3. Login Form

Aim:

Create a SIGN Up activity with Username and Password. Validation of password should happen based on the following rules:

• Password should contain uppercase and lowercase letters.

• Password should contain letters and numbers.

• Password should contain special characters.

• Minimum length of the password (the default value is 8).

On successful SIGN UP proceed to the next Login activity. Here the user should SIGN IN using the Username and Password created during signup activity. If the Username and Password are matched then navigate to the next activity which displays a message saying "Successful Login" or else display a toast message saying "Login Failed". The user is given only two attempts and after that display a toast message saying "Failed Login Attempts" and disable the SIGN IN button. Use Bundle to transfer information from one activity to another.

Procedure:

1) Firstly Create an Application by Name "SignUpActivity"

2) Go to xml code of design change the layout to "RelativeLayout"

3) Add TextView component & change the following properties:

• Size: 38dp

• Text: "Sign Up"

• Center-Align

4) Add Email (EditText) component & change the following properties in XML Code:

• Hint: "Email ID"

• id: "@+id/emailEditText"

5) Add Password (EditText) component & change the following properties in XML

Code:

• Hint: "Password"

• id: "@+id/passwordEditText"

6) Add Button component & change the following properties in XML

• Id: "@+id/signBtn"

• Text: "Sign Up"

activity_main.xml:

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout 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">
    <TextView
        android:layout_width="160dp"
        android:layout_height="42dp"
        android:layout_alignParentEnd="true"
        android:layout_alignParentBottom="true"
        android:layout_marginEnd="112dp"
        android:layout_marginBottom="573dp"
        android:text="SIGN UP"
        android:textSize="28dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent" />
    <EditText
        android:id="@+id/emailEditText"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentEnd="true"
        android:layout_alignParentBottom="true"
        android:layout_marginEnd="29dp"
        android:layout_marginBottom="431dp"
        android:ems="10"
        android:hint="Email ID"
        android:inputType="textEmailAddress"
        android:textSize="28dp" />
    <EditText
        android:id="@+id/passwordEditText"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentEnd="true"
        android:layout_alignParentBottom="true"
        android:layout_marginEnd="34dp"
        android:layout_marginBottom="345dp"
        android:ems="10"
        android:hint="Password"
        android:inputType="textPassword"
```

```xml
        android:textSize="28dp" />
    <Button
        android:id="@+id/signUpBtn"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentEnd="true"
        android:layout_alignParentBottom="true"
        android:layout_marginEnd="106dp"
        android:layout_marginBottom="226dp"
        android:text="Sign Up"
        android:textSize="28dp" />
</RelativeLayout>
```

MainActivity.java

```java
package com.example.loginapplication;

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 LoginActivity extends AppCompatActivity {

EditText emailEditText, passwordEditText;

Button loginBtn;

int counter=2;

 @Override

 protected void onCreate(Bundle savedInstanceState) {

 super.onCreate(savedInstanceState);

 setContentView(R.layout.activity_login);

 emailEditText=findViewById(R.id.emailEditText);

 passwordEditText=findViewById(R.id.passwordEditText);
```

```java
loginBtn=findViewById(R.id.loginBtn);

String registeredEmail=getIntent().getStringExtra("email");

String registeredPassword=getIntent().getStringExtra("password");

loginBtn.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

String email=emailEditText.getText().toString();

String password=passwordEditText.getText().toString();

if(registeredEmail.equals(email)&& registeredPassword.equals(password))

{

Intent intent=new Intent(LoginActivity.this,LoginSuccessActivity.class);

startActivity(intent);

}

else{

Toast.makeText(LoginActivity.this,"Invalid

Credentials",Toast.LENGTH_LONG).show();

}

counter--;

if (counter==0)

{

Toast.makeText(getBaseContext(),"FAILED LOGIN

ATTEMPTS",Toast.LENGTH_LONG).show();

loginBtn.setEnabled(false);

}

}

});

}

}
```

7) Right click on Java folder-> new-> activity->empty activity-> name it as

"LoginActivity"

8) Go to xml code of design change the layout to "RelativeLayout"

9) Add TextView component & change the following properties:

• Size: 38dp

• Text: "Login"

• Center-Align

10)Add Email (EditText) component & change the following properties in XML Code:

• Hint: "Email ID"

• id: "@+id/emailEditText"

11)Add Password (EditText) component & change the following properties in XML

Code:

• Hint: "Password"

• id: "@+id/passwordEditText"

12)Add Button component & change the following properties in XML

• Id: "@+id/loginBtn"

• Text: "Login"

activity_login.xml


```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout 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=".LoginActivity">
    <TextView
        android:id="@+id/textView"
        android:layout_width="210dp"
        android:layout_height="54dp"
        android:layout_alignParentEnd="true"
        android:layout_alignParentBottom="true"
        android:layout_marginEnd="120dp"
        android:layout_marginBottom="576dp"
        android:text="Login Activity"
```

```xml
            android:textSize="28dp" />
    <EditText
        android:id="@+id/emailEditText"
        android:layout_width="222dp"
        android:layout_height="80dp"
        android:layout_alignParentEnd="true"
        android:layout_alignParentBottom="true"
        android:layout_marginEnd="108dp"
        android:layout_marginBottom="424dp"
        android:ems="10"
        android:hint="Email ID"
        android:inputType="textEmailAddress"
        android:textSize="28dp" />
    <EditText
        android:id="@+id/passwordEditText"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentEnd="true"
        android:layout_alignParentBottom="true"
        android:layout_marginEnd="40dp"
        android:layout_marginBottom="299dp"
        android:ems="10"
        android:hint="Password"
        android:inputType="textPassword"
        android:textSize="28dp" />
    <Button
        android:id="@+id/loginBtn"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentEnd="true"
        android:layout_alignParentBottom="true"
        android:layout_marginEnd="173dp"
        android:layout_marginBottom="189dp"
        android:text="login"
        android:textSize="26dp" />
</RelativeLayout>
```

LoginActivity.java

package com.example.loginapplication;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

```java
import android.widget.EditText;

import android.widget.Toast;

public class LoginActivity extends AppCompatActivity {

EditText emailEditText, passwordEditText;

Button loginBtn;

int counter=2;

 @Override

 protected void onCreate(Bundle savedInstanceState) {

 super.onCreate(savedInstanceState);

 setContentView(R.layout.activity_login);

 emailEditText=findViewById(R.id.emailEditText);

 passwordEditText=findViewById(R.id.passwordEditText);

 loginBtn=findViewById(R.id.loginBtn);

 String registeredEmail=getIntent().getStringExtra("email");

 String registeredPassword=getIntent().getStringExtra("password");

 loginBtn.setOnClickListener(new View.OnClickListener() {

 @Override

 public void onClick(View v) {

 String email=emailEditText.getText().toString();

 String password=passwordEditText.getText().toString();

 if(registeredEmail.equals(email)&& registeredPassword.equals(password))

 {

 Intent intent=new Intent(LoginActivity.this,LoginSuccessActivity.class);

 startActivity(intent);

 }

 else{

 Toast.makeText(LoginActivity.this,"Invalid

Credentials",Toast.LENGTH_LONG).show();

 }
```

```
counter--;

if (counter==0)

{

Toast.makeText(getBaseContext(),"FAILED LOGIN

ATTEMPTS",Toast.LENGTH_LONG).show();

loginBtn.setEnabled(false);

}

}

});

}

}
```

13)Right click on Java folder-> new-> activity->empty activity-> name it as

"LoginSuccess"

14)Go to xml code of design change the layout to "RelativeLayout"

15)Add TextView component & change the following properties:

• Size: 38dp

• Text: "Login Successful"

• Center-Align

activity_login_success.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout 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=".LoginSuccessActivity">
    <TextView
        android:id="@+id/textView2"
```

```xml
        android:layout_width="297dp"
        android:layout_height="190dp"
        android:layout_alignParentEnd="true"
        android:layout_alignParentBottom="true"
        android:layout_marginEnd="42dp"
        android:layout_marginBottom="400dp"
        android:text="Login Successful"
        android:textSize="38dp" />
</RelativeLayout>
```

LoginSuccess.java

```java
package com.example.signupactivity;

import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
public class LoginSuccess extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_login_success);
    }
}
```

Output

Result:

Thus, the Login application is executed successfully.