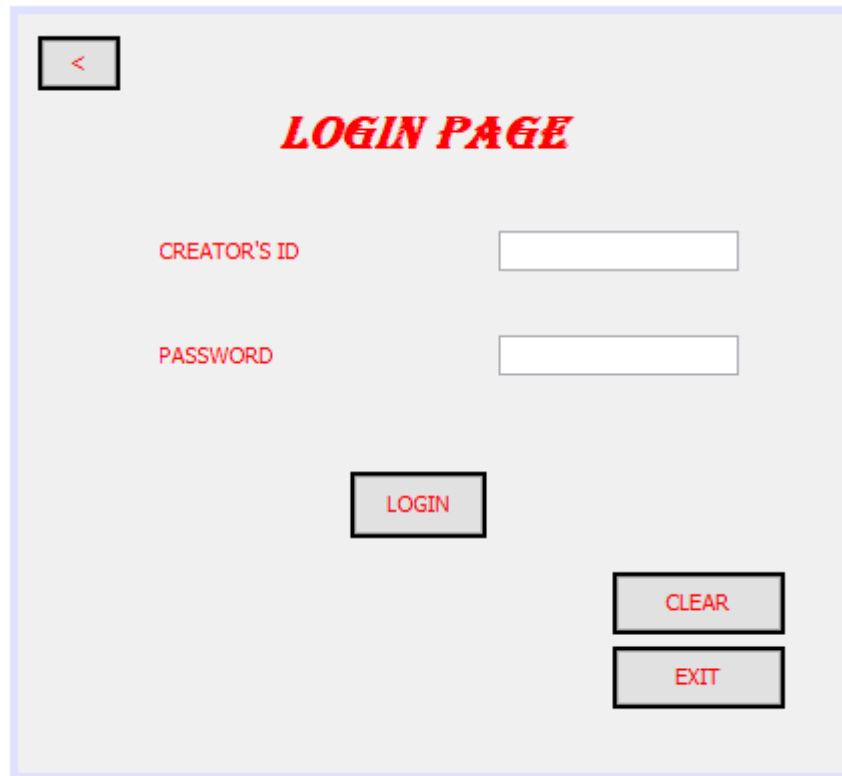## < button

this.setVisible(false);

new PLAYORINFO().setVisible(true);

There are no other Button, this is just for user's help.

IDpass.java

Login button

String username =un1.getText();

String password = new String(pf1.getPassword());

if (username.equals("1001")&&password.equals("rathi"))

{

JOptionPane.showMessageDialog(null,"you have logged in");

this.setVisible(false);

new update_records().setVisible(true);

```
}
else if (username.equals("1003")&&password.equals("jeena"))
{
JOptionPane.showMessageDialog(null,"you have logged in");
this.setVisible(false);
new update_records().setVisible(true);
}
else if (username.equals("1002")&&password.equals("singh"))
{
JOptionPane.showMessageDialog(null,"you have logged in");
this.setVisible(false);
new update_records().setVisible(true);
}
else
    JOptionPane.showMessageDialog(null,"incorrect password");
```

Clear button

```
un1.setText("");
pf1.setText("");
```
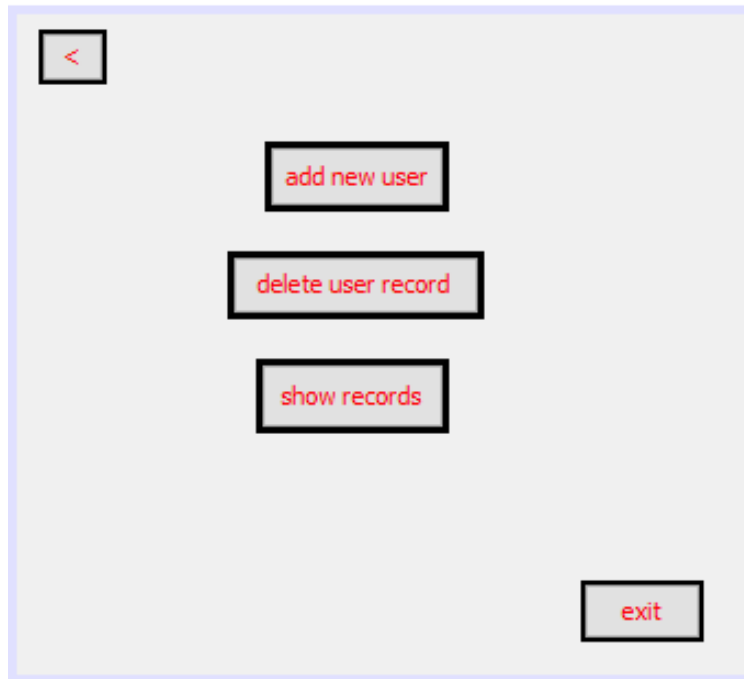
< button

```
this.setVisible(false);
new welcome ().setVisible(true);
```

Exit button

System.exit(0);

Updaterecords.java

Add new user button

this.setVisible(false);

new add_record().setVisible(true);

Delete record button

this.setVisible(false);

new delete_record().setVisible(true);

Show record button

this.setVisible(false);

new show_record().setVisible(true);

< button

this.setVisible(false);

new IDpass ().setVisible(true);

Exit button

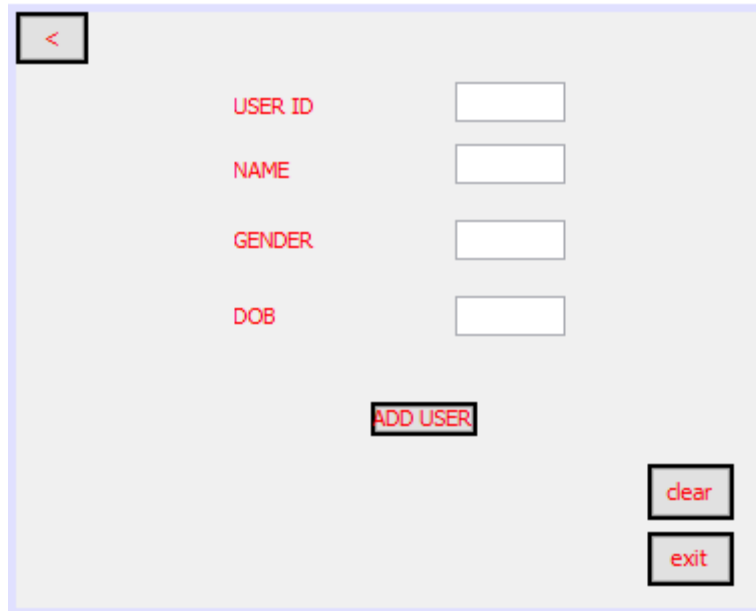System.exit(0);

Add_record.java

Add user button

```
String id=j1.getText();

String nm=j2.getText();

String age=j3.getText();

String moj=j4.getText();

try

{

    Class.forName("java.sql.Driver");

    Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3306/piano","root","comp");

    Statement stmt=con.createStatement();

    String query="insert into piano values("+id+",'"+nm+"','"+age+"','"+moj+"');";
```

```
    stmt.executeUpdate(query);

    JOptionPane.showMessageDialog(null,"record added");

}

catch(Exception e)

{

JOptionPane.showMessageDialog(null,e.getMessage());

}
```

Clear button

```
j1.setText("");
j2.setText("");
j3.setText("");
j4.setText("");
```
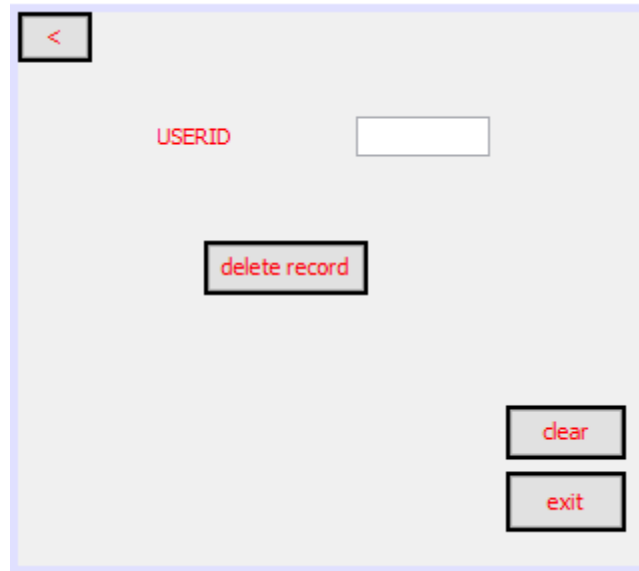
< button

```
this.setVisible(false);
new updaterecords().setVisible(true);
```

Exit button

```
System.exit(0);
```

Delete_record.java

Delete record button

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

try

{

    Class.forName("java.sql.Driver");

    Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3306/piano","root","comp");

    Statement stmt=con.createStatement();

    String query="Delete from piano where Roll_no ="+id+";";

    stmt.executeUpdate(query);

    JOptionPane.showMessageDialog(null,"record deleted");

}
```

```
catch(Exception e)

{

JOptionPane.showMessageDialog(null,e.getMessage());

}
```
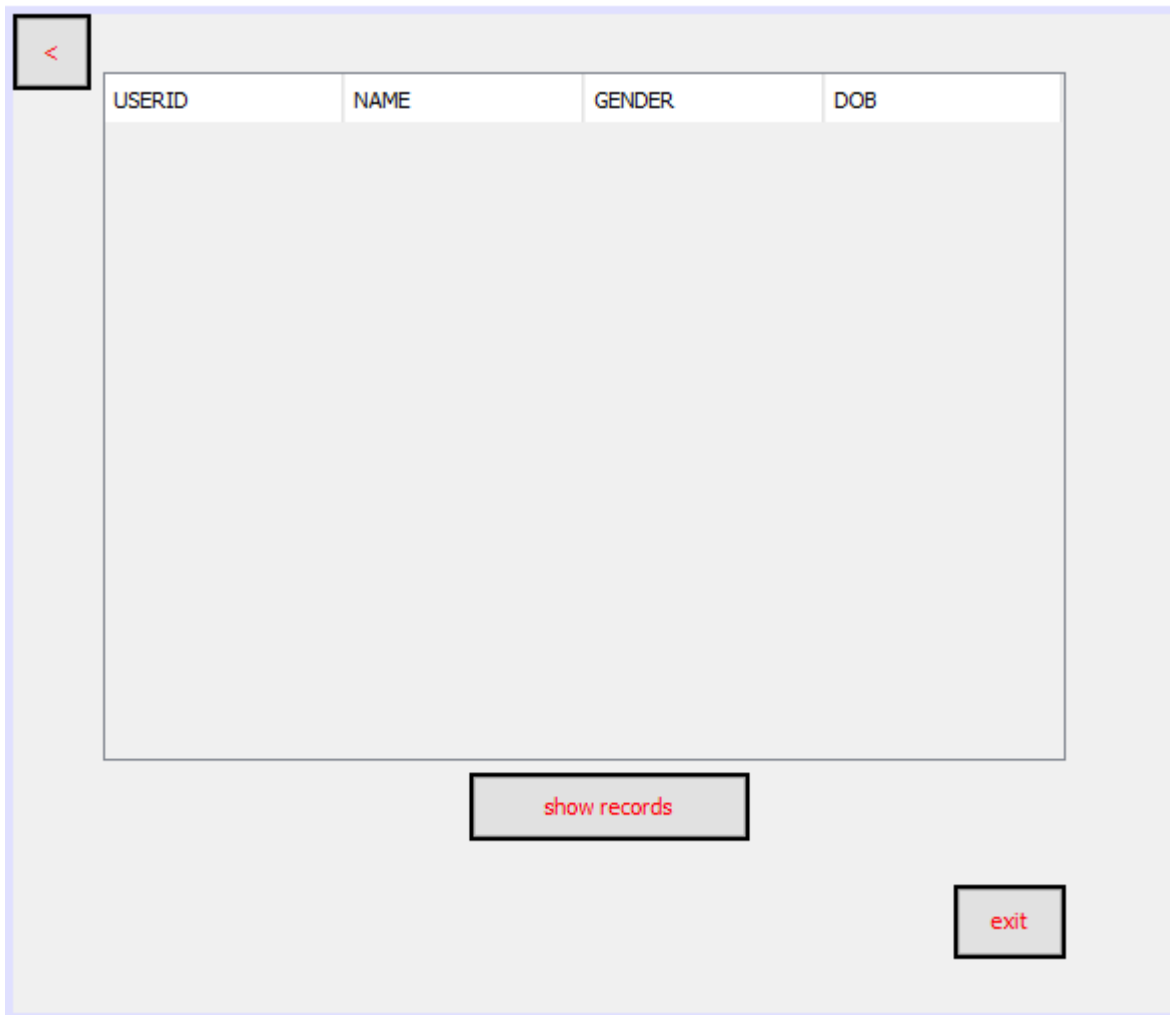
Clear button

```
jl.setText("");
```

< button

```
this.setVisible(false);

new updaterecords().setVisible(true);
```

Exit button

```
System.exit(0);
```

show_records.java

Show records button

```
DefaultTableModel m= (DefaultTableModel)t1.getModel();
    try
     {
     Class.forName("java.sql.Driver");
```

```java
      Connection conn=
DriverManager.getConnection("jdbc:mysql://localhost:3306/piano","root","comp");

      Statement stmt= conn.createStatement();

      String query= "select * from piano";

      ResultSet rs = stmt.executeQuery(query);

      while(rs.next())

      {

      String roll_no=rs.getString("roll_no");

      String name= rs.getString("name");

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

      String DOB=rs.getString("DOB");

      m.addRow(new Object[]{roll_no, name, gender, DOB});


        }

      rs.close();

      stmt.close();

      conn.close();

      }

      catch (Exception e)

      {

       JOptionPane.showMessageDialog(null,e.getMessage());

      }
```

< button

this.setVisible(false);

new updaterecords().setVisible(true);

Exit button

System.exit(0);

BACK END CODE

```
mysql> use piano;
Database changed
```

```
mysql> show tables;
+-----------------+
| Tables_in_piano |
+-----------------+
| piano           |
+-----------------+
1 row in set (0.08 sec)
```

```
mysql> select*from piano;
+---------+--------+--------+------------+
| ROLL_NO | NAME   | GENDER | DOB        |
+---------+--------+--------+------------+
|    1001 | jayant | m      | 2002-01-15 |
|    1003 | yash   | m      | 2002-11-11 |
|    1002 | trilok | m      | 2002-06-14 |
+---------+--------+--------+------------+
3 rows in set (0.02 sec)

mysql>
```
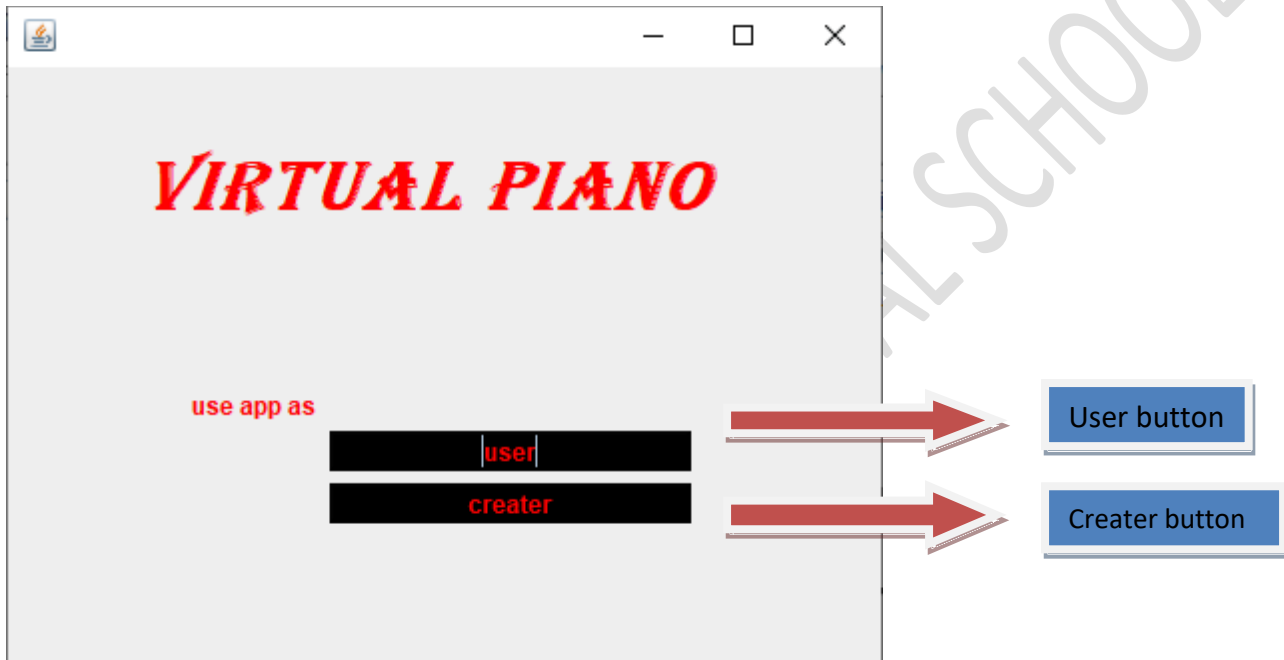
```
mysql> desc piano;
+---------+----------+------+-----+---------+-------+
| Field   | Type     | Null | Key | Default | Extra |
+---------+----------+------+-----+---------+-------+
| ROLL_NO | int(11)  | YES  |     | NULL    |       |
| NAME    | char(20) | YES  |     | NULL    |       |
| GENDER  | char(10) | YES  |     | NULL    |       |
| DOB     | char(20) | YES  |     | NULL    |       |
+---------+----------+------+-----+---------+-------+
4 rows in set (0.03 sec)

mysql>
```
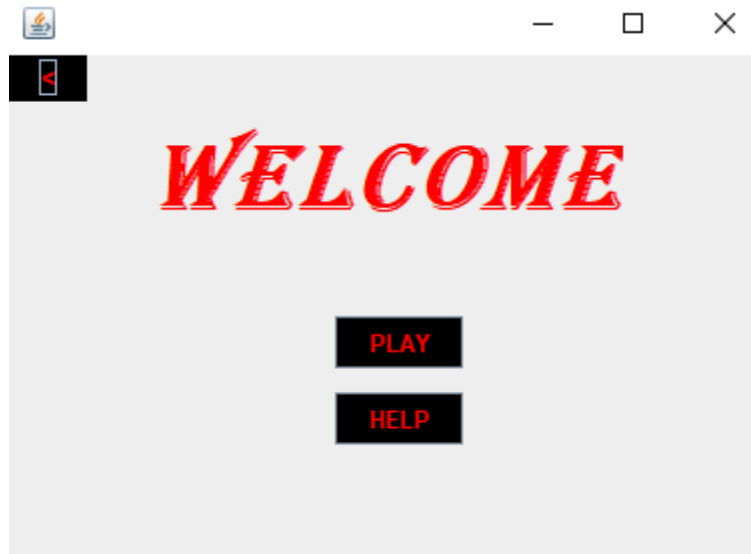
SAMPLE OUTPUT

Welcome.java

When clicked on user button – playerinfo frame will open up

When clicked on creater button – IDpass frame will open up
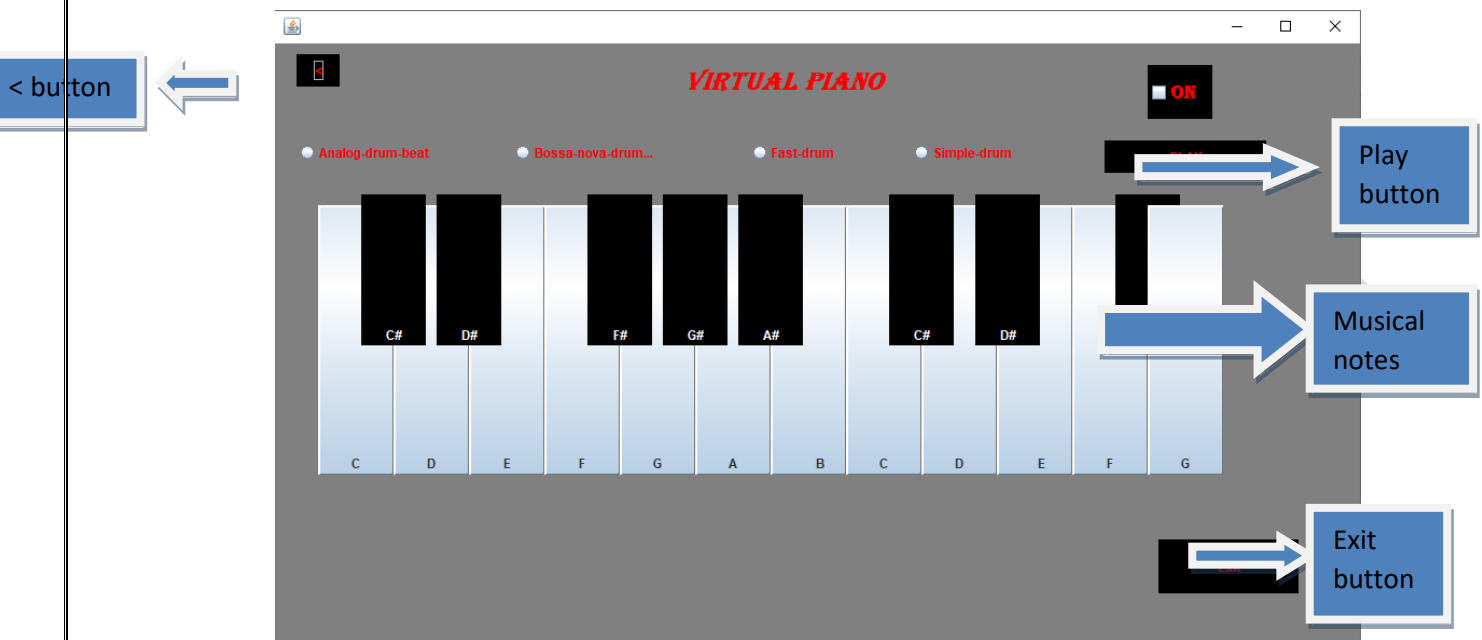
Playerinfo.java

When clicked on play button – piano frame will open up

When clicked on help button – INFO frame will open up

When clicked on < button – welcome frame will open up

Piano.java

When clicked on any musical note respected musical note will be played

When clicked on < button – playerinfo frame will open up

When jradiobutton is selected and play button is pressed the following beat will be played

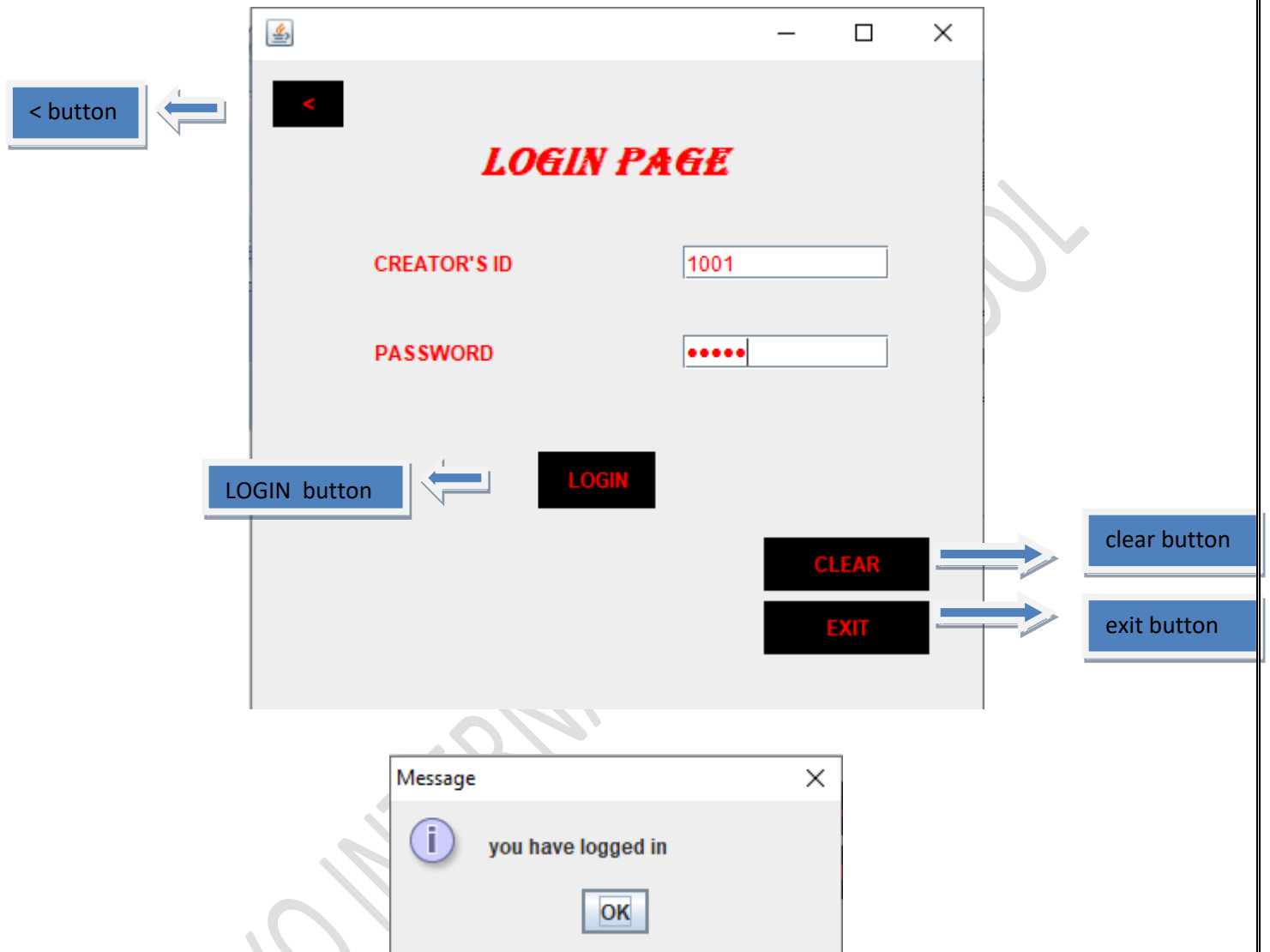When clicked on exit button – frame will be closed

INFO.java

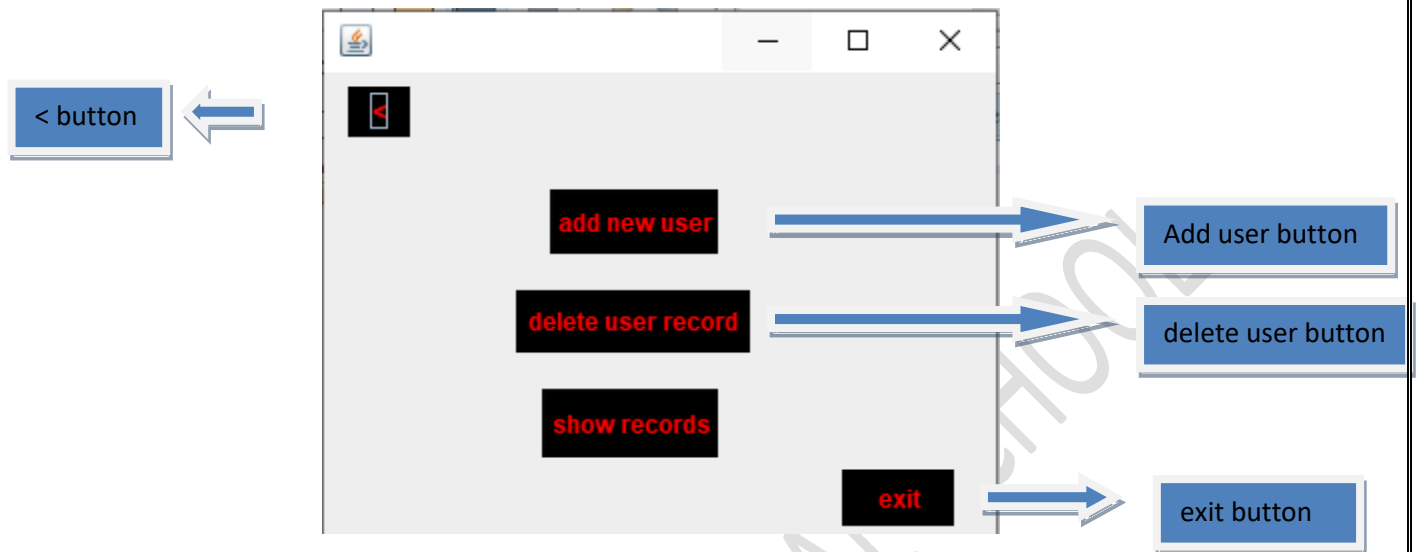When clicked on < button – playerinfo frame will open up

IDpass.java

When clicked on login button –update_records frame will open up

When clicked on < button – welcome frame will open up

When clicked on clear button – all the fields ill be clear

When clicked on exit button – it gets closed

Updaterecords.java

When clicked on add new user button – Add_record frame will open up

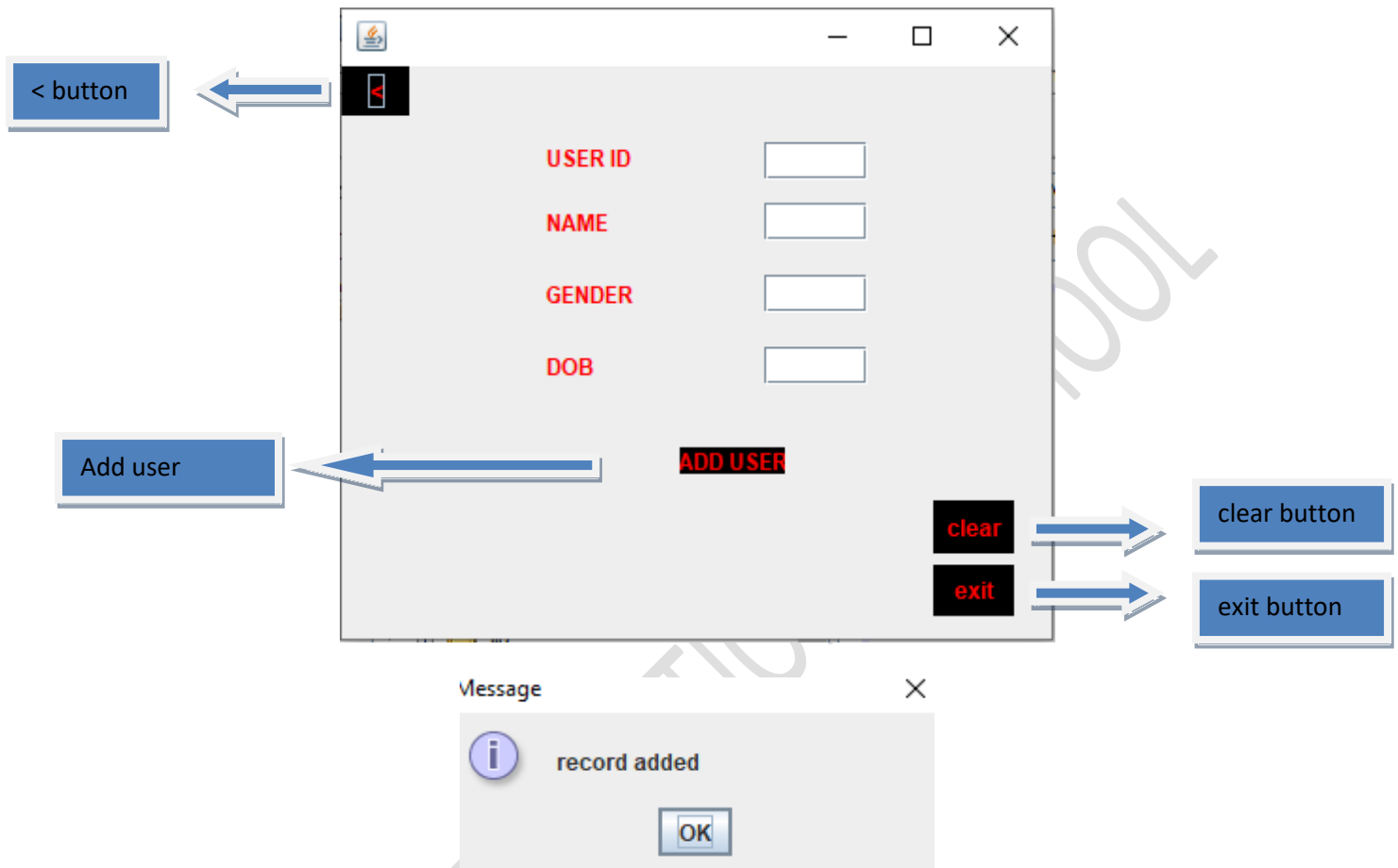When clicked on delete user button – delete_record frame will open up

When clicked on show records button – show_record frame will open up

When clicked on < button – welcome frame will open up

 When clicked on clear button – all the fields ill be clear

When clicked on exit button – it gets closed

Add_record.java
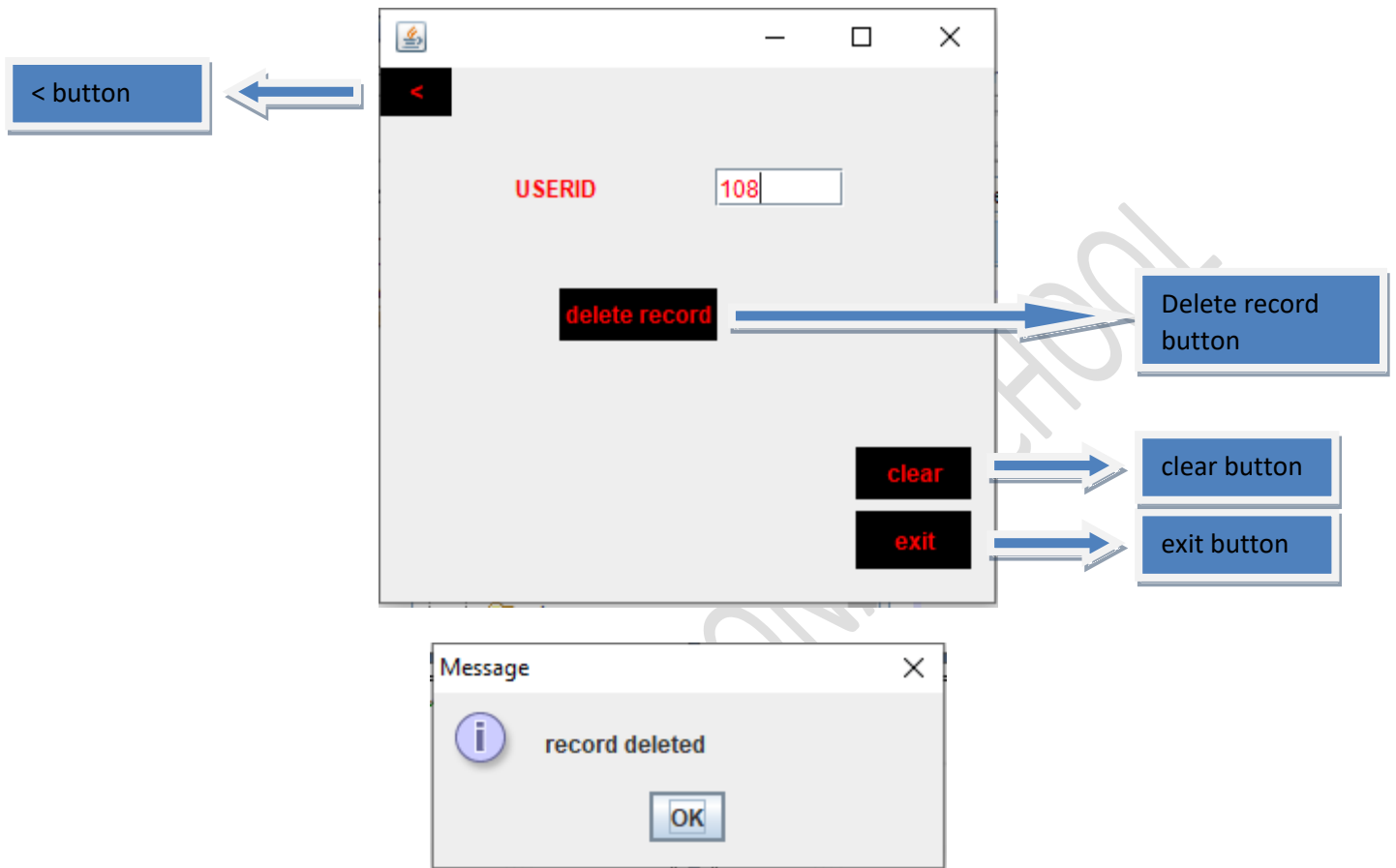

When clicked on add user button – record will be added

When clicked on < button – welcome frame will open up

When clicked on clear button – all the fields will be clear

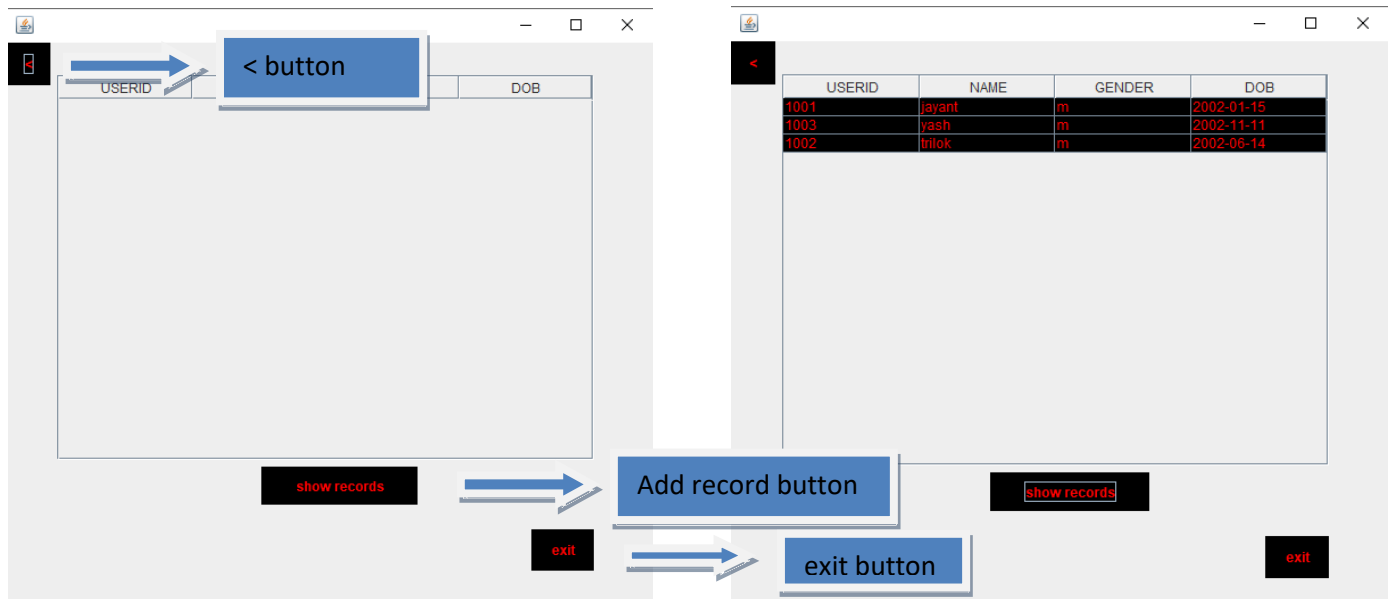When clicked on exit button – it gets closed

Delete_record.java

< button

USERID   108

delete record → Delete record button

clear → clear button

exit → exit button

Message

(i) record deleted

OK

When clicked on < button – welcome frame will open up

When clicked on clear button – all the fields will be clear

When clicked on exit button – it gets closed

When clicked on delete user button – record will be deleted

show_records.java

When clicked on < button – welcome frame will open up

When clicked on exit button – it gets closed

When clicked on show records button – record will be shown