**STEPS FOR CREATING GUI:**

1) Open Netbeans.

2) Click on New Project>Next>Project Name>Finish.

3) Navigate to Default Package and create a new JFrame Form.

4) Resize the form by stretching it.

5) Add components to the form from toolbar present on right side(drag and drop).

6) Save Project.

**STEPS FOR CONNECTING DATABASE WITH GUI:**

1) Click on Services tab.

2) Navigate to Databases> Drivers>MySQL (Connector/ J driver)

3) Enter the password of your MySQL Server in the password field and click Finish.

4) Click on Project tab.

5) Navigate to Libraries>Add Library>MySQL JDBC Driver>Add Library.

6) Create a class file in java. Insert the following syntax in it.

**import java.sql.\*;**

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

**public class MySQLConnect {**

**Connection conn=null;**

**public static Connection JK(){**

**try{**

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

**Connection conn=DriverManager.getConnection("jdbc:mysql://localhost/db","root","password");**

**return conn;**

**}catch(Exception e){**

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

**return null;**

**}**

**}**

**}**

In above syntax “**localhost**” is used because we are linking database from same server.”**db**” is the name of the database. ”**root**” and ”**password**” are nothing but username and password of the database. “**com.mysql.jdbc.Driver**” is nothing but driver file required for connecting with **MySQL** Database.

7) Insert the above class name in forms for making connection Successful.

Q. Create a login form in Netbeans and connect it with Database. Add information to the database and try to retrieve the data from database with the help of GUI.

**SOURCE CODE: Login**

import java.sql.\*;

import javax.swing.\*;

public class Login extends javax.swing.JFrame {

Connection conn=null;

PreparedStatement pst=null;

ResultSet rs=null;

/\*\*

\* Creates new form Login

\*/

public Login() {

initComponents();

} private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {

conn=MySQLConnect.JK();

String sql="select \* from Signup where Username=? and Password=?";

try{

pst=conn.prepareStatement(sql);

pst.setString(1,jTextField1.getText());

pst.setString(2,String.valueOf(jPasswordField1.getPassword()));

rs=pst.executeQuery();

if(rs.next()){

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

new Welcome().setVisible(true);

}

else{

JOptionPane.showMessageDialog(null,"Invalid username or password!!!");

}

}catch(Exception e){

JOptionPane.showMessageDialog(null, e);

}

}

private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {

jTextField1.setText("");

jPasswordField1.setText("");

jTextField1.requestFocus();

}

private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {

System.exit(0);

}

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {

new SignUp().setVisible(true);

}

public static void main(String args[]) {

/\* Set the Nimbus look and feel \*/

//<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">

/\* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.

\* For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html

\*/

try {

for (javax.swing.UIManager.LookAndFeelInfo info : javax.swing.UIManager.getInstalledLookAndFeels()) {

if ("Nimbus".equals(info.getName())) {

javax.swing.UIManager.setLookAndFeel(info.getClassName());

break;

}

}

} catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(Login.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

} catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(Login.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

} catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(Login.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

} catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(Login.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

}

//</editor-fold>

/\* Create and display the form \*/

java.awt.EventQueue.invokeLater(new Runnable() {

public void run() {

new Login().setVisible(true);

}

});

}

**SOURCE CODE: SignUp:**

import java.sql.\*;

import javax.swing.\*;

public class SignUp extends javax.swing.JFrame {

/\*\*

\* Creates new form SignUp

\*/

public SignUp() {

initComponents();

}

private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {

new Login().setVisible(true);

}

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {

jTextField1.setText("");

jTextField7.setText("");

jTextField2.setText("");

jTextField3.setText("");

jTextField4.setText("");

jTextField5.setText("");

jTextField6.setText("");

jPasswordField1.setText("");

jTextField1.requestFocus();

}

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {

Connection conn=MySQLConnect.JK();

String t1=jTextField1.getText();

String t2=jTextField2.getText();

String t3=jTextField3.getText();

String t4=jTextField4.getText();

String t5=jTextField5.getText();

String t6=jTextField6.getText();

String t7=String.valueOf(jPasswordField1.getPassword());

String t8=jTextField7.getText();

try{

String sql="insert into Signup(Name,Gender,DateOfBirth,Address,EmailId,MobileNO,Username,Password) values(?,?,?,?,?,?,?,?)";

PreparedStatement st=conn.prepareStatement(sql);

st.setString(1,t1);

st.setString(2,t8);

st.setString(3,t2);

st.setString(4,t3);

st.setString(5,t4);

st.setString(6,t5);

st.setString(7,t6);

st.setString(8,t7);

st.execute();

JOptionPane.showMessageDialog(null,"Data is successfully saved");

}catch(Exception e){}

}

public static void main(String args[]) {

/\* Set the Nimbus look and feel \*/

//<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">

/\* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.

\* For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html

\*/

try {

for (javax.swing.UIManager.LookAndFeelInfo info : javax.swing.UIManager.getInstalledLookAndFeels()) {

if ("Nimbus".equals(info.getName())) {

javax.swing.UIManager.setLookAndFeel(info.getClassName());

break;

}

}

} catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(SignUp.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

} catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(SignUp.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

} catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(SignUp.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

} catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(SignUp.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

}

//</editor-fold>

/\* Create and display the form \*/

java.awt.EventQueue.invokeLater(new Runnable() {

public void run() {

new SignUp().setVisible(true);

}

});

}

**SOURCE CODE: Welcome**

public class Welcome extends javax.swing.JFrame {

/\*\*

\* Creates new form Welcome

\*/

public Welcome() {

initComponents();

}

public static void main(String args[]) {

/\* Set the Nimbus look and feel \*/

//<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">

/\* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.

\* For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html

\*/

try {

for (javax.swing.UIManager.LookAndFeelInfo info : javax.swing.UIManager.getInstalledLookAndFeels()) {

if ("Nimbus".equals(info.getName())) {

javax.swing.UIManager.setLookAndFeel(info.getClassName());

break;

}

}

} catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(Welcome.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

} catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(Welcome.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

} catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(Welcome.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

} catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(Welcome.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

}

/\* Create and display the form \*/

java.awt.EventQueue.invokeLater(new Runnable() {

public void run() {

new Welcome().setVisible(true);

}

});

}

**Insert data into database:**

mysql> CREATE DATABASE REGISTRATION;

Query OK, 1 row affected (0.08 sec)

mysql> USE REGISTRATION;

Database changed

mysql> CREATE TABLE SIGNUP(Name VARCHAR(20),Gender CHAR,DateOfBirth VARCHAR(10),Address VARCHAR(20),EmailId VARCHAR(40),MobileNO VARCHAR(15),Username VARCHAR(10) PRIMARY KEY,Password VARCHAR(20));

Query OK, 0 rows affected (0.38 sec)

mysql> DESC SIGNUP;

+-------------+-------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-------------+-------------+------+-----+---------+-------+

| Name | varchar(20) | YES | | NULL | |

| Gender | char(1) | YES | | NULL | |

| DateOfBirth | varchar(10) | YES | | NULL | |

| Address | varchar(20) | YES | | NULL | |

| EmailId | varchar(40) | YES | | NULL | |

| MobileNO | varchar(15) | YES | | NULL | |

| Username | varchar(10) | NO | PRI | NULL | |

| Password | varchar(20) | YES | | NULL | |

+-------------+-------------+------+-----+---------+-------+

8 rows in set (0.06 sec)

mysql> select \* from signup;

+-------------+--------+-------------+-------------+---------------------+------------+------------+----------+

| Name | Gender | DateOfBirth | Address | EmailId | MobileNO | Username | Password |

+-------------+--------+-------------+-------------+---------------------+------------+------------+----------+

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+-------------+--------+-------------+-------------+---------------------+------------+------------+----------+

2 rows in set (0.00 sec)

**OUTPUT:**

 

 





