**PR-25**

**25 Develop a program to create the login form with necessary validations like length of username and password, empty text fields, count of unsuccessful login attempts. Display the login successful/Unsuccessful toast message..**

**XML Code**

<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 android:padding="20dp"  
 tools:context=".MainActivity">  
  
 <TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Login Form"  
 android:textSize="24sp"  
 android:layout\_gravity="center\_horizontal"  
 android:layout\_marginBottom="20dp"/>  
  
 <EditText  
 android:id="@+id/email"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Email"  
 android:inputType="textEmailAddress"  
 android:layout\_marginBottom="10dp"/>  
  
 <EditText  
 android:id="@+id/username"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Username"  
 android:inputType="text"  
 android:layout\_marginBottom="10dp"/>  
  
 <EditText  
 android:id="@+id/password"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Password"  
 android:inputType="textPassword"  
 android:layout\_marginBottom="10dp"/>  
  
 <EditText  
 android:id="@+id/confirmPassword"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Confirm Password"  
 android:inputType="textPassword"  
 android:layout\_marginBottom="20dp"/>  
  
 <Button  
 android:id="@+id/login"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Login"  
 android:layout\_gravity="center\_horizontal"  
 android:textColor="#FFFFFF"/>  
</LinearLayout>

**Java Code**

package com.example.loginformvalidation;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.util.Patterns;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.TextView;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

EditText email, username, password, confirmPassword;

Button login;

TextView statusText;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

// Reference UI elements

email = findViewById(R.id.email);

username = findViewById(R.id.username);

password = findViewById(R.id.password);

confirmPassword = findViewById(R.id.confirmPassword);

login = findViewById(R.id.login);

statusText = findViewById(R.id.statusText);

login.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

String emailInput = email.getText().toString().trim();

String usernameInput = username.getText().toString().trim();

String passwordInput = password.getText().toString().trim();

String confirmInput = confirmPassword.getText().toString().trim();

if (!Patterns.EMAIL\_ADDRESS.matcher(emailInput).matches()) {

Toast.makeText(getApplicationContext(), "Invalid Email", Toast.LENGTH\_SHORT).show();

} else if (usernameInput.isEmpty()) {

Toast.makeText(getApplicationContext(), "Username cannot be empty", Toast.LENGTH\_SHORT).show();

} else if (passwordInput.length() < 8) {

Toast.makeText(getApplicationContext(), "Password must be at least 8 characters", Toast.LENGTH\_SHORT).show();

} else if (!passwordInput.equals(confirmInput)) {

Toast.makeText(getApplicationContext(), "Passwords do not match", Toast.LENGTH\_SHORT).show();

} else {

statusText.setText("Login Successful");

}

}

});

}

}