

K. K. Wagh Polytechnic Nashik
Department of Information Technology
Subject: Mobile Application Development
Subject Code: 22617

Title: Electricity Bill Management System

Group Members:

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activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>

<androidx.constraintlayout.widget.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity" >

    <ImageView
        android:src="@drawable/background"
        android:scaleType="fitXY"
        android:layout_width="match_parent"
        android:layout_height="match_parent"/>

    <TextView
        android:id="@+id/textView2"
        android:layout_width="376dp"
        android:layout_height="144dp"
        android:layout_marginTop="16dp"
        android:gravity="center"
        android:text="Welcome to the Electricity Billing Management System"
        android:textColor="#0E0E0E"
        android:textSize="30sp"
        android:textStyle="bold"
        app:layout_constraintHorizontal_bias="0.542"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <TextView
```

```
android:id="@+id/textView1"
android:layout_width="378dp"
android:layout_height="70dp"
android:layout_marginTop="52dp"
android:text="Consumer ID:"
android:textColor="#0B0A0A"
android:textSize="30sp"
android:textStyle="bold"
app:layout_constraintHorizontal_bias="0.515"
app:layout_constraintLeft_toLeftOf="parent"
app:layout_constraintRight_toRightOf="parent"
app:layout_constraintTop_toBottomOf="@+id/textView2" />
```

<EditText

```
android:id="@+id/consumerid"
android:layout_width="373dp"
android:layout_height="70dp"
android:layout_marginTop="32dp"
android:gravity="center"
android:hint="ConsumerID"
android:textColor="#050505"
android:textSize="24sp"
android:textStyle="bold"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/textView1" />
```

<Button

```
android:id="@+id/button1"
android:layout_width="200dp"
android:layout_height="72dp"
android:layout_marginTop="236dp"
android:text="Submit"
```

```
android:textSize="24sp"
android:textStyle="bold"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/consumerid" />
```

<TextView

```
android:id="@+id/textView"
android:layout_width="320dp"
android:layout_height="54dp"
android:layout_marginTop="32dp"
android:text="Password:"
android:textColor="#101010"
android:textSize="34sp"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/consumerid" />
```

<EditText

```
android:id="@+id/Password"
android:layout_width="339dp"
android:layout_height="63dp"
android:ems="10"
android:hint="Password"
android:gravity="center"
android:inputType="textPassword"
android:textColor="#0B0A0A"
android:textSize="24sp"
app:layout_constraintBottom_toTopOf="@+id/button1"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/textView" />
```

</androidx.constraintlayout.widget.ConstraintLayout>

MainActivity.java

```
package com.example.microproject;
```

```
import androidx.appcompat.app.AppCompatActivity;
```

```
import android.content.Intent;
```

```
import android.os.Bundle;
```

```
import android.view.View;
```

```
import android.widget.Button;
```

```
import android.widget.EditText;
```

```
import android.widget.Toast;
```

```
public class MainActivity extends AppCompatActivity {
```

```
    Button submit;
```

```
    EditText consumer, password;
```

```
    @Override
```

```
    protected void onCreate(Bundle savedInstanceState) {
```

```
        super.onCreate(savedInstanceState);
```

```
        setContentView(R.layout.activity_main);
```

```
        consumer=(EditText)findViewById(R.id.consumerid);
```

```
        password=(EditText)findViewById(R.id.Password);
```

```
        submit = (Button)findViewById(R.id.button1);
```

```
        submit.setOnClickListener(new View.OnClickListener() {
```

```
            @Override
```

```
            public void onClick(View v) {
```

```
                if(consumer.getText().toString().equals("admin")                &&  
password.getText().toString().equals("admin"))                {
```

```
                    nextPage1();
```

```
                }
```

```
                else                {
```

```
                    Toast.makeText(getApplicationContext(),                "invalid                credentials",  
Toast.LENGTH_LONG).show();
```

```
                }                }                });    }
```

```

public void nextPage1(){
    Intent intent = new Intent(this,status.class);
    startActivity(intent);
}
}

```

activity_status.xml

```

<?xml version="1.0" encoding="utf-8"?>

<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:app="http://schemas.android.com/apk/res-auto"
xmlns:tools="http://schemas.android.com/tools"
android:layout_width="match_parent"
android:layout_height="match_parent"
tools:context=".status"
>

<TextView
    android:id="@+id/bill"
    android:layout_width="311dp"
    android:layout_height="59dp"
    android:text="Your Bill:"
    android:textColor="#050505"
    android:textSize="30sp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.43"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.309" />

<TextView

```

```
android:id="@+id/date"
android:layout_width="311dp"
android:layout_height="59dp"
android:layout_marginTop="52dp"
android:text="Due Date: 27/05/2022"
android:textColor="#0B0A0A"
android:textColorHint="#040303"
android:textSize="30sp"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.43"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/bill" />
```

<EditText

```
android:id="@+id/unit"
android:layout_width="306dp"
android:layout_height="49dp"
android:layout_marginStart="32dp"
android:layout_marginEnd="32dp"
android:layout_marginBottom="32dp"
android:ems="10"
android:hint="Unit consumed"
android:textColor="#100F0F"
android:textColorHint="#0B0A0A"
app:layout_constraintBottom_toTopOf="@+id/bill"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.268"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.884" />
```

<Button

```
        android:id="@+id/paybutton"
        android:layout_width="359dp"
        android:layout_height="132dp"
        android:layout_marginBottom="112dp"
        android:text="Pay Now"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.514"
        app:layout_constraintStart_toStartOf="parent" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

Status.java

```
package com.example.microproject;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
import android.os.Handler;

public class status extends AppCompatActivity {
    EditText unit;
    TextView bill;
    TextView a;
    Button pay;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
```



```

setContentView(R.layout.activity_status);

a = (TextView)findViewById(R.id.bill);
unit = (EditText)findViewById(R.id.unit);
pay = (Button) findViewById(R.id.paybutton);
pay.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        int unitconsumed = Integer.parseInt(unit.getText().toString());
        double bill = 0;
        if (unitconsumed<=100){
            bill = 4.22 * unitconsumed;
            a.setText("Your Bill:" + bill);

        }
        else if (unitconsumed>=100 && unitconsumed<=300){
            bill = 5.02 * unitconsumed;
            a.setText("Your Bill:" + bill);

        }
        else if (unitconsumed>=301 && unitconsumed <=500){
            bill = 5.87 * unitconsumed;
            a.setText("Your Bill:" + bill);

        }
        else if (unitconsumed>=501){
            bill = 7 * unitconsumed;
            a.setText("Your Bill:" + bill);
        }
        final Handler handler = new Handler();
        handler.postDelayed(new Runnable() {
            @Override
            public void run() {

```

```

        Paypage();

    }

    }, 5000);

    }

    });

}

public void Paypage(){

    Intent intent = new Intent(this,pay.class);

    startActivity(intent);

}

}

```

activity_pay.xml

```

<?xml version="1.0" encoding="utf-8"?>

<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"

    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".pay">

    <TextView
        android:id="@+id/bill"
        android:layout_width="323dp"
        android:layout_height="67dp"
        android:layout_marginTop="164dp"
        android:text="PAY YOUR BILL USING:"
        android:textSize="30dp"
        app:layout_constraintEnd_toEndOf="parent"

```

```
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent" />
```

```
<Button
    android:id="@+id/paybutton1"
    android:layout_width="308dp"
    android:layout_height="74dp"
    android:layout_marginBottom="112dp"
    android:text="CREDIT CARD"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.427"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/paybutton2"
    app:layout_constraintVertical_bias="0.319" />
```

```
<Button
    android:id="@+id/paybutton2"
    android:layout_width="308dp"
    android:layout_height="74dp"
    android:layout_marginTop="68dp"
    android:text="DEBIT CARD"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/bill" />
```

```
</androidx.constraintlayout.widget.ConstraintLayout>
```

pay.java

```
package com.example.microproject;
```

```
import androidx.appcompat.app.AppCompatActivity;
```

```

import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;

public class pay extends AppCompatActivity {

    Button a ,b;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_pay);
        a = (Button) findViewById(R.id.paybutton1);
        b = (Button) findViewById(R.id.paybutton2);
        a.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {

                nextPage();
            }
        });
        b.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                nextPage();
            }
        });
    }

    public void nextPage(){

```

```

        Intent intent = new Intent(this,portal.class);
        startActivity(intent);
    }

}

```

activity_portal.xml

```

<?xml version="1.0" encoding="utf-8"?>

<androidx.constraintlayout.widget.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".portal">

    <EditText
        android:id="@+id/cardholder"
        android:layout_width="342dp"
        android:layout_height="48dp"
        android:layout_marginTop="64dp"
        android:ems="10"
        android:gravity="center"
        android:hint="Name of the Card"
        android:inputType="textPersonName"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.492"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <EditText
        android:id="@+id/cardnumber"

```

```
android:layout_width="342dp"
android:layout_height="48dp"
android:layout_marginTop="48dp"
android:ems="10"
android:gravity="center"
android:hint="Card number"
android:inputType="textPersonName"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.507"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/cardholder" />
```

<EditText

```
android:id="@+id/cvv"
android:layout_width="146dp"
android:layout_height="61dp"
android:layout_marginTop="64dp"
android:ems="10"
android:hint="CVV"
android:inputType="textPersonName"
app:layout_constraintEnd_toStartOf="@+id/validupto"
app:layout_constraintHorizontal_bias="0.397"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/cardnumber" />
```

<EditText

```
android:id="@+id/validupto"
android:layout_width="146dp"
android:layout_height="61dp"
android:layout_marginTop="64dp"
android:layout_marginEnd="32dp"
android:ems="10"
android:gravity="center"
```

```

        android:hint="Valid upto year"

        android:inputType="textPersonName"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintTop_toBottomOf="@+id/cardnumber" />

<Button
    android:id="@+id/homeeeyy"
    android:layout_width="140dp"
    android:layout_height="46dp"
    android:layout_marginBottom="128dp"
    android:text="Pay"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.498"
    app:layout_constraintStart_toStartOf="parent" />
</androidx.constraintlayout.widget.ConstraintLayout>

```

Portal.java

```

package com.example.microproject;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

import static android.widget.Toast.LENGTH_SHORT;

public class portal extends AppCompatActivity {

```

```

Button qw;
EditText card, CVV, valid;
@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_portal);
    card= (EditText)findViewById(R.id.cardnumber);
    CVV= (EditText)findViewById(R.id.cvv);
    valid= (EditText)findViewById(R.id.validupto);
    qw = (Button)findViewById(R.id.homeeeyy);
    qw.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            if(card.getText().length()==12      &&      CVV.getText().length()==3      &&
valid.getText().length()==2){

                Toast.makeText(getApplicationContext(),      "Payment      was      Successful",
Toast.LENGTH_LONG).show();

                homepage();}

            else if(card.getText().length()!=12){

                Toast.makeText(getApplicationContext(),      "Invalid      card      number",
Toast.LENGTH_LONG).show();

                }
            else if(CVV.getText().length()!=3){

                Toast.makeText(getApplicationContext(),      "Invalid      CVV      number",
Toast.LENGTH_LONG).show();

                }

            else if(valid.getText().length()!=2){

```



```

        Toast.makeText(getApplicationContext(), "Invalid Year",
        Toast.LENGTH_LONG).show();
    }
    else if (card.getText().length()==12 && CVV.getText().length()==3 &&
    valid.getText().length()==2){

        Toast.makeText(getApplicationContext(), "Payment was Successful",
        Toast.LENGTH_LONG).show();
        homepage();
    }
    else{
        Toast.makeText(getApplicationContext(), "Payment was not Successful",
        Toast.LENGTH_LONG).show();
        homepage();
    }
}
});
}

public void homepage(){
    Intent intent = new Intent(this,MainActivity.class);
    startActivity(intent);
}
}

```

Output

Microproject

Welcome to the Electricity
Billing Management System

Consumer ID:

admin

Password:

SUBMIT

Microproject

57

Your Bill:240.54

Due Date: 27/05/2022

PAY NOW

Microproject

PAY YOUR BILL USING:

DEBIT CARD

CREDIT CARD

Microproject

vardhaman

555566661111

455 22

PAY

Microproject

vardhaman

555566661111

455

22

Payment was Successful