**Name: Abin Sunil**

**Roll No:1**

**Batch: MCA B**

**Date:**

**MOBILE APPLICATION DEVELOPMENT LAB**

**Experiment No.: 4**

**Aim:**

Implement Validation on various UI Controls.

**Procedure:**

**Xml file**

<?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"

tools:context=".MainActivity"

tools:ignore="HardcodedText">

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_gravity="center"

android:textSize="20dp"

android:layout\_marginTop="20dp"

android:text="Form Validation"/>

<EditText

android:id="@+id/firstName"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginStart="16dp"

android:layout\_marginTop="16dp"

android:layout\_marginEnd="16dp"

android:hint="First Name"

android:inputType="text" />

<EditText

android:id="@+id/lastName"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginStart="16dp"

android:layout\_marginTop="16dp"

android:layout\_marginEnd="16dp"

android:hint="Last Name"

android:inputType="text" />

<EditText

android:id="@+id/email"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginStart="16dp"

android:layout\_marginTop="16dp"

android:layout\_marginEnd="16dp"

android:hint="Email"

android:inputType="textEmailAddress" />

<EditText

android:id="@+id/password"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginStart="16dp"

android:layout\_marginTop="16dp"

android:layout\_marginEnd="16dp"

android:hint="Password"

android:inputType="textPassword" />

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginTop="8dp"

android:gravity="end"

android:orientation="horizontal">

<Button

android:id="@+id/cancelButton"

style="@style/Widget.AppCompat.Button.Borderless"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginEnd="180dp"

android:text="CANCEL"

android:textColor="@color/black" />

<Button

android:id="@+id/proceedButton"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginEnd="20dp"

android:backgroundTint="@color/black"

android:text="PROCEED"

android:textColor="@android:color/white"/>

</LinearLayout>

</LinearLayout>

**Java file**

package com.example.program4;

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;

public class MainActivity extends AppCompatActivity {

Button bCancel, bProceed;

EditText etFirstName, etLastName, etEmail, etPassword;

boolean isAllFieldsChecked = false;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

bProceed = findViewById(R.id.proceedButton);

bCancel = findViewById(R.id.cancelButton);

etFirstName = findViewById(R.id.firstName);

etLastName = findViewById(R.id.lastName);

etEmail = findViewById(R.id.email);

etPassword = findViewById(R.id.password);

bProceed.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

isAllFieldsChecked = CheckAllFields();

if (isAllFieldsChecked) {

Intent i = new Intent(MainActivity.this, MainActivity.class);

startActivity(i);

}

}

});

bCancel.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

MainActivity.this.finish();

System.exit(0);

}

});

}

private boolean CheckAllFields() {

if (etFirstName.length() == 0) {

etFirstName.setError("This field is required");

return false;

}

if (etLastName.length() == 0) {

etLastName.setError("This field is required");

return false;

}

if (etEmail.length() == 0) {

etEmail.setError("Email is required");

return false;

}

if (etPassword.length() == 0) {

etPassword.setError("Password is required");

return false;

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

etPassword.setError("Password must be minimum 8 characters");

return false;

}

return true;

}

}

**Output:**