

JAVA PROJECT:

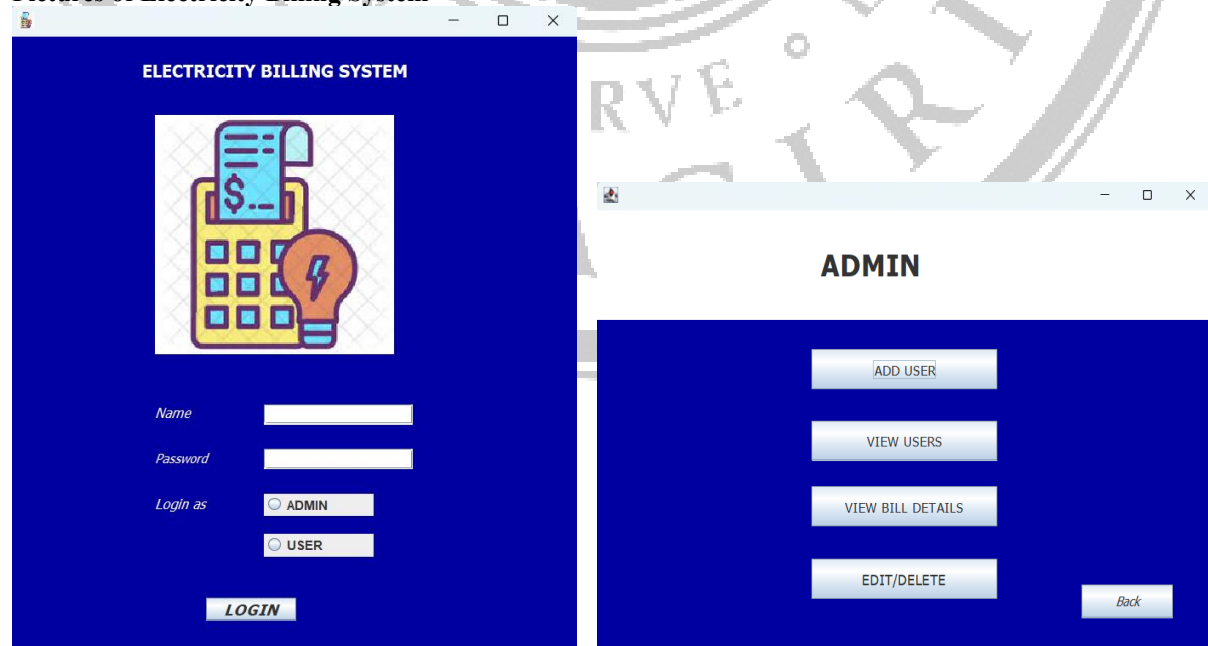
ELECTRICITY BILLING SYSTEM

The "Electricity Billing System" project in Java is a comprehensive software application facilitating efficient management of electricity billing processes for both users and administrators. Users access a secure dashboard to view and pay their bills online, while administrators have enhanced privileges to add, edit, delete, and view user accounts and billing details. Through the user dashboard, users can conveniently access their billing information, make payments using various methods, and monitor their consumption patterns. Admins, on the other hand, can perform administrative tasks such as user management, generate reports, and ensure system security.

Tables Used:

1.Admin:	
Column	Type
Name	varchar2(20) primary key
password	varchar2(20)
2.userdetails :	
Column	Type
userid	varchar2(20) primary key
username	varchar2(20)
city	varchar2(20)
phone	varchar2(20)
password	varchar2(20)
2.bill :	
Column	Type
meterid	varchar2(20) primary key
userid	varchar2(20) references userdetails
month	varchar2(20)
unit	varchar2(20)
totalamount	varchar(20)

Pictures of Electricity Billing System



User Details

Userid

Name

City

Phone

password

Add

Back

User Details

Show

Back

USERID	USERNAME	CITY	PHONE	PASSWORD
u004	Aadhi	Kannur	1234567890	ad@12
u008	Riya	Tvm	7654310909	ri@12
u003	Hima	Vadakara	8974230911	hi03
u011	Aaa	kochi	79787	aa12
u001	Aravind	Kochi	9098754367	ar01
u002	Ravi	kochi	9098334369	ra02

Bill Details

Show

Back

METERID	USERID	MONTH	UNIT	TOTALAMOUNT
1234	u003	feb	1900	5600
7654	u008	feb	2200	6500
7623	u003	feb	1100	8400
6543	u008	mar	3277	9731
2345	u06	feb	430	3040
1238	u02	mar	1400	10800

User ID

u004

Username

Aadhi

city

Kannur

SHOW

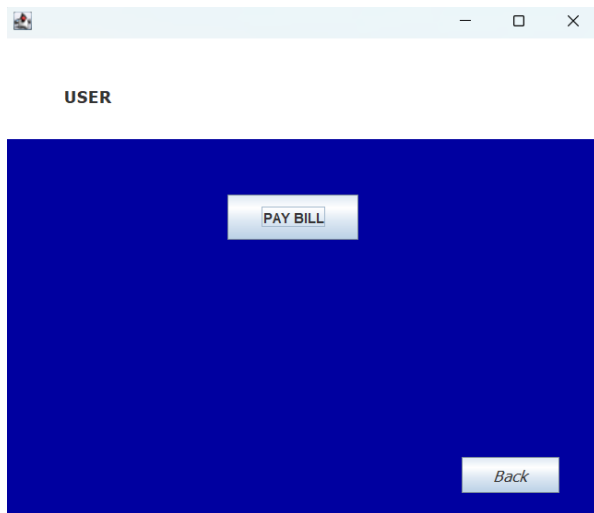
DELETE

EDIT

Back

USER DETAILS

User ID	Username	City
u004	Aadhi	Kannur
u008	Riya	Tvm
u003	Hima	Vadakara
u011	Aaa	kochi
u001	Aravind	Kochi
u002	Ravi	kochi



Source Code:

Login Page

```
package user;

import javax.swing.*;
import java.awt.EventQueue;
import java.awt.Color;
import java.awt.Toolkit;
import java.awt.Font;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;
import java.sql.*;

public class login {

    private JFrame frame;
    private JTextField textField;
    private JTextField textField_1;
    private JRadioButton rdbtnNewRadioButton;
    private JRadioButton rdbtnNewRadioButton_1;

    // Connection parameters
    private static final String JDBC_URL = "jdbc:oracle:thin:@localhost:1521:ORCL"; // Change the
    URL accordingly
    private static final String USERNAME = "hr";
    private static final String PASSWORD = "1234rh#";

    public static void main(String[] args) {
        EventQueue.invokeLater(new Runnable() {
            public void run() {
                try {
                    login window = new login();
                    window.frame.setVisible(true);
                } catch (Exception e) {
                    e.printStackTrace();
                }
            }
        });
    }
}
```

```

        } catch (Exception e) {
            e.printStackTrace();
        }
    }
});
}

public login() {
    initialize();
}

public boolean validateLogin() {
    String username = textField.getText();
    String password = textField_1.getText();
    if (username.isEmpty()) {
        JOptionPane.showMessageDialog(frame, "Please enter username");
        return false;
    }

    if (password.isEmpty()) {
        JOptionPane.showMessageDialog(frame, "Please enter password");
        return false;
    }
    try {
        Class.forName("oracle.jdbc.driver.OracleDriver");
        Connection con = DriverManager.getConnection(JDBC_URL, USERNAME, PASSWORD);
        PreparedStatement pst;

        if (rdbtnNewRadioButton_1.isSelected()) {
            pst = con.prepareStatement("select * from userdetails where username=? and password=?");
            pst.setString(1, username);
            pst.setString(2, password);
            ResultSet rs = pst.executeQuery();
            if (rs.next()) {
                JOptionPane.showMessageDialog(frame, "Login successful");
                userdashboard db = new userdashboard();
                db.setVisible(true);
                frame.dispose(); // Close current login frame
                rs.close();
                pst.close();
            } else {
                JOptionPane.showMessageDialog(frame, "Invalid username or password");
            }
        } else if (rdbtnNewRadioButton.isSelected()) {
            String str = "select * from admin where name='" + username + "' and password='" +
password + "'";
            Statement st = con.createStatement();
            ResultSet rs = st.executeQuery(str);
            if (rs.next()) {
                JOptionPane.showMessageDialog(frame, "Login successful");
                Admindashboard db = new Admindashboard();
                db.setVisible(true);
                frame.dispose(); // Close current login frame
                rs.close();
            } else {

```

```

        JOptionPane.showMessageDialog(frame, "Invalid username or password");
    }
}

con.close();

} catch (Exception ex) {
    System.out.println(ex);
}
return true;
}

private void initialize() {
    frame = new JFrame();

frame.setIconImage(Toolkit.getDefaultToolkit().getImage("C:\\Users\\athul\\Downloads\\electricity.jpg"));
    frame.getContentPane().setBackground(new Color(0, 0, 160));
    frame.setBounds(100, 100, 549, 618);
    frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    frame.getContentPane().setLayout(null);

    JLabel lblNewLabel = new JLabel("");
    lblNewLabel.setIcon(new ImageIcon("C:\\Users\\athul\\Downloads\\electricity.jpeg"));
    lblNewLabel.setBounds(136, 70, 225, 232);
    frame.getContentPane().add(lblNewLabel);

    JLabel lblNewLabel_1 = new JLabel("Name");
    lblNewLabel_1.setForeground(new Color(255, 255, 255));
    lblNewLabel_1.setFont(new Font("Tahoma", Font.ITALIC, 13));
    lblNewLabel_1.setBounds(136, 348, 45, 13);
    frame.getContentPane().add(lblNewLabel_1);

    JLabel lblNewLabel_2 = new JLabel("Password");
    lblNewLabel_2.setForeground(new Color(255, 255, 255));
    lblNewLabel_2.setFont(new Font("Tahoma", Font.ITALIC, 12));
    lblNewLabel_2.setBounds(136, 390, 65, 13);
    frame.getContentPane().add(lblNewLabel_2);

    textField = new JTextField();
    textField.setBounds(239, 346, 140, 19);
    frame.getContentPane().add(textField);
    textField.setColumns(10);

    textField_1 = new JTextField();
    textField_1.setBounds(239, 388, 140, 19);
    frame.getContentPane().add(textField_1);
    textField_1.setColumns(10);

    JLabel lblNewLabel_3 = new JLabel("ELECTRICITY BILLING SYSTEM");
    lblNewLabel_3.setForeground(new Color(255, 255, 255));
    lblNewLabel_3.setFont(new Font("Tahoma", Font.BOLD, 16));
    lblNewLabel_3.setBounds(124, 27, 269, 13);
    frame.getContentPane().add(lblNewLabel_3);

```

```

JButton btnNewButton = new JButton("LOGIN");
btnNewButton.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        validateLogin();
    }
});
btnNewButton.setFont(new Font("Tahoma", Font.BOLD | Font.ITALIC, 15));
btnNewButton.setBounds(184, 528, 85, 21);
frame.getContentPane().add(btnNewButton);

JLabel lblNewLabel_4 = new JLabel("Login as");
lblNewLabel_4.setFont(new Font("Tahoma", Font.ITALIC, 13));
lblNewLabel_4.setForeground(new Color(255, 255, 255));
lblNewLabel_4.setBounds(136, 430, 65, 19);
frame.getContentPane().add(lblNewLabel_4);

JRadioButton rdbtnNewRadioButton = new JRadioButton("ADMIN");
rdbtnNewRadioButton.setBounds(239, 430, 103, 21);
frame.getContentPane().add(rdbtnNewRadioButton);

JRadioButton rdbtnNewRadioButton_1 = new JRadioButton("USER");
rdbtnNewRadioButton_1.setBounds(239, 468, 103, 21);
frame.getContentPane().add(rdbtnNewRadioButton_1);

// Button Group
ButtonGroup bg = new ButtonGroup();
bg.add(rdbtnNewRadioButton);
bg.add(rdbtnNewRadioButton_1);

// Action listeners for radio buttons
rdbtnNewRadioButton.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        if (rdbtnNewRadioButton.isSelected()) {
            rdbtnNewRadioButton_1.setSelected(false);
        }
    }
});

rdbtnNewRadioButton_1.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        if (rdbtnNewRadioButton_1.isSelected()) {
            rdbtnNewRadioButton.setSelected(false);
        }
    }
});

public void setVisible(boolean b) {
    frame.setVisible(b);
    // TODO Auto-generated method stub

}
}

```

Admin Dashboard

```
package user;
```

```
import java.awt.EventQueue;
import javax.swing.JFrame;
import javax.swing.JPanel;
import java.awt.Color;
import javax.swing.JLabel;
import java.awt.Font;
import javax.swing.JButton;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;
```

```
public class Admindashboard {
```

```
    private JFrame frame;
```

```
    /**
```

```
     * Launch the application.
```

```
     */
```

```
    public static void main(String[] args) {
```

```
        EventQueue.invokeLater(new Runnable() {
```

```
            public void run() {
```

```
                try {
```

```
                    Admindashboard window = new Admindashboard();
```

```
                    window.frame.setVisible(true);
```

```
                } catch (Exception e) {
```

```
                    e.printStackTrace();
```

```
                }
```

```
            }
```

```
        });
```

```
    }
```

```
    /**
```

```
     * Create the application.
```

```
     */
```

```
    public Admindashboard() {
```

```
        initialize();
```

```
    }
```

```
    /**
```

```
     * Initialize the contents of the frame.
```

```
     */
```

```
    private void initialize() {
```

```
        frame = new JFrame();
```

```
        frame.setBounds(100, 100, 687, 477);
```

```
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
```

```
        frame.getContentPane().setLayout(null);
```

```
        JPanel panel = new JPanel();
```

```
        panel.setBackground(new Color(0, 0, 160));
```

```
        panel.setBounds(0, 0, 705, 657);
```

```
        frame.getContentPane().add(panel);
```

```
        panel.setLayout(null);
```

```

JPanel panel_1 = new JPanel();
panel_1.setBounds(-29, 0, 705, 109);
panel_1.setBackground(new Color(255, 255, 255));
panel.add(panel_1);
panel_1.setLayout(null);

JLabel lblNewLabel = new JLabel("ADMIN");
lblNewLabel.setFont(new Font("Tahoma", Font.BOLD, 30));
lblNewLabel.setBounds(36, 10, 541, 89);
panel_1.add(lblNewLabel);

JButton btnNewButton = new JButton("ADD USER");
btnNewButton.setFont(new Font("Tahoma", Font.PLAIN, 14));
btnNewButton.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        adduser add=new adduser();
        add.main(null);
        frame.dispose();
    }
});
btnNewButton.setBounds(235, 138, 203, 40);
panel.add(btnNewButton);

JButton btnNewButton_1 = new JButton("VIEW BILL DETAILS");
btnNewButton_1.setFont(new Font("Tahoma", Font.PLAIN, 14));
btnNewButton_1.setBounds(235, 274, 203, 40);
panel.add(btnNewButton_1);
// Add action listener to the button
btnNewButton_1.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        // Create an instance of viewbill and display it
        viewbill viewBillWindow = new viewbill();
        viewBillWindow.setVisible(true);
    }
});

JButton btnNewButton_2 = new JButton("VIEW USERS");
btnNewButton_2.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        userdetails ud=new userdetails();
        ud.setVisible(true);
    }
});
btnNewButton_2.setFont(new Font("Tahoma", Font.PLAIN, 14));
btnNewButton_2.setBounds(235, 209, 203, 40);
panel.add(btnNewButton_2);

JButton btnNewButton_3 = new JButton("Back");
btnNewButton_3.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        // Close the current window
        frame.dispose();
        // Open the login page
        login loginPage = new login();
        loginPage.setVisible(true);
    }
});

```



```

    }
});
btnNewButton_3.setFont(new Font("Tahoma", Font.ITALIC, 13));
btnNewButton_3.setBounds(530, 372, 100, 33);
panel.add(btnNewButton_3);

JButton btnNewButton_4 = new JButton("EDIT/DELETE");
btnNewButton_4.setFont(new Font("Tahoma", Font.PLAIN, 15));
btnNewButton_4.setBounds(235, 346, 203, 40);
panel.add(btnNewButton_4);

// Add action listener to the "EDIT/DELETE" button
btnNewButton_4.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        // Create an instance of adminedits and display it
        adminedits editsWindow = new adminedits();
        editsWindow.setVisible(true);
        // Close the current window
        frame.dispose();
    }
});
}

public void setVisible(boolean b) {
    frame.setVisible(b);
    // TODO Auto-generated method stub
}
}

```

Add User

```

package user;

import java.awt.EventQueue;

import javax.swing.JFrame;
import java.awt.Color;
import javax.swing.JLabel;
import javax.swing.JOptionPane;

import java.awt.Font;
import javax.swing.JButton;
import javax.swing.JTextField;
import java.awt.event.ActionListener;
import java.sql.Statement;
import java.sql.Connection;
import java.sql.DriverManager;
import java.awt.event.ActionEvent;

public class adduser {

    private JFrame frame;
    private JTextField t1;
    private JTextField t2;
    private JTextField t3;

```

```

private JTextField t4;
private JTextField t5;

public static void main(String[] args) {
    EventQueue.invokeLater(new Runnable() {
        public void run() {
            try {
                adduser window = new adduser();
                window.frame.setVisible(true);
            } catch (Exception e) {
                e.printStackTrace();
            }
        }
    });
}

public adduser() {
    initialize();
}

private void initialize() {
    frame = new JFrame();
    frame.getContentPane().setBackground(new Color(0, 0, 160));
    frame.setBackground(new Color(255, 255, 255));
    frame.setBounds(100, 100, 598, 676);
    frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    frame.getContentPane().setLayout(null);

    JLabel lblNewLabel = new JLabel("User Details");
    lblNewLabel.setForeground(new Color(255, 255, 255));
    lblNewLabel.setFont(new Font("Tahoma", Font.BOLD, 16));
    lblNewLabel.setBounds(192, 26, 108, 26);
    frame.getContentPane().add(lblNewLabel);

    JLabel l1 = new JLabel("Userid");
    l1.setForeground(new Color(255, 255, 255));
    l1.setFont(new Font("Tahoma", Font.BOLD, 13));
    l1.setBounds(83, 93, 60, 26);
    frame.getContentPane().add(l1);

    JLabel l2 = new JLabel("Name");
    l2.setForeground(new Color(255, 255, 255));
    l2.setFont(new Font("Tahoma", Font.BOLD, 13));
    l2.setBounds(86, 160, 45, 13);
    frame.getContentPane().add(l2);

    JLabel l3 = new JLabel("City");
    l3.setFont(new Font("Tahoma", Font.BOLD, 13));
    l3.setForeground(new Color(255, 255, 255));
    l3.setBounds(98, 209, 45, 13);
    frame.getContentPane().add(l3);

    JLabel l4 = new JLabel("Phone");
    l4.setForeground(new Color(255, 255, 255));
    l4.setFont(new Font("Tahoma", Font.BOLD, 13));

```

```

14.setBounds(83, 270, 45, 13);
frame.getContentPane().add(14);

JButton b = new JButton("Add");
b.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        try {

            Class.forName("oracle.jdbc.driver.OracleDriver");
            Connection con =
DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:ORCL", "hr", "1234rh#");
            Statement stmt = con.createStatement();

            String userid = t1.getText();
            String name = t2.getText();
            String city = t3.getText();
            String phone = t4.getText();
            String password = t5.getText(); // Retrieve password from the JTextField

            String insqr = "insert into userdetails values('" + userid + "','" + name + "','" + city + "','"
+ phone + "','" + password + "')";
            stmt.execute(insqr);

            JOptionPane.showMessageDialog(null, "Records added");
            t1.setText("");
            t2.setText("");
            t3.setText("");
            t4.setText("");
            t5.setText(""); // Clear the password field after adding the record
            con.close();
        } catch (Exception e1) {
            System.out.println(e1);
        }
    }
});
b.setFont(new Font("Tw Cen MT", Font.BOLD | Font.ITALIC, 17));
b.setBounds(192, 406, 97, 32);
frame.getContentPane().add(b);

t1 = new JTextField();
t1.setBounds(174, 98, 156, 32);
frame.getContentPane().add(t1);
t1.setColumns(10);

t2 = new JTextField();
t2.setBounds(174, 151, 156, 32);
frame.getContentPane().add(t2);
t2.setColumns(10);

t3 = new JTextField();
t3.setBounds(174, 207, 156, 32);
frame.getContentPane().add(t3);
t3.setColumns(10);

```

```

t4 = new JTextField();
t4.setBounds(174, 262, 156, 32);
frame.getContentPane().add(t4);
t4.setColumns(10);

JLabel l5 = new JLabel("password");
l5.setForeground(new Color(255, 255, 255));
l5.setFont(new Font("Tahoma", Font.BOLD, 13));
l5.setBounds(68, 325, 75, 13);
frame.getContentPane().add(l5);

t5 = new JTextField();
t5.setBounds(174, 316, 156, 32);
frame.getContentPane().add(t5);
t5.setColumns(10);

JButton btnNewButton = new JButton("Back");
btnNewButton.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        // Close the current window
        frame.dispose();
        // Open the Admindashboard window
        Admindashboard adminDashboard = new Admindashboard();
        adminDashboard.setVisible(true);
    }
});
btnNewButton.setFont(new Font("Tahoma", Font.ITALIC, 13));
btnNewButton.setBounds(394, 494, 85, 21);
frame.getContentPane().add(btnNewButton);
}
}

```

Delete/Edit User

```

package user;

import java.awt.EventQueue;

import javax.swing.JFrame;
import java.awt.Color;
import javax.swing.JLabel;
import javax.swing.JOptionPane;

import java.awt.Font;
import javax.swing.JButton;
import javax.swing.JTextField;
import java.awt.event.ActionListener;
import java.sql.Statement;
import java.sql.Connection;
import java.sql.DriverManager;
import java.awt.event.ActionEvent;

public class adduser {

```

```

private JFrame frame;
private JTextField t1;
private JTextField t2;
private JTextField t3;
private JTextField t4;
private JTextField t5;

public static void main(String[] args) {
    EventQueue.invokeLater(new Runnable() {
        public void run() {
            try {
                adduser window = new adduser();
                window.frame.setVisible(true);
            } catch (Exception e) {
                e.printStackTrace();
            }
        }
    });
}

public adduser() {
    initialize();
}

private void initialize() {
    frame = new JFrame();
    frame.getContentPane().setBackground(new Color(0, 0, 160));
    frame.setBackground(new Color(255, 255, 255));
    frame.setBounds(100, 100, 598, 676);
    frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    frame.getContentPane().setLayout(null);

    JLabel lblNewLabel = new JLabel("User Details");
    lblNewLabel.setForeground(new Color(255, 255, 255));
    lblNewLabel.setFont(new Font("Tahoma", Font.BOLD, 16));
    lblNewLabel.setBounds(192, 26, 108, 26);
    frame.getContentPane().add(lblNewLabel);

    JLabel l1 = new JLabel("Userid");
    l1.setForeground(new Color(255, 255, 255));
    l1.setFont(new Font("Tahoma", Font.BOLD, 13));
    l1.setBounds(83, 93, 60, 26);
    frame.getContentPane().add(l1);

    JLabel l2 = new JLabel("Name");
    l2.setForeground(new Color(255, 255, 255));
    l2.setFont(new Font("Tahoma", Font.BOLD, 13));
    l2.setBounds(86, 160, 45, 13);
    frame.getContentPane().add(l2);

    JLabel l3 = new JLabel("City");
    l3.setFont(new Font("Tahoma", Font.BOLD, 13));
    l3.setForeground(new Color(255, 255, 255));
    l3.setBounds(98, 209, 45, 13);
    frame.getContentPane().add(l3);
}

```

```

JLabel l4 = new JLabel("Phone");
l4.setForeground(new Color(255, 255, 255));
l4.setFont(new Font("Tahoma", Font.BOLD, 13));
l4.setBounds(83, 270, 45, 13);
frame.getContentPane().add(l4);

JButton b = new JButton("Add");
b.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        try {

            Class.forName("oracle.jdbc.driver.OracleDriver");
            Connection con =
DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:ORCL", "hr", "1234rh#");
            Statement stmt = con.createStatement();

            String userid = t1.getText();
            String name = t2.getText();
            String city = t3.getText();
            String phone = t4.getText();
            String password = t5.getText(); // Retrieve password from the JTextField

            String insqr = "insert into userdetails values('" + userid + "','" + name + "','" + city + "','"
+ phone + "','" + password + "')";
            stmt.execute(insqr);

            JOptionPane.showMessageDialog(null, "Records added");
            t1.setText("");
            t2.setText("");
            t3.setText("");
            t4.setText("");
            t5.setText(""); // Clear the password field after adding the record
            con.close();
        } catch (Exception e1) {
            System.out.println(e1);
        }
    }
});
b.setFont(new Font("Tw Cen MT", Font.BOLD | Font.ITALIC, 17));
b.setBounds(192, 406, 97, 32);
frame.getContentPane().add(b);

t1 = new JTextField();
t1.setBounds(174, 98, 156, 32);
frame.getContentPane().add(t1);
t1.setColumns(10);

t2 = new JTextField();
t2.setBounds(174, 151, 156, 32);
frame.getContentPane().add(t2);
t2.setColumns(10);

```

```

t3 = new JTextField();
t3.setBounds(174, 207, 156, 32);
frame.getContentPane().add(t3);
t3.setColumns(10);

t4 = new JTextField();
t4.setBounds(174, 262, 156, 32);
frame.getContentPane().add(t4);
t4.setColumns(10);

JLabel l5 = new JLabel("password");
l5.setForeground(new Color(255, 255, 255));
l5.setFont(new Font("Tahoma", Font.BOLD, 13));
l5.setBounds(68, 325, 75, 13);
frame.getContentPane().add(l5);

t5 = new JTextField();
t5.setBounds(174, 316, 156, 32);
frame.getContentPane().add(t5);
t5.setColumns(10);

JButton btnNewButton = new JButton("Back");
btnNewButton.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        // Close the current window
        frame.dispose();
        // Open the Admindashboard window
        Admindashboard adminDashboard = new Admindashboard();
        adminDashboard.setVisible(true);
    }
});
btnNewButton.setFont(new Font("Tahoma", Font.ITALIC, 13));
btnNewButton.setBounds(394, 494, 85, 21);
frame.getContentPane().add(btnNewButton);
}
}

```

Userdetails

```

package user;

import javax.swing.*;

import net.proteanit.sql.DbUtils;

import java.awt.EventQueue;
import java.awt.Color;
import java.awt.Font;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;
import java.sql.*;

public class userdetails {
    private JFrame frame;
    private JTable table;

```

```

// Connection parameters
private static final String JDBC_URL = "jdbc:oracle:thin:@localhost:1521:ORCL"; // Change the
URL accordingly
private static final String USERNAME = "hr";
private static final String PASSWORD = "1234rh#";

public static void main(String[] args) {
    EventQueue.invokeLater(new Runnable() {
        public void run() {
            try {
                userdetails window = new userdetails();
                window.frame.setVisible(true);
            } catch (Exception e) {
                e.printStackTrace();
            }
        }
    });
}

public userdetails() {
    initialize();
}

private void initialize() {
    frame = new JFrame();
    frame.getContentPane().setBackground(new Color(0, 0, 160));
    frame.setBounds(100, 100, 561, 441);
    frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    frame.getContentPane().setLayout(null);

    JPanel panel = new JPanel();
    panel.setBounds(32, 10, 467, 50);
    frame.getContentPane().add(panel);

    JLabel lblNewLabel = new JLabel("User Details");
    lblNewLabel.setFont(new Font("Tahoma", Font.BOLD, 13));
    panel.add(lblNewLabel);

    JButton btnShow = new JButton("Show");
    btnShow.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e) {
            showUserDetails();
        }
    });
    btnShow.setBounds(220, 70, 89, 23);
    frame.getContentPane().add(btnShow);

    JScrollPane scrollPane = new JScrollPane();
    scrollPane.setBounds(32, 120, 467, 250);
    frame.getContentPane().add(scrollPane);

    table = new JTable();
    scrollPane.setViewportView(table);
}

```



```

JButton btnNewButton = new JButton("Back");
btnNewButton.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        Admindashboard ad=new Admindashboard();
        ad.setVisible(true);
    }
});
btnNewButton.setBounds(348, 70, 85, 23);
frame.getContentPane().add(btnNewButton);
}

private void showUserDetails() {
    try {
        Class.forName("oracle.jdbc.driver.OracleDriver");
        Connection con = DriverManager.getConnection(JDBC_URL, USERNAME, PASSWORD);
        Statement stmt = con.createStatement();
        ResultSet rs = stmt.executeQuery("SELECT * FROM userdetails");

        // Set table model
        table.setModel(DbUtils.resultSetToTableModel(rs));

        // Close resources
        rs.close();
        stmt.close();
        con.close();
    } catch (Exception e) {
        JOptionPane.showMessageDialog(frame, "Failed to fetch user details: " + e.getMessage(),
"Error", JOptionPane.ERROR_MESSAGE);
    }
}

public void setVisible(boolean b) {
    frame.setVisible(b);
    // TODO Auto-generated method stub
}

public void setVisible(boolean b) {
    frame.setVisible(b);
    // TODO Auto-generated method stub
}
}
}

```

Viewbill

```
package user;
```

```

import java.awt.EventQueue;
import javax.swing.JFrame;
import java.awt.Color;
import javax.swing.JPanel;
import javax.swing.JLabel;
import java.awt.Font;
import javax.swing.JButton;
import javax.swing.JTable;

```

```

import javax.swing.JScrollPane;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.sql.*;
import net.proteanit.sql.DbUtils;

public class viewbill {

    private JFrame frame;
    private JTable table;

    // Connection parameters
    private static final String JDBC_URL = "jdbc:oracle:thin:@localhost:1521:ORCL"; // Change the
    URL accordingly
    private static final String USERNAME = "hr";
    private static final String PASSWORD = "1234rh#";

    /**
     * Launch the application.
     */
    public static void main(String[] args) {
        EventQueue.invokeLater(new Runnable() {
            public void run() {
                try {
                    viewbill window = new viewbill();
                    window.frame.setVisible(true);
                } catch (Exception e) {
                    e.printStackTrace();
                }
            }
        });
    }

    /**
     * Create the application.
     */
    public viewbill() {
        initialize();
    }

    /**
     * Initialize the contents of the frame.
     */
    private void initialize() {
        frame = new JFrame();
        frame.getContentPane().setBackground(new Color(0, 0, 160));
        frame.setBounds(100, 100, 544, 416);
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        frame.getContentPane().setLayout(null);

        JPanel panel = new JPanel();
        panel.setBounds(10, 10, 510, 59);
        frame.getContentPane().add(panel);

        JLabel lblNewLabel = new JLabel("Bill Details");
    }
}

```

```

lblNewLabel.setFont(new Font("Tahoma", Font.BOLD, 15));
panel.add(lblNewLabel);

JButton btnNewButton = new JButton("Show");
btnNewButton.setFont(new Font("Tahoma", Font.ITALIC, 13));
btnNewButton.setBounds(223, 79, 85, 21);
frame.getContentPane().add(btnNewButton);

JScrollPane scrollPane = new JScrollPane();
scrollPane.setBounds(10, 111, 510, 256);
frame.getContentPane().add(scrollPane);

table = new JTable();
scrollPane.setViewportView(table);

JButton btnNewButton_1 = new JButton("Back");
btnNewButton_1.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        Admindashboard ad=new Admindashboard();
        ad.setVisible(true);
    }
});
btnNewButton_1.setFont(new Font("Tahoma", Font.ITALIC, 11));
btnNewButton_1.setBounds(320, 79, 85, 21);
frame.getContentPane().add(btnNewButton_1);

btnNewButton.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        showBillDetails();
    }
});
}

private void showBillDetails() {
    try {
        Class.forName("oracle.jdbc.driver.OracleDriver");
        Connection con = DriverManager.getConnection(JDBC_URL, USERNAME, PASSWORD);
        Statement stmt = con.createStatement();
        ResultSet rs = stmt.executeQuery("SELECT * FROM bill");

        // Displaying data in JTable
        table.setModel(DbUtils.resultSetToTableModel(rs));

        // Closing database connection
        con.close();
    } catch (Exception ex) {
        ex.printStackTrace();
    }
}

public void setVisible(boolean b) {
    frame.setVisible(b);
    // TODO Auto-generated method stub
}
}

```

Userdashboard

```
package user;
```

```
import java.awt.EventQueue;  
import javax.swing.JFrame;  
import javax.swing.JPanel;  
import java.awt.Color;  
import javax.swing.JLabel;  
import java.awt.Font;  
import javax.swing.JButton;  
import java.awt.event.ActionListener;  
import java.awt.event.ActionEvent;
```

```
public class userdashboard {
```

```
    private JFrame frame;
```

```
    /**
```

```
     * Launch the application.
```

```
    */
```

```
    public static void main(String[] args) {
```

```
        EventQueue.invokeLater(new Runnable() {
```

```
            public void run() {
```

```
                try {
```

```
                    userdashboard window = new userdashboard();
```

```
                    window.frame.setVisible(true);
```

```
                } catch (Exception e) {
```

```
                    e.printStackTrace();
```

```
                }
```

```
            }
```

```
        });
```

```
    }
```

```
    /**
```

```
     * Create the application.
```

```
    */
```

```
    public userdashboard() {
```

```
        initialize();
```

```
    }
```

```
    /**
```

```
     * Initialize the contents of the frame.
```

```
    */
```

```
    private void initialize() {
```

```
        frame = new JFrame();
```

```
        frame.setBounds(100, 100, 531, 454);
```

```
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
```

```
        frame.getContentPane().setLayout(null);
```

```
        JPanel panel = new JPanel();
```

```
        panel.setBackground(new Color(0, 0, 160));
```

```
        panel.setBounds(0, 0, 517, 417);
```

```
        frame.getContentPane().add(panel);
```

```
        panel.setLayout(null);
```

```

JPanel panel_1 = new JPanel();
panel_1.setBackground(new Color(255, 255, 255));
panel_1.setBounds(0, 0, 517, 88);
panel.add(panel_1);
panel_1.setLayout(null);

JLabel lblNewLabel = new JLabel("USER");
lblNewLabel.setFont(new Font("Tahoma", Font.BOLD, 15));
lblNewLabel.setBounds(51, 23, 360, 55);
panel_1.add(lblNewLabel);

JButton btnNewButton_1 = new JButton("PAY BILL");
btnNewButton_1.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        Bill b = new Bill();
        b.setVisible(true);
    }
});
btnNewButton_1.setBounds(193, 136, 114, 39);
panel.add(btnNewButton_1);

JButton btnNewButton = new JButton("Back");
btnNewButton.setFont(new Font("Tahoma", Font.ITALIC, 14));
btnNewButton.setBounds(396, 363, 85, 31);
panel.add(btnNewButton);
// Add action listener to the button
btnNewButton.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        // Close the current window
        frame.dispose();
        // Open the login page
        login loginPage = new login();
        loginPage.setVisible(true);
    }
});
}

public void setVisible(boolean b) {
    frame.setVisible(b);
    // TODO Auto-generated method stub
}
}

```

Paybill

package user;

```

import javax.swing.*;
import java.awt.EventQueue;
import java.awt.Color;
import java.awt.Font;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;
import java.sql.*;

```

```

public class Bill {

```

```

private JFrame frame;
private JTextField textFieldMeterId;
private JTextField textFieldUserId;
private JTextField textFieldMonth;
private JTextField textFieldCurrentReading;
private JTextField textFieldPreviousReading;
private JTextField textFieldUnits;
private JTextField textFieldTotalAmount;
private int units;
private int amount;
private JRadioButton rdbtnStandard;
private JRadioButton rdbtnCommercial;

// Connection parameters
private static final String JDBC_URL = "jdbc:oracle:thin:@localhost:1521:ORCL"; // Change the
URL accordingly
private static final String USERNAME = "hr";
private static final String PASSWORD = "1234rh#";

public static void main(String[] args) {
    EventQueue.invokeLater(new Runnable() {
        public void run() {
            try {
                Bill window = new Bill();
                window.frame.setVisible(true);
            } catch (Exception e) {
                e.printStackTrace();
            }
        }
    });
}

public Bill() {
    initialize();
}

private void initialize() {
    frame = new JFrame();
    frame.getContentPane().setFont(new Font("Tahoma", Font.PLAIN, 11));
    frame.getContentPane().setBackground(new Color(0, 0, 160));
    frame.setBounds(100, 100, 604, 680);
    frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    frame.getContentPane().setLayout(null);

    JLabel lblMeterId = new JLabel("Meter ID");
    lblMeterId.setFont(new Font("Tahoma", Font.BOLD, 14));
    lblMeterId.setForeground(new Color(255, 255, 255));
    lblMeterId.setBounds(54, 37, 80, 21);
    frame.getContentPane().add(lblMeterId);

    JLabel lblUserId = new JLabel("User ID");
    lblUserId.setFont(new Font("Tahoma", Font.BOLD, 14));
    lblUserId.setForeground(new Color(255, 255, 255));
    lblUserId.setBounds(54, 96, 80, 21);
    frame.getContentPane().add(lblUserId);
}

```

```

JLabel lblMonth = new JLabel("Month");
lblMonth.setFont(new Font("Tahoma", Font.BOLD, 14));
lblMonth.setForeground(new Color(255, 255, 255));
lblMonth.setBounds(54, 157, 80, 21);
frame.getContentPane().add(lblMonth);

JLabel lblCurrentReading = new JLabel("Current Reading");
lblCurrentReading.setFont(new Font("Tahoma", Font.BOLD, 14));
lblCurrentReading.setForeground(new Color(255, 255, 255));
lblCurrentReading.setBounds(54, 215, 136, 27);
frame.getContentPane().add(lblCurrentReading);

JLabel lblPreviousReading = new JLabel("Previous Reading");
lblPreviousReading.setFont(new Font("Tahoma", Font.BOLD, 14));
lblPreviousReading.setForeground(new Color(255, 255, 255));
lblPreviousReading.setBounds(54, 273, 136, 40);
frame.getContentPane().add(lblPreviousReading);

JLabel lblUnits = new JLabel("Units");
lblUnits.setFont(new Font("Tahoma", Font.BOLD, 14));
lblUnits.setForeground(new Color(255, 255, 255));
lblUnits.setBounds(71, 449, 45, 13);
frame.getContentPane().add(lblUnits);

JLabel lblTotalAmount = new JLabel("Total Amount");
lblTotalAmount.setFont(new Font("Tahoma", Font.BOLD, 14));
lblTotalAmount.setForeground(new Color(255, 255, 255));
lblTotalAmount.setBounds(66, 508, 112, 21);
frame.getContentPane().add(lblTotalAmount);

JButton btnPayBill = new JButton("PAY BILL");
btnPayBill.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        payBill();
    }
});
btnPayBill.setFont(new Font("Tahoma", Font.BOLD | Font.ITALIC, 15));
btnPayBill.setBounds(200, 573, 124, 21);
frame.getContentPane().add(btnPayBill);

textFieldMeterId = new JTextField();
textFieldMeterId.setBounds(259, 37, 164, 30);
frame.getContentPane().add(textFieldMeterId);
textFieldMeterId.setColumns(10);

textFieldUserId = new JTextField();
textFieldUserId.setBounds(259, 91, 164, 33);
frame.getContentPane().add(textFieldUserId);
textFieldUserId.setColumns(10);

textFieldMonth = new JTextField();
textFieldMonth.setBounds(259, 149, 164, 30);
frame.getContentPane().add(textFieldMonth);
textFieldMonth.setColumns(10);

```

```

textFieldCurrentReading = new JTextField();
textFieldCurrentReading.setBounds(259, 209, 164, 33);
frame.getContentPane().add(textFieldCurrentReading);
textFieldCurrentReading.setColumns(10);

textFieldPreviousReading = new JTextField();
textFieldPreviousReading.setBounds(259, 269, 164, 32);
frame.getContentPane().add(textFieldPreviousReading);
textFieldPreviousReading.setColumns(10);

textFieldUnits = new JTextField();
textFieldUnits.setBounds(259, 432, 164, 30);
textFieldUnits.setEditable(false);
frame.getContentPane().add(textFieldUnits);
textFieldUnits.setColumns(10);

textFieldTotalAmount = new JTextField();
textFieldTotalAmount.setBounds(259, 506, 164, 30);
textFieldTotalAmount.setEditable(false);
frame.getContentPane().add(textFieldTotalAmount);
textFieldTotalAmount.setColumns(10);

rdbtnStandard = new JRadioButton("Standard");
rdbtnStandard.setBounds(259, 338, 103, 21);
frame.getContentPane().add(rdbtnStandard);

rdbtnCommercial = new JRadioButton("Commercial");
rdbtnCommercial.setFont(new Font("Tahoma", Font.PLAIN, 11));
rdbtnCommercial.setBounds(259, 387, 103, 21);
frame.getContentPane().add(rdbtnCommercial);

ButtonGroup buttonGroup = new ButtonGroup();
buttonGroup.add(rdbtnStandard);
buttonGroup.add(rdbtnCommercial);

// Adding action listeners to radio buttons
rdbtnStandard.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        calculateBill();
    }
});

rdbtnCommercial.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        calculateBill();
    }
});
}

private void calculateBill() {
    try {
        int currentReading = Integer.parseInt(textFieldCurrentReading.getText());
        int previousReading = Integer.parseInt(textFieldPreviousReading.getText());
        units = currentReading - previousReading;
    }
}

```



```

String type = (rdbtnStandard.isSelected()) ? "Standard" : "Commercial";
if (type.equals("Standard")) {
    if (units <= 100)
        amount = units * 2;
    else
        amount = 100 * 2 + (units - 100) * 3;
} else if (type.equals("Commercial")) {
    if (units <= 100)
        amount = units * 4;
    else
        amount = 100 * 4 + (units - 100) * 8;
}
textFieldUnits.setText(String.valueOf(units));
textFieldTotalAmount.setText(String.valueOf(amount));
} catch (NumberFormatException ex) {
    JOptionPane.showMessageDialog(frame, "Please enter valid numeric values for current and
previous readings.", "Error", JOptionPane.ERROR_MESSAGE);
}
}

private void payBill() {
    try {
        Class.forName("oracle.jdbc.driver.OracleDriver");
        Connection con = DriverManager.getConnection(JDBC_URL, USERNAME, PASSWORD);
        Statement stmt = con.createStatement();

        String meterid = textFieldMeterId.getText();
        String userid = textFieldUserId.getText();
        String month = textFieldMonth.getText();
        String totalamount = textFieldTotalAmount.getText();

        // Inserting bill details into the database
        String insqr = "INSERT INTO bill VALUES(?, ?, ?, ?, ?)";
        PreparedStatement pstmt = con.prepareStatement(insqr);
        pstmt.setString(1, meterid);
        pstmt.setString(2, userid);
        pstmt.setString(3, month);
        pstmt.setInt(4, units);
        pstmt.setString(5, totalamount);
        pstmt.executeUpdate();

        // Clearing input fields after successful payment
        clearFields();

        // Closing database connection
        con.close();

        // Displaying a dialog box indicating successful payment
        JOptionPane.showMessageDialog(frame, "Bill successfully paid!");
    } catch (Exception e1) {
        // Displaying error message in case of any exception
        JOptionPane.showMessageDialog(frame, "Failed to pay bill: " + e1.getMessage(), "Error",
JOptionPane.ERROR_MESSAGE);
    }
}
}

```

```
private void clearFields() {  
    textFieldMeterId.setText("");  
    textFieldUserId.setText("");  
    textFieldMonth.setText("");  
    textFieldCurrentReading.setText("");  
    textFieldPreviousReading.setText("");  
    textFieldUnits.setText("");  
    textFieldTotalAmount.setText("");  
}
```

```
public void setVisible(boolean b) {  
    frame.setVisible(b);  
}  
}
```

