Practical 5

# AIM: Create a login application with the following features:

1. **Successful Login message in TextView with Green background if Username & password is correct**
2. **Failure message in TextView with Red background if Username or password is incorrect.**
3. **Disable Login Button after three wrong log in attempts.**
4. **Close application if the user selects Cancel Button.**

**SOURCE CODE:**

**Java File/s:**

**MainActivity.java**

package com.charusat.login;

import androidx.appcompat.app.AppCompatActivity; import android.graphics.Color;

import android.os.Bundle;

import android.text.TextUtils; 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 { private EditText EmailId;

private EditText Password;

private Button Login; private TextView Info; private TextView Message; private int counter=3;

@Override

protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState); setContentView(R.layout.*activity\_main*); getSupportActionBar().setTitle("Login");

EmailId = (EditText) findViewById(R.id.*etEmailId*); Password = (EditText) findViewById(R.id.*etPassword*); Login = (Button) findViewById(R.id.*btnLogin*);

Info = (TextView) findViewById(R.id.*tvInfo*); Message = (TextView) findViewById(R.id.*tvMessage*);

Info.setText(" No. of attempts remaining : 3");

Login.setOnClickListener(new View.OnClickListener() { @Override

public void onClick(View v) {

validate(EmailId.getText().toString().trim(), Password.getText().toString().trim());

}

});

}

private void validate(String userEmailId , String userPassword)

{

if((userEmailId.equals("[17it102@gmail.com"](mailto:17it102@gmail.com))) && (userPassword.equals("17it102")))

{

Message.setBackgroundColor(Color.*GREEN*); Message.setText("Successful Login");

}

else if(TextUtils.*isEmpty*(userEmailId) || TextUtils.*isEmpty*(userPassword) )

{

Toast.*makeText*(this ,"Please enter all the details", Toast.*LENGTH\_SHORT*).show();

}

else {

counter --; Message.setText("Failure");

Message.setBackgroundColor(Color.*RED*);

Info.setText(" No. of attempts remaining : " + String.*valueOf*(counter)); if(counter == 0 ) {

Login.setEnabled(false);

}

}

}

}

# Layout File/s:

**activity\_main.xml**

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

<androidx.constraintlayout.widget.ConstraintLayout xmlns:andr[oid="http://schemas.android.com/apk/res/android"](http://schemas.android.com/apk/res/android)

xmlns:app="[http://schemas.android.com/apk/res-auto"](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:layout\_editor\_absoluteX="0dp" tools:layout\_editor\_absoluteY="81dp">

<EditText android:id="@+id/etEmailId" android:layout\_width="244dp" android:layout\_height="57dp" android:layout\_marginStart="8dp" android:layout\_marginTop="8dp" android:layout\_marginEnd="8dp" android:layout\_marginBottom="8dp" android:ems="10" android:hint="Email ID"

android:inputType="textEmailAddress" app:layout\_constraintBottom\_toBottomOf="parent" app:layout\_constraintEnd\_toEndOf="parent" app:layout\_constraintHorizontal\_bias="0.496" app:layout\_constraintStart\_toStartOf="parent" app:layout\_constraintTop\_toTopOf="parent" app:layout\_constraintVertical\_bias="0.25" />

<Button

android:id="@+id/btnLogin" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:layout\_marginLeft="8dp" android:layout\_marginTop="8dp" android:layout\_marginRight="8dp" android:layout\_marginBottom="117dp" android:text="Login" app:layout\_constraintBottom\_toBottomOf="parent" app:layout\_constraintHorizontal\_bias="0.498" app:layout\_constraintLeft\_toLeftOf="parent" app:layout\_constraintRight\_toRightOf="parent" app:layout\_constraintTop\_toBottomOf="@+id/etPassword" app:layout\_constraintVertical\_bias="0.275" />

<TextView android:id="@+id/tvInfo" android:layout\_width="245dp" android:layout\_height="26dp"

android:layout\_marginLeft="8dp" android:layout\_marginTop="8dp" android:layout\_marginRight="8dp" android:layout\_marginBottom="36dp" android:text="No. of attempts remaining: 5" app:layout\_constraintBottom\_toBottomOf="parent" app:layout\_constraintHorizontal\_bias="0.58" app:layout\_constraintLeft\_toLeftOf="parent" app:layout\_constraintRight\_toRightOf="parent"

app:layout\_constraintTop\_toBottomOf="@id/tvMessage" app:layout\_constraintVertical\_bias="1.0" />

<EditText android:id="@+id/etPassword" android:layout\_width="244dp" android:layout\_height="55dp" android:layout\_marginLeft="8dp" android:layout\_marginTop="8dp" android:layout\_marginRight="8dp" android:layout\_marginBottom="8dp" android:ems="10" android:hint="Password" android:inputType="textPassword"

app:layout\_constraintBottom\_toBottomOf="parent" app:layout\_constraintHorizontal\_bias="0.508" app:layout\_constraintLeft\_toLeftOf="parent" app:layout\_constraintRight\_toRightOf="parent" app:layout\_constraintTop\_toBottomOf="@+id/etEmailId" app:layout\_constraintVertical\_bias="0.059" />

<TextView android:id="@+id/tvMessage" android:layout\_width="150dp" android:layout\_height="21dp"

app:layout\_constraintBottom\_toTopOf="@+id/tvInfo" app:layout\_constraintEnd\_toEndOf="parent" app:layout\_constraintHorizontal\_bias="0.498" app:layout\_constraintStart\_toStartOf="parent" app:layout\_constraintTop\_toBottomOf="@+id/btnLogin" app:layout\_constraintVertical\_bias="0.284" />

</androidx.constraintlayout.widget.ConstraintLayout>

**OUTPUT:**

