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**Subject: Modern Programming Language**

Assignment No 02

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Introduction

Basic login and registration form using Java language which take username and password from user and then authenticate it whether password or user name is correct or not otherwise it will show Error box invalid login .

Project Name

Login form

Language

Java

Task to Assign

This is our Assignment 02 of modern programming language have to create basic login or Registration form. if we put wrong information then login failed.

**CODE**

register: package Register\_Sys;

import java.awt.EventQueue;

import javax.swing.JFrame;

import javax.swing.JLabel;

import javax.swing.JOptionPane;

import javax.swing.JTextField;

import javax.swing.JPasswordField;

import javax.swing.JButton;

import javax.swing.JSeparator;

import java.awt.event.ActionListener;

import java.sql.Connection;

import java.sql.DatabaseMetaData;

import java.sql.DriverManager;

import java.sql.PreparedStatement;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.awt.event.ActionEvent;

import java.awt.Color;

import java.awt.Font;

import java.awt.Window.Type;

public class Register {

private JFrame frmRegister;

private JTextField mailField;

private JTextField nameField;

private JTextField phoneField;

private JLabel lblUsername;

private JTextField userField;

private JLabel lblPassword;

private JPasswordField passwordField;

private JButton btnSubmit;

private JButton btnCanel;

private JSeparator separator;

private JSeparator separator\_1;

private JButton btnExit;

/\*\*

\* Launch the application.

\*/

public static void main(String[] args) {

EventQueue.invokeLater(new Runnable() {

public void run() {

try {

Register window = new Register();

window.frmRegister.setVisible(true);

} catch (Exception e) {

e.printStackTrace();

}

}

});

}

/\*\*

\* Create the application.

\*/

public Register() {

initialize();

}

Connection connection=null;

public void createTableNew(){

try {

DatabaseMetaData dmd=connection.getMetaData();

ResultSet set=dmd.getTables(null, null, "USERTABLE", null);

if(set.next()){

}

else{

String creat\_table="create table USERTABLE ("

+"email varchar2(20),"

+"name varchar2(30), "

+"phone varchar2(12), "

+"user varchar2(30), "

+"pass varchar2 (20))";

PreparedStatement statement = connection.prepareStatement(creat\_table);

statement.executeUpdate();

JOptionPane.showMessageDialog(null, "Table create sucessfull");

}

}

catch (Exception e){

}

}

/\*\*

\* Initialize the contents of the frame.

\*/

private void initialize() {

try {

Class.forName("org.h2.Driver");

connection= DriverManager.getConnection("jdbc:h2:tcp://localhost/~/test","sa","");

}

catch (ClassNotFoundException | SQLException e1) {

// TODO Auto-generated catch block

e1.printStackTrace();

}

frmRegister = new JFrame();

frmRegister.setTitle("REGISTER");

frmRegister.setType(Type.POPUP);

frmRegister.getContentPane().setFont(new Font("Tahoma", Font.BOLD, 15));

frmRegister.getContentPane().setBackground(new Color(255, 128, 0));

frmRegister.setBounds(200, 200, 400, 400);

frmRegister.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

frmRegister.getContentPane().setLayout(null);

JLabel lblRegisterSystem = new JLabel("Register Form");

lblRegisterSystem.setFont(new Font("Tahoma", Font.BOLD, 20));

lblRegisterSystem.setBounds(116, 11, 176, 35);

frmRegister.getContentPane().add(lblRegisterSystem);

JLabel lblEmail = new JLabel("Email");

lblEmail.setFont(new Font("Tahoma", Font.BOLD, 15));

lblEmail.setBounds(24, 60, 46, 14);

frmRegister.getContentPane().add(lblEmail);

mailField = new JTextField();

mailField.setBounds(120, 57, 170, 20);

frmRegister.getContentPane().add(mailField);

mailField.setColumns(10);

JLabel lblName = new JLabel("Name");

lblName.setFont(new Font("Tahoma", Font.BOLD, 15));

lblName.setBounds(24, 100, 46, 14);

frmRegister.getContentPane().add(lblName);

nameField = new JTextField();

nameField.setBounds(120, 100, 170, 20);

frmRegister.getContentPane().add(nameField);

nameField.setColumns(10);

JLabel lblPhone = new JLabel("Phone");

lblPhone.setFont(new Font("Tahoma", Font.BOLD, 15));

lblPhone.setBounds(24, 140, 46, 14);

frmRegister.getContentPane().add(lblPhone);

phoneField = new JTextField();

phoneField.setBounds(120, 140, 170, 20);

frmRegister.getContentPane().add(phoneField);

phoneField.setColumns(10);

lblUsername = new JLabel("Username");

lblUsername.setFont(new Font("Tahoma", Font.BOLD, 15));

lblUsername.setBounds(24, 180, 86, 14);

frmRegister.getContentPane().add(lblUsername);

userField = new JTextField();

userField.setBounds(120, 180, 170, 20);

frmRegister.getContentPane().add(userField);

userField.setColumns(10);

lblPassword = new JLabel("Password");

lblPassword.setFont(new Font("Tahoma", Font.BOLD, 15));

lblPassword.setBounds(24, 220, 73, 14);

frmRegister.getContentPane().add(lblPassword);

passwordField = new JPasswordField();

passwordField.setBounds(120, 220, 170, 20);

frmRegister.getContentPane().add(passwordField);

btnSubmit = new JButton("Submit");

btnSubmit.setFont(new Font("Tahoma", Font.BOLD, 15));

btnSubmit.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent arg0) {

try {

String insert\_data=" insert into USERTABLE values(?,?,?,?,?)";

PreparedStatement statement= connection.prepareStatement(insert\_data);

statement.setString(1, mailField.getText());

statement.setString(2, nameField.getText());

statement.setString(3, phoneField.getText());

statement.setString(4, userField.getText());

statement.setString(5, passwordField.getText());

int data\_entered= statement.executeUpdate();

if (data\_entered>0)

{

JOptionPane.showMessageDialog(null, "Data inserted into table sucessfull");

}

else

JOptionPane.showMessageDialog(null, "Data insert false");

} catch (SQLException e) {

// TODO Auto-generated catch block

e.printStackTrace();

}

}

});

btnSubmit.setBounds(170, 286, 89, 23);

frmRegister.getContentPane().add(btnSubmit);

btnCanel = new JButton("Canel");

btnCanel.setFont(new Font("Tahoma", Font.BOLD, 15));

btnCanel.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent e) {

passwordField.setText(null);

mailField.setText(null);

nameField.setText(null);

phoneField.setText(null);

userField.setText(null);

}

});

btnCanel.setBounds(285, 286, 89, 23);

frmRegister.getContentPane().add(btnCanel);

separator = new JSeparator();

separator.setBounds(10, 47, 364, 2);

frmRegister.getContentPane().add(separator);

separator\_1 = new JSeparator();

separator\_1.setBounds(10, 273, 364, 2);

frmRegister.getContentPane().add(separator\_1);

btnExit = new JButton("Exit");

btnExit.setFont(new Font("Tahoma", Font.BOLD, 15));

btnExit.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent e) {

JFrame frmRegisterSystem = new JFrame("Exit");

if(JOptionPane.showConfirmDialog(frmRegisterSystem,"Confirm if you want to change login","Register Systems",JOptionPane.YES\_NO\_OPTION)==JOptionPane.YES\_NO\_OPTION){

frmRegister.setVisible(false);

Login info= new Login();

Login.main(null);

}

}

});

btnExit.setBounds(10, 286, 89, 23);

frmRegister.getContentPane().add(btnExit);

createTableNew();

}

}

**Login code**

import java.awt.Component;

import java.awt.EventQueue;

import javax.swing.JFrame;

import javax.swing.JLabel;

import javax.swing.JOptionPane;

import javax.swing.JTextField;

import javax.swing.JPasswordField;

import javax.swing.JButton;

import java.awt.event.ActionListener;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.PreparedStatement;

import java.awt.event.ActionEvent;

import javax.swing.JSeparator;

import java.awt.Font;

import java.awt.Color;

import java.awt.Window.Type;

import java.sql.ResultSet;

import java.sql.SQLException;

import Register\_Sys.Register;

public class Login{

protected static Component frmLoginSystem = null;

private JFrame frmLogin;

private JTextField textField;

private JPasswordField passwordField;

Connection connection=null;

/\*\*

\* Launch the application.

\*/

public static void main(String[] args) {

EventQueue.invokeLater(new Runnable() {

public void run() {

try {

Login window = new Login();

window.frmLogin.setVisible(true);

} catch (Exception e) {

e.printStackTrace();

}

}

});

}

/\*\*

\* Create the application.

\*/

public Login() {

initialize();

}

/\*\*

\* Initialize the contents of the frame.

\*/

private void initialize() {

try {

Class.forName("org.h2.Driver");

connection= DriverManager.getConnection("jdbc:h2:tcp://localhost/~/test","sa","");

}

catch (ClassNotFoundException | SQLException e1) {

// TODO Auto-generated catch block

e1.printStackTrace();

}

frmLogin = new JFrame();

frmLogin.setType(Type.POPUP);

frmLogin.setTitle("Login");

frmLogin.setBackground(Color.BLUE);

frmLogin.getContentPane().setBackground(new Color(255, 128, 0));

frmLogin.setForeground(Color.BLACK);

frmLogin.getContentPane().setForeground(Color.DARK\_GRAY);

frmLogin.getContentPane().setFont(new Font("Tahoma", Font.BOLD, 15));

frmLogin.setBounds(200, 200, 500, 300);

frmLogin.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

frmLogin.getContentPane().setLayout(null);

JLabel lblNewLabel = new JLabel("Login Form");

lblNewLabel.setBounds(167, 11, 186, 26);

lblNewLabel.setFont(new Font("Tahoma", Font.BOLD, 25));

frmLogin.getContentPane().add(lblNewLabel);

JLabel lblUsername = new JLabel("Username");

lblUsername.setBounds(66, 70, 90, 30);

lblUsername.setFont(new Font("Tahoma", Font.BOLD, 15));

frmLogin.getContentPane().add(lblUsername);

JLabel lblPassword = new JLabel("Password");

lblPassword.setBounds(66, 135, 75, 30);

lblPassword.setFont(new Font("Tahoma", Font.BOLD, 15));

frmLogin.getContentPane().add(lblPassword);

textField = new JTextField();

textField.setBounds(151, 83, 161, 30);

textField.setFont(new Font("Tahoma", Font.BOLD, 15));

frmLogin.getContentPane().add(textField);

textField.setColumns(10);

passwordField = new JPasswordField();

passwordField.setBounds(151, 136, 161, 30);

passwordField.setFont(new Font("Tahoma", Font.BOLD, 15));

frmLogin.getContentPane().add(passwordField);

JButton btnLogin = new JButton("Login");

btnLogin.setForeground(Color.BLUE);

btnLogin.setBackground(Color.LIGHT\_GRAY);

btnLogin.setBounds(10, 210, 89, 23);

btnLogin.setFont(new Font("Tahoma", Font.BOLD, 15));

btnLogin.addActionListener(new ActionListener() {

@SuppressWarnings("deprecation")

public void actionPerformed(ActionEvent arg0) {

try{

String validate= "SELECT \* FROM USERTABLE WHERE USER=? AND PASS=? ";

PreparedStatement statement = connection.prepareStatement(validate);

statement.setString(1, textField.getText());

statement.setString(2, passwordField.getText());

ResultSet set = statement.executeQuery();

if(set.next()){

frmLogin.setVisible(false);

FrameScreen info= new FrameScreen();

FrameScreen.main(null);

}

else{

JOptionPane.showMessageDialog(null, "Invalid Login Details","Login System Error",JOptionPane.ERROR\_MESSAGE);

passwordField.setText(null);

textField.setText(null);

}

}

catch (SQLException e) {

e.printStackTrace();

}

}

});

frmLogin.getContentPane().add(btnLogin);

JButton btnExit = new JButton("Exit");

btnExit.setForeground(Color.BLUE);

btnExit.setBackground(Color.LIGHT\_GRAY);

btnExit.setBounds(385, 210, 89, 23);

btnExit.setFont(new Font("Tahoma", Font.BOLD, 15));

btnExit.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent e) {

frmLoginSystem= new JFrame("Exit");

if(JOptionPane.showConfirmDialog(frmLoginSystem,"Confirm if you want to exit","Login Systems",JOptionPane.YES\_NO\_OPTION)==JOptionPane.YES\_NO\_OPTION){

System.exit(1);

}

}

});

frmLogin.getContentPane().add(btnExit);

JSeparator separator = new JSeparator();

separator.setBounds(10, 188, 464, 2);

frmLogin.getContentPane().add(separator);

JSeparator separator\_1 = new JSeparator();

separator\_1.setBounds(10, 35, 464, 2);

frmLogin.getContentPane().add(separator\_1);

JButton btnRegister = new JButton("Register");

btnRegister.setBackground(Color.LIGHT\_GRAY);

btnRegister.setForeground(Color.BLUE);

btnRegister.setFont(new Font("Tahoma", Font.BOLD, 15));

btnRegister.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent e) {

Register info = new Register();

Register.main(null);

frmLogin.setVisible(false);

}

});

btnRegister.setBounds(193, 210, 97, 23);

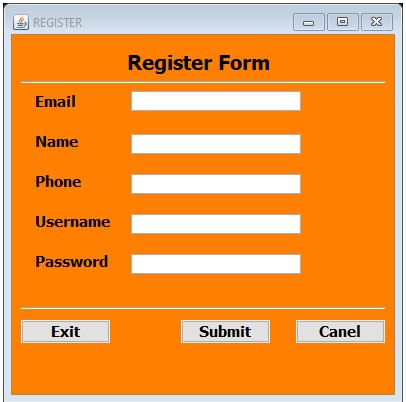
frmLogin.getContentPane().add(btnRegister);

}

}

**Output**

**Register form**



Login Form



**Github link:**

**END**