Buttong.xml

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

<selector xmlns:android="http://schemas.android.com/apk/res/android">

<item android:state\_pressed="true" android:drawable="@drawable/shape"/>

<item android:state\_pressed="false" android:drawable="@color/black"/>

</selector>

Shape.xml

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

<shape xmlns:android="http://schemas.android.com/apk/res/android" android:shape="rectangle">

<gradient android:startColor="#123456" android:type="linear" android:endColor="#456875"/>

<corners android:radius="18dp"></corners>

</shape>

XML file

<?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:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity">

<Button

android:id="@+id/button"

android:layout\_width="146dp"

android:layout\_height="62dp"

android:text="Press"

android:background="@drawable/buttong"

android:textColor="@color/white"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.162"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.863" />

<Switch

android:id="@+id/switch1"

android:layout\_width="154dp"

android:layout\_height="48dp"

android:layout\_marginBottom="204dp"

android:text="Activate"

android:textColor="#AE0C0C"

android:textSize="20dp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.904"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintVertical\_bias="0.903" />

<androidx.constraintlayout.widget.ConstraintLayout

android:id="@+id/Layout"

android:layout\_width="0dp"

android:layout\_height="0dp"

android:layout\_marginStart="1dp"

android:layout\_marginTop="1dp"

android:layout\_marginEnd="1dp"

android:layout\_marginBottom="1dp"

app:layout\_constraintBottom\_toTopOf="@+id/switch1"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent">

</androidx.constraintlayout.widget.ConstraintLayout>

</androidx.constraintlayout.widget.ConstraintLayout>

Java file

package com.example.lab2;

import androidx.appcompat.app.AppCompatActivity;

import androidx.constraintlayout.widget.ConstraintLayout;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.CalendarView;

import android.widget.Switch;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

Button button = findViewById(R.id.button);

Switch switch1=findViewById(R.id.switch1);

// it will give you the reference to the view in XML layouts by searching its ID

ConstraintLayout layout = findViewById(R.id.Layout);

CalendarView cal = new CalendarView(this);

// create the calenderview dynamically

layout.addView(cal);

//adding the calenderView dyanamically to the constraintLayout

switch1.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

if(switch1.isChecked())

{ //if the switch is checked the calender view is removed

// and button is enabled

button.setEnabled(true);

layout.removeView(cal);

Toast.makeText(MainActivity.this,"Button is Enabled",Toast.LENGTH\_LONG).show();

}

else

{//if the switch is unchecked the calender view is removed

// and button is disabled

Toast.makeText(MainActivity.this,"Button is Disabled",Toast.LENGTH\_LONG).show();

button.setEnabled(false);

layout.addView(cal);

}

}

}

);

}

}