

THIRD SEMESTER MCA DEGREE PRACTICAL EXAMINATION FEBRUARY 2022

20MCA243 MOBILE APPLICATION DEVELOPMENT LAB

Q : Develop an android application for electricity bill generation (Use Intent)

- **Create a login form for validation (Username and Password checking)**
- **Create a form for electricity bill generation and display**

Source code:

MainActivity.java

```
package com.example.electricitybill;

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 {
    EditText uNameET,uPswdET;
    Button LoginBtn;
    String TVUsername,TVPassword;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        uNameET = findViewById(R.id.userName);
        uPswdET = findViewById(R.id.userPassword);
        LoginBtn = findViewById(R.id.LoginButton);
        LoginBtn.setOnClickListener(new View.OnClickListener() {
            @Override
```

```

        public void onClick(View view) {

            TVUsername = uNameET.getText().toString().trim();
            TVPassword = uPswdET.getText().toString().trim();

            if(TVUsername.isEmpty()){
                uNameET.setError("Please provide your Username");
            }else if (TVPassword.isEmpty()){
                uPswdET.setError("Please provide your Password");
            }else if(TVUsername.equals("user") && TVPassword.equals("user")){
                try {
                    Intent intent = new
Intent(getApplicationContext(),BillPayment.class);
                    startActivity(intent);
                    Toast.makeText(getApplicationContext(),"Login
Successfully",Toast.LENGTH_LONG).show();
                }catch (Exception e){
                    Toast.makeText(getApplicationContext(),"An Error occuring
when Login Attempt. Please check your username and
Password",Toast.LENGTH_LONG).show();
                }
            }
        }
    });
}
}

```

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"
    android:background="#D5ECEF"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/textView2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="16dp"
        android:text="Consumer Login Portal"
        android:textSize="28sp"
        android:textStyle="bold"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.495"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/imageView" />

    <TextView

```

```
    android:id="@+id/textView3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="100dp"
    android:text="Username"
    android:textColor="#3F51B5"
    android:textSize="22sp"
    android:textStyle="bold"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.251"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/textView2" />
```

<EditText

```
    android:id="@+id/userName"
    android:layout_width="250dp"
    android:layout_height="45dp"
    android:layout_marginTop="4dp"
    android:ems="10"
    android:hint="Provide your username"
    android:inputType="textPersonName"
    android:textColor="#3F51B5"
    android:textSize="20sp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.481"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/textView3" />
```

<TextView

```
    android:id="@+id/textView4"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="20dp"
    android:text="Password"
    android:textColor="#3F51B5"
    android:textSize="22sp"
    android:textStyle="bold"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.249"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/userName" />
```

<EditText

```
    android:id="@+id/userPassword"
    android:layout_width="249dp"
    android:layout_height="53dp"
    android:layout_marginTop="8dp"
    android:ems="10"
    android:hint="Provide your password"
    android:inputType="textPassword"
    android:textColor="#3F51B5"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.481"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/textView4" />
```

```

<Button
    android:id="@+id/LoginButton"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="155dp"
    android:layout_marginTop="70dp"
    android:layout_marginEnd="156dp"
    android:layout_marginBottom="132dp"
    android:onClick="login"
    android:text="Login"
    android:textSize="20sp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/userPassword" />

<ImageView
    android:id="@+id/imageView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="44dp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:srcCompat="@drawable/kseb" />
</androidx.constraintlayout.widget.ConstraintLayout>

```

BillPayment.java

```

package com.example.electricitybill;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

public class BillPayment extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_bill_payment);
    }
}

```

activity_bill_payment.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"
android:background="#D5ECEF"
tools:context=".MainActivity">

<TextView
    android:id="@+id/textView2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="16dp"
    android:text="Consumer Login Portal"
    android:textSize="28sp"
    android:textStyle="bold"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.495"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/imageView" />

<TextView
    android:id="@+id/textView3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="100dp"
    android:text="Username"
    android:textColor="#3F51B5"
    android:textSize="22sp"
    android:textStyle="bold"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.251"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/textView2" />

<EditText
    android:id="@+id/userName"
    android:layout_width="250dp"
    android:layout_height="45dp"
    android:layout_marginTop="4dp"
    android:ems="10"
    android:hint="Provide your username"
    android:inputType="textPersonName"
    android:textColor="#3F51B5"
    android:textSize="20sp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.481"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/textView3" />

<TextView
    android:id="@+id/textView4"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="20dp"
```

```
    android:text="Password"
    android:textColor="#3F51B5"
    android:textSize="22sp"
    android:textStyle="bold"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.249"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/userName" />
```

<EditText

```
    android:id="@+id/userPassword"
    android:layout_width="249dp"
    android:layout_height="53dp"
    android:layout_marginTop="8dp"
    android:ems="10"
    android:hint="Provide your password"
    android:inputType="textPassword"
    android:textColor="#3F51B5"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.481"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/textView4" />
```

<Button

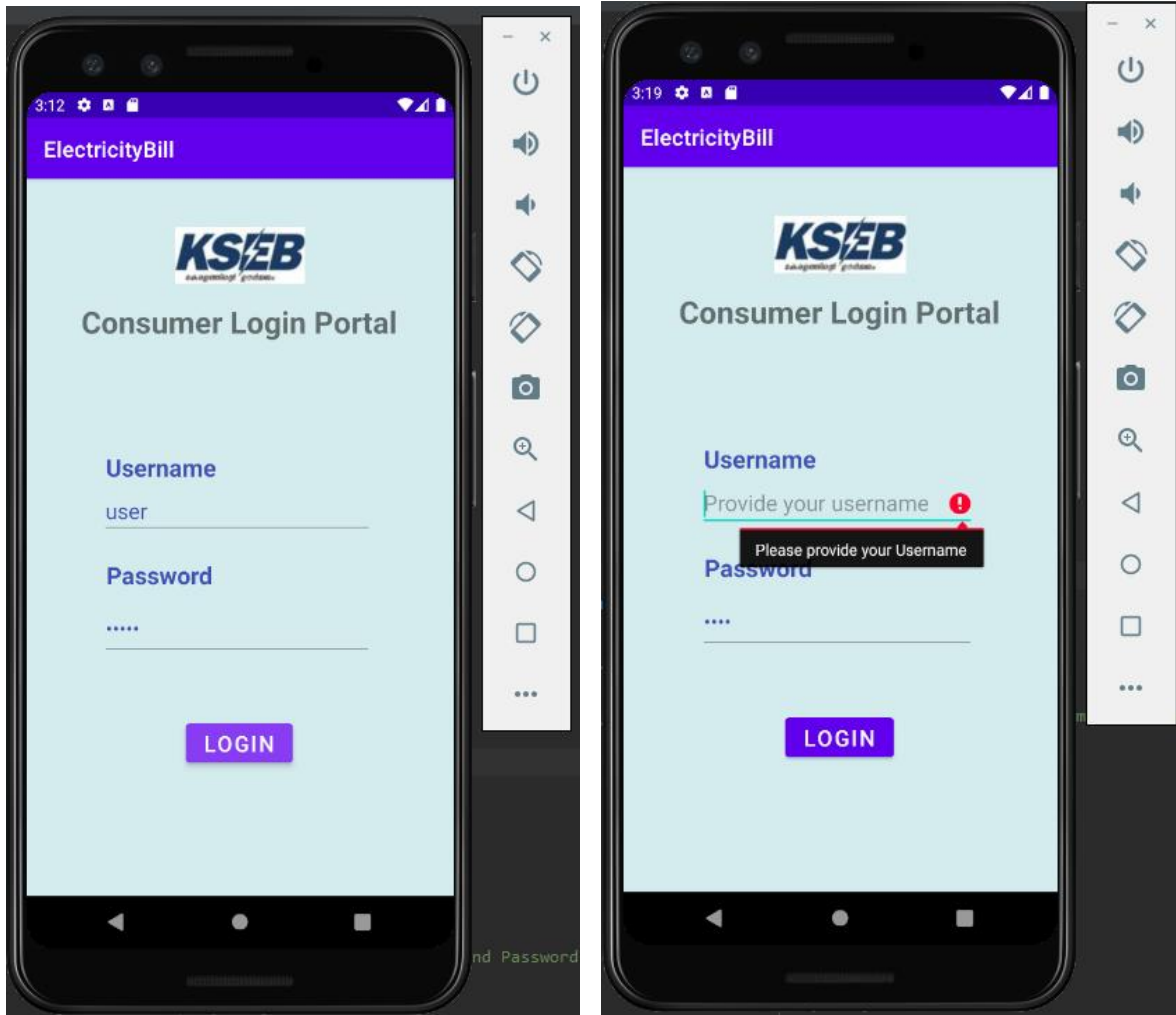
```
    android:id="@+id/LoginButton"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="155dp"
    android:layout_marginTop="70dp"
    android:layout_marginEnd="156dp"
    android:layout_marginBottom="132dp"
    android:onClick="login"
    android:text="Login"
    android:textSize="20sp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/userPassword" />
```

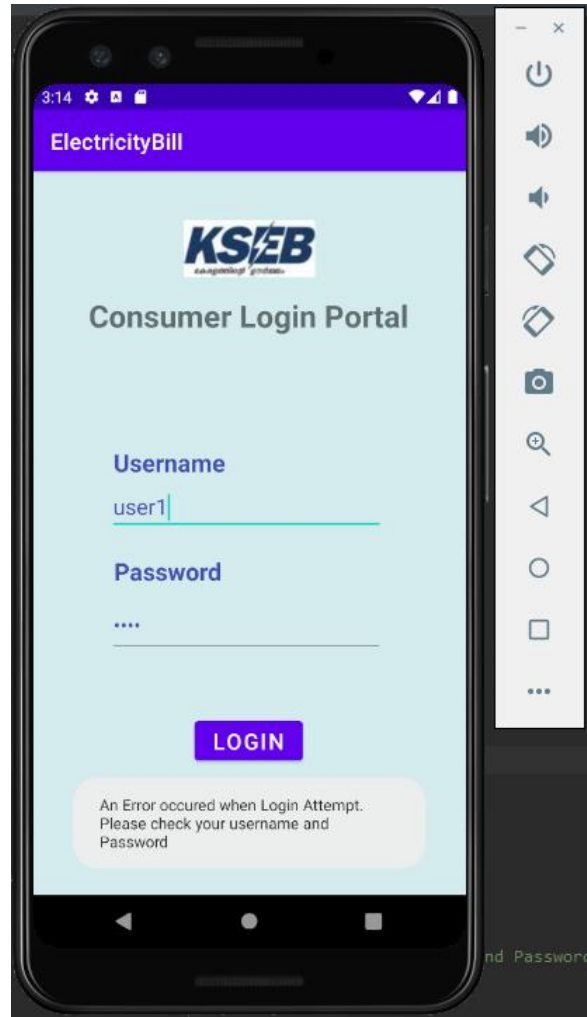
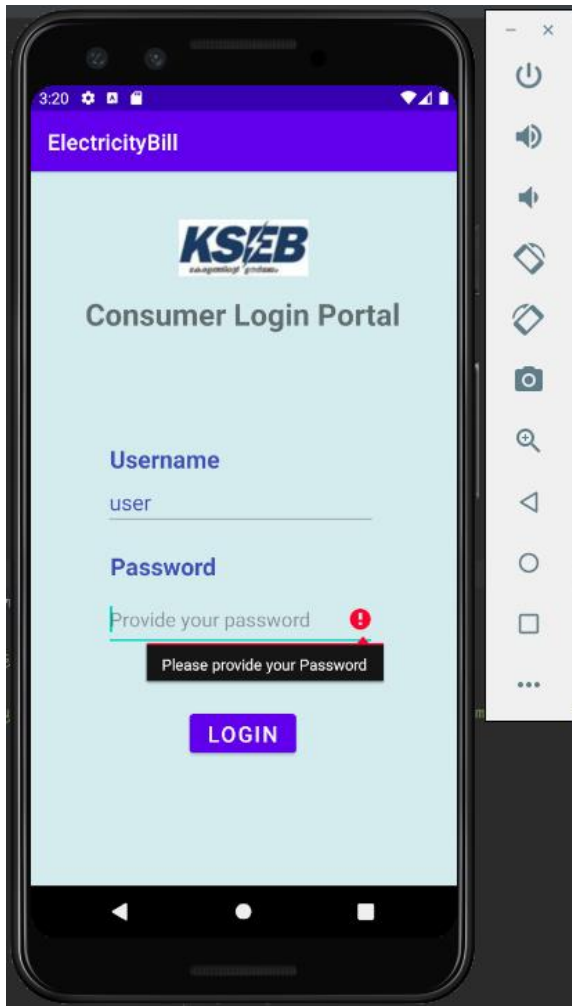
<ImageView

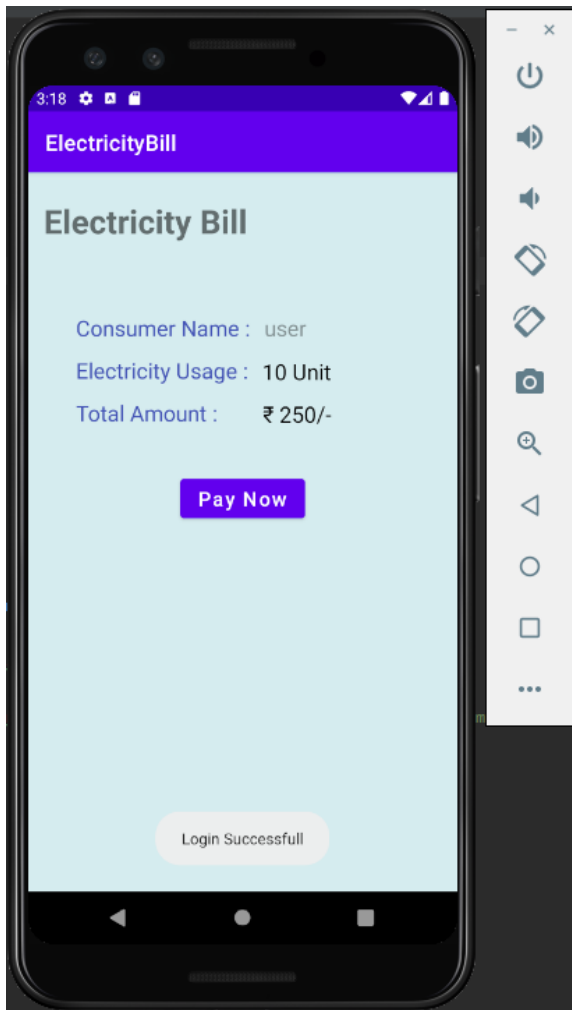
```
    android:id="@+id/imageView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="44dp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:srcCompat="@drawable/kseb" />
```

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

OUTPUT







RESULT

Successfully developed Android Application and Output executed.