

Practical Applications in CS I - Session 03.02

jFrameForm class variables
<pre> Connection con = null; Statement stmt = null; ResultSet rs = null; </pre>

DoConnect
<pre> try { String uName = "root"; String uPass = "root"; String db = "jdbc:mysql://localhost:3306/CSITResults"; con = DriverManager.getConnection(db, uName, uPass); stmt = con.createStatement(ResultSet.TYPE_SCROLL_SENSITIVE, ResultSet.CONCUR_UPDATABLE); String SQL = "SELECT * FROM CSIT12Results"; rs = stmt.executeQuery(SQL); rs.next(); getRecord(); } catch (SQLException err) { JOptionPane.showMessageDialog(this, err.getMessage()); } </pre>

getRecord
<pre> try { jTextField1.setText(rs.getString("StudentID")); jTextField2.setText(rs.getString("StudentName")); jTextField3.setText(rs.getString("CH")); jTextField4.setText(rs.getString("GPA")); jTextField5.setText(rs.getString("English_Language_I")); jTextField6.setText(rs.getString("English_Language_II")); jTextField7.setText(rs.getString("Linear_Algebra_I")); jTextField8.setText(rs.getString("Calculus_I")); jTextField9.setText(rs.getString("Calculus_II")); } </pre>

	<pre> jTextField10.setText(rs.getString("Discrete_Math")); jTextField11.setText(rs.getString("Management")); jTextField12.setText(rs.getString("Fundamentals_of_Programming_I")); jTextField13.setText(rs.getString("Introduction_to_Computer_Science")); jTextField14.setText(rs.getString("Electronics")); jTextField15.setText(rs.getString("Physics")); jTextField16.setText(rs.getString("Critical_Creative_Thinking")); jTextField17.setText(rs.getString("Presentation_and_Communication_Skills")); } catch (SQLException err) { JOptionPane.showMessageDialog(this, err.getMessage()); } </pre>
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jFrameForm constructor
DoConnect

Next button
<pre> try { rs.next(); getRecord(); } catch (SQLException err) { JOptionPane.showMessageDialog(this, err.getMessage()); } </pre>

Previous button
<pre> try { rs.previous(); getRecord(); } catch (SQLException err) { JOptionPane.showMessageDialog(this, err.getMessage()); } </pre>

Last button
<pre>try { rs.last(); getRecord(); } catch (SQLException err) { JOptionPane.showMessageDialog(this, err.getMessage()); }</pre>

First button
<pre>try { rs.first(); getRecord(); } catch (SQLException err) { JOptionPane.showMessageDialog(this, err.getMessage()); }</pre>

Delete button
<pre>try { rs.deleteRow(); getRecord(); } catch (SQLException err) { JOptionPane.showMessageDialog(this, err.getMessage()); }</pre>

Update button
<pre>try { rs.updateString("StudentID", jTextField1.getText()); rs.updateString("StudentName", jTextField2.getText()); rs.updateString("CH", jTextField3.getText()); rs.updateString("GPA", jTextField4.getText()); rs.updateString("English_Language_I", jTextField5.getText()); rs.updateString("English_Language_II", jTextField6.getText()); rs.updateString("Linear_Algebra_I", jTextField7.getText()); rs.updateString("Calculus_I", jTextField8.getText()); }</pre>

```
rs.updateString("Calculus_II", jTextField9.getText());
rs.updateString("Discrete_Math", jTextField10.getText());
rs.updateString("Management", jTextField11.getText());
rs.updateString("Fundamentals_of_Programming_I",
jTextField12.getText());
rs.updateString("Introduction_to_Computer_Science",
jTextField13.getText());
rs.updateString("Electronics", jTextField14.getText());
rs.updateString("Physics", jTextField15.getText());
rs.updateString("Critical_Creative_Thinking",
jTextField16.getText());
rs.updateString("Presentation_and_Communication_Skills",
jTextField17.getText());
rs.updateRow();
} catch (SQLException err) {
    JOptionPane.showMessageDialog(this, err.getMessage());
}
```

Insert button

```
jButton1.setEnabled(false);
jButton2.setEnabled(false);
jButton3.setEnabled(false);
jButton4.setEnabled(false);
jButton5.setEnabled(false);
jButton6.setEnabled(false);
jButton7.setEnabled(false);
jButton8.setEnabled(true);
jButton9.setEnabled(true);
jTextField1.setText("");
jTextField2.setText("");
jTextField3.setText("");
jTextField4.setText("");
jTextField5.setText("");
jTextField6.setText("");
jTextField7.setText("");
```

```

jTextField8.setText("");
jTextField9.setText("");
jTextField10.setText("");
jTextField11.setText("");
jTextField12.setText("");
jTextField13.setText("");
jTextField14.setText("");
jTextField15.setText("");
jTextField16.setText("");
jTextField17.setText("");

```

Cancel new Record button

```

getRecord();
jButton1.setEnabled(true);
jButton2.setEnabled(true);
jButton3.setEnabled(true);
jButton4.setEnabled(true);
jButton5.setEnabled(true);
jButton6.setEnabled(true);
jButton7.setEnabled(true);
jButton8.setEnabled(false);
jButton9.setEnabled(false);

```

Insert new Record button

```

try {
    rs.moveToInsertRow();
    rs.updateString("StudentID", jTextField1.getText());
    rs.updateString("StudentName", jTextField2.getText());
    rs.updateString("CH", jTextField3.getText());
    rs.updateString("GPA", jTextField4.getText());
    rs.updateString("English_Language_I", jTextField5.getText());
    rs.updateString("English_Language_II", jTextField6.getText());
    rs.updateString("Linear_Algebra_I", jTextField7.getText());
    rs.updateString("Calculus_I", jTextField8.getText());
}

```

```
rs.updateString("Calculus_II", jTextField9.getText());
rs.updateString("Discrete_Math", jTextField10.getText());
rs.updateString("Management", jTextField11.getText());
rs.updateString("Fundamentals_of_Programming_I",
jTextField12.getText());
rs.updateString("Introduction_to_Computer_Science",
jTextField13.getText());
rs.updateString("Electronics", jTextField14.getText());
rs.updateString("Physics", jTextField15.getText());
rs.updateString("Critical_Creative_Thinking",
jTextField16.getText());
rs.updateString("Presentation_and_Communication_Skills",
jTextField17.getText());
rs.insertRow();
getRecord();
jButton1.setEnabled(true);
jButton2.setEnabled(true);
jButton3.setEnabled(true);
jButton4.setEnabled(true);
jButton5.setEnabled(true);
jButton6.setEnabled(true);
jButton7.setEnabled(true);
jButton8.setEnabled(false);
jButton9.setEnabled(false);
} catch (SQLException err) {
JOptionPane.showMessageDialog(this, err.getMessage());
}
```