

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.example.login;

import androidx.appcompat.app.AppCompatActivity;
import android.view.View;
import android.widget.Button;
import android.widget.ImageButton;
import android.widget.EditText;
import android.widget.TextView;
import android.os.Bundle;
import android.widget.Toast;
import android.graphics.Color;

public class MainActivity extends AppCompatActivity {
    EditText username,passwd,name;
    Button b1,b2;
    ImageButton iB;
    TextView tx1;
    int counter = 3;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        b1 = (Button)findViewById(R.id.login);
        b1.setVisibility(View.VISIBLE);
        iB=(ImageButton)findViewById(R.id.iB);

        username=(EditText) findViewById(R.id.username);
        passwd=(EditText) findViewById(R.id.password);
```

```

        iB.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Toast.makeText(getApplicationContext(),"Password contains atleast 6 character including digits",Toast.LENGTH_LONG).show();
            }
        });

        tx1 = (TextView) findViewById(R.id.textView3);
        tx1.setVisibility(View.GONE);

        b1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                if(username.getText().toString().equals("kunj") &&
                    passwd.getText().toString().equals("kunj@123")) {
                    Toast.makeText(getApplicationContext(),
                        "Redirecting...",Toast.LENGTH_SHORT).show();
                }else{
                    Toast.makeText(getApplicationContext(), "Wrong Credentials",Toast.LENGTH_SHORT).show();

                    tx1.setVisibility(View.VISIBLE);
                    tx1.setBackgroundColor(Color.RED);
                    counter--;
                    tx1.setText(Integer.toString(counter));

                    if (counter == 0) {
                        b1.setEnabled(false);
                    }
                }
            }
        });
    }
}

```

Layout File/s:**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:id="@+id/container"
android:layout_width="match_parent"
android:layout_height="match_parent"
android:background="#F5C3C3">
```

```
<EditText
```

```
    android:id="@+id/username"
    android:layout_width="296dp"
    android:layout_height="46dp"
    android:layout_marginStart="24dp"
    android:layout_marginTop="128dp"
    android:layout_marginEnd="24dp"
    android:hint="username"

    android:inputType="textEmailAddress"
    android:selectAllOnFocus="true"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.0"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent" />
```

```
<EditText
```

```
    android:id="@+id/password"
    android:layout_width="296dp"
    android:layout_height="46dp"
    android:layout_marginStart="24dp"
    android:layout_marginTop="56dp"
    android:layout_marginEnd="24dp"
    android:hint="password"

    android:imeOptions="actionDone"
    android:inputType="textPassword"
    android:selectAllOnFocus="true"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.0"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/username" />
```

```
<Button
```

```
    android:id="@+id/login"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_gravity="start"
    android:layout_marginStart="48dp"
    android:layout_marginTop="16dp"
    android:layout_marginEnd="48dp"
```

```

android:layout_marginBottom="64dp"
android:enabled="true"

android:text="login"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/password"
app:layout_constraintVertical_bias="0.2" />

```

<ProgressBar

```

android:id="@+id/loading"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_gravity="center"
android:layout_marginStart="32dp"
android:layout_marginTop="64dp"
android:layout_marginEnd="32dp"
android:layout_marginBottom="64dp"
android:visibility="gone"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="@+id/password"
app:layout_constraintStart_toStartOf="@+id/password"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.3" />

```

<TextView

```

android:id="@+id/textView"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:background="#B9F5A2"
android:text="Login Into Account:"
android:textColor="#673AB7"
android:textSize="24sp"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.498"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.071" />

```

<TextView

```

android:id="@+id/textView3"
android:layout_width="88dp"
android:layout_height="36dp"
android:text="TextView"
app:layout_constraintBottom_toBottomOf="parent"

```

```

    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.658" />

<ImageButton
    android:id="@+id/iB"
    android:layout_width="34dp"
    android:layout_height="33dp"
    android:tint="#07515E"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="1.0"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.56"
    app:srcCompat="@android:drawable/ic_menu_info_details" />

</androidx.constraintlayout.widget.ConstraintLayout>

```

Output:

