r

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Tarea 2:

﻿Realizar una aplicacion que me pida dos numeros por teclado que me sume, reste, multiplique y me muestre el resultado (una edad)

y pueda saber el año de nacimiento de ese resultado es decir de esa edad. Serian minimo 4 botones(sume, reste, multiplique,limpiar) y que me lo muestre en pantalla tambien. Todo eso en un mismo layout una sola vista.

Debe mostrar la fecha con el formato {{{ Fecha de nacimiento de la edad(00) es (0000) }}}

manifiest.xml

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

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

package="com.example.tarea2">

<application

android:allowBackup="true"

android:icon="@mipmap/ic\_launcher"

android:label="@string/app\_name"

android:roundIcon="@mipmap/ic\_launcher\_round"

android:supportsRtl="true"

android:theme="@style/AppTheme">

<activity android:name=".MainActivity">

<intent-filter>

<action android:name="android.intent.action.MAIN" />

<category android:name="android.intent.category.LAUNCHER" />

</intent-filter>

</activity>

</application>

MainActivity.java

package com.example.tarea2;

import androidx.appcompat.app.AppCompatActivity;

import androidx.fragment.app.Fragment;

import androidx.fragment.app.FragmentManager;

import android.os.Bundle;

public class MainActivity extends AppCompatActivity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.*activity\_main*);

FragmentManager fm = getSupportFragmentManager();

Fragment fragment = fm.findFragmentById(R.id.*fragment\_container*);

if(fragment==null){

fragment = new MainFragment();

fm.beginTransaction()

.add(R.id.*fragment\_container*,fragment)

.commit();

}

}

}

MainFragment.java

package com.example.tarea2;

import android.os.Bundle;

import android.view.LayoutInflater;

import android.view.View;

import android.view.ViewGroup;

import android.widget.Button;

import android.widget.EditText;

import android.widget.TextView;

import android.widget.Toast;

import androidx.annotation.NonNull;

import androidx.annotation.Nullable;

import androidx.fragment.app.Fragment;

import java.util.Calendar;

import java.util.GregorianCalendar;

public class MainFragment extends Fragment {

private Button mAddBtn;

private Button mSubstractBtn;

private Button mMultiplyBtn;

private Button mClearBtn;

private EditText mNum1;

private EditText mNum2;

private TextView mOutputTxt;

@Nullable

@Override

public View onCreateView(@NonNull LayoutInflater inflater, @Nullable ViewGroup container, @Nullable Bundle savedInstanceState) {

View v= inflater.inflate(R.layout.*fragment\_main*,null,false);

mAddBtn=(Button) v.findViewById(R.id.*btn\_add*);

mSubstractBtn = (Button)v.findViewById(R.id.*btn\_substract*);

mMultiplyBtn = (Button) v.findViewById(R.id.*btn\_multiply*);

mClearBtn = (Button) v.findViewById(R.id.*btn\_clear*);

mNum1 = (EditText) v.findViewById(R.id.*etxt\_num1*);

mNum2 = (EditText)v.findViewById(R.id.*etxt\_num2*);

mOutputTxt = (TextView) v.findViewById(R.id.*txt\_output*);

mAddBtn.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

String txtNum1 =mNum1.getText().toString();

String txtNum2 = mNum2.getText().toString();

if(areEmpty(txtNum1,txtNum2)){

return;

}

int num1 = Integer.*parseInt*(txtNum1);

int num2 = Integer.*parseInt*(txtNum2);

int sum = add(num1,num2);

updateOutput(sum);

}

});

mSubstractBtn.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

String txtNum1 =mNum1.getText().toString();

String txtNum2 = mNum2.getText().toString();

if(areEmpty(txtNum1,txtNum2)){

return;

}

int num1 = Integer.*parseInt*(txtNum1);

int num2 = Integer.*parseInt*(txtNum2);

int diference = substract(num1,num2);

updateOutput(diference);

}

});

mMultiplyBtn.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

String txtNum1 =mNum1.getText().toString();

String txtNum2 = mNum2.getText().toString();

if(areEmpty(txtNum1,txtNum2)){

return;

}

int num1 = Integer.*parseInt*(txtNum1);

int num2 = Integer.*parseInt*(txtNum2);

int product = multiply(num1,num2);

updateOutput(product);

}

});

mClearBtn.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

clearAll();

}

});

return v;

}

@Override

public void onCreate(@Nullable Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

}

private int add(int num1, int num2){

return num1+num2;

}

private int substract(int num1,int num2){

return num1-num2;

}

private int multiply(int num1,int num2){

return num1\*num2;

}

private void updateOutput(int result){

String output=null;

if(result<0){

output = getString(R.string.*output\_not\_calculated*);

} else {

int year = new GregorianCalendar().get(Calendar.*YEAR*);

int birthYear = year-result;

output = new StringBuilder().append(getString(R.string.*output\_result1*)+ "" +

"("+ result+")" + getString(R.string.*output\_result2*) +" ("+birthYear+")").toString();

}

mOutputTxt.setText(output);

}

private boolean areEmpty(String txtNum1,String txtNum2){

if(txtNum1.equals("")|| txtNum2.equals("") ){

Toast.*makeText*(getContext(),R.string.*field\_empty*,Toast.*LENGTH\_SHORT*).show();

return true;

} else {

return false;

}

}

private void clearAll(){

mOutputTxt.setText(R.string.*output\_default*);

mNum1.setText("");

mNum2.setText("");

}

}

activity\_main.xml

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

<FrameLayout

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

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:id="@+id/fragment\_container"

/>

fragment\_main.xml

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

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

android:orientation="vertical" android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

>

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:orientation="vertical">

<EditText

android:id="@+id/etxt\_num1"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:ems="10"

android:hint="@string/give\_number"

android:inputType="numberSigned" />

<EditText

android:id="@+id/etxt\_num2"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:ems="10"

android:hint="@string/give\_number1"

android:inputType="numberSigned" />

<TextView

android:id="@+id/txt\_output"

android:layout\_width="match\_parent"

android:layout\_height="38dp"

android:hint="@string/output\_default" />

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<Button

android:id="@+id/btn\_add"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:drawableLeft="@drawable/ic\_add\_black\_24dp"

android:text="@string/add"

android:textSize="12sp" />

<Button

android:id="@+id/btn\_substract"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:drawableLeft="@drawable/ic\_minus"

android:text="@string/substract"

android:textSize="12sp" />

<Button

android:id="@+id/btn\_multiply"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:drawableLeft="@drawable/ic\_multiply\_24dp"

android:text="@string/multiply"

android:textSize="12sp" />

</LinearLayout>

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<Button

android:id="@+id/btn\_clear"

android:layout\_width="300dp"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:drawableLeft="@drawable/ic\_clear\_all\_black\_24dp"

android:text="@string/clear\_all" />

</LinearLayout>

</LinearLayout>

</FrameLayout>

colors.xml

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

<resources>

<color name="colorPrimary">#008577</color>

<color name="colorPrimaryDark">#00574B</color>

<color name="colorAccent">#D81B60</color>

</resources>

strings.xml

<resources>

<string name="app\_name">Tarea2</string>

<string name="add">Add</string>

<string name="substract">Substract</string>

<string name="multiply">Multiply</string>

<string name="clear\_all">Clear all</string>

<string name="output\_not\_calculated">The output cannot be calculated</string>

<string name= "output\_result1">Date of birth of the age</string>

<string name="output\_result2">is</string>

<string name="output\_default">The output will displayed here</string>

<string name="give\_number">Tap me and give me a number</string>

<string name="give\_number1">Tap me and give another number</string>

<string name="field\_empty">The fields MUST NOT be empty</string>

</resources>

styles.xml

<resources>

<!-- Base application theme. -->

<style name="AppTheme" parent="Theme.AppCompat.Light.DarkActionBar">

<!-- Customize your theme here. -->

<item name="colorPrimary">@color/colorPrimary</item>

<item name="colorPrimaryDark">@color/colorPrimaryDark</item>

<item name="colorAccent">@color/colorAccent</item>

</style>

</resources>

ic\_add\_black\_24dp.xml

<vector android:height="24dp" android:tint="#02FF00"

android:viewportHeight="24.0" android:viewportWidth="24.0"

android:width="24dp" xmlns:android="http://schemas.android.com/apk/res/android">

<path android:fillColor="#FF000000" android:pathData="M19,13h-6v6h-2v-6H5v-2h6V5h2v6h6v2z"/>

</vector>

ic\_clear\_all\_back\_24dp.xml

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

android:width="24dp"

android:height="24dp"

android:viewportWidth="24.0"

android:viewportHeight="24.0">

<path

android:fillColor="#FF000000"

android:pathData="M5,13h14v-2L5,11v2zM3,17h14v-2L3,15v2zM7,7v2h14L21,7L7,7z"/>

</vector>

ic\_launcher\_background.xml

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

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

android:width="108dp"

android:height="108dp"

android:viewportWidth="108"

android:viewportHeight="108">

<path

android:fillColor="#008577"

android:pathData="M0,0h108v108h-108z" />

<path

android:fillColor="#00000000"

android:pathData="M9,0L9,108"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M19,0L19,108"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M29,0L29,108"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M39,0L39,108"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M49,0L49,108"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M59,0L59,108"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M69,0L69,108"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M79,0L79,108"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M89,0L89,108"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M99,0L99,108"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M0,9L108,9"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M0,19L108,19"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M0,29L108,29"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M0,39L108,39"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M0,49L108,49"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M0,59L108,59"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M0,69L108,69"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M0,79L108,79"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M0,89L108,89"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M0,99L108,99"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M19,29L89,29"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M19,39L89,39"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M19,49L89,49"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M19,59L89,59"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M19,69L89,69"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M19,79L89,79"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M29,19L29,89"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M39,19L39,89"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M49,19L49,89"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M59,19L59,89"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M69,19L69,89"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

<path

android:fillColor="#00000000"

android:pathData="M79,19L79,89"

android:strokeWidth="0.8"

android:strokeColor="#33FFFFFF" />

</vector>

ic\_launcher\_foreground.xml

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

xmlns:aapt="http://schemas.android.com/aapt"

android:width="108dp"

android:height="108dp"

android:viewportWidth="108"

android:viewportHeight="108">

<path

android:fillType="evenOdd"

android:pathData="M32,64C32,64 38.39,52.99 44.13,50.95C51.37,48.37 70.14,49.57 70.14,49.57L108.26,87.69L108,109.01L75.97,107.97L32,64Z"

android:strokeWidth="1"

android:strokeColor="#00000000">

<aapt:attr name="android:fillColor">

<gradient

android:endX="78.5885"

android:endY="90.9159"

android:startX="48.7653"

android:startY="61.0927"

android:type="linear">

<item

android:color="#44000000"

android:offset="0.0" />

<item

android:color="#00000000"

android:offset="1.0" />

</gradient>

</aapt:attr>

</path>

<path

android:fillColor="#FFFFFF"

android:fillType="nonZero"

android:pathData="M66.94,46.02L66.94,46.02C72.44,50.07 76,56.61 76,64L32,64C32,56.61 35.56,50.11 40.98,46.06L36.18,41.19C35.45,40.45 35.45,39.3 36.18,38.56C36.91,37.81 38.05,37.81 38.78,38.56L44.25,44.05C47.18,42.57 50.48,41.71 54,41.71C57.48,41.71 60.78,42.57 63.68,44.05L69.11,38.56C69.84,37.81 70.98,37.81 71.71,38.56C72.44,39.3 72.44,40.45 71.71,41.19L66.94,46.02ZM62.94,56.92C64.08,56.92 65,56.01 65,54.88C65,53.76 64.08,52.85 62.94,52.85C61.8,52.85 60.88,53.76 60.88,54.88C60.88,56.01 61.8,56.92 62.94,56.92ZM45.06,56.92C46.2,56.92 47.13,56.01 47.13,54.88C47.13,53.76 46.2,52.85 45.06,52.85C43.92,52.85 43,53.76 43,54.88C43,56.01 43.92,56.92 45.06,56.92Z"

android:strokeWidth="1"

android:strokeColor="#00000000" />

</vector>

ic\_minus.xml

<vector android:height="24dp" android:tint="#FF0010"

android:viewportHeight="24.0" android:viewportWidth="24.0"

android:width="24dp" xmlns:android="http://schemas.android.com/apk/res/android">

<path android:fillColor="#FF000000" android:pathData="M19,13H5v-2h14v2z"/>

</vector>

ic\_multiply\_24.xml

<vector android:height="24dp" android:tint="#024AFF"

android:viewportHeight="24.0" android:viewportWidth="24.0"

android:width="24dp" xmlns:android="http://schemas.android.com/apk/res/android">

<path android:fillColor="#FF000000" android:pathData="M19,6.41L17.59,5 12,10.59 6.41,5 5,6.41 10.59,12 5,17.59 6.41,19 12,13.41 17.59,19 19,17.59 13.41,12z"/>

</vector>

BuildConfig.java

*/\*\**

*\* Automatically generated file. DO NOT MODIFY*

*\*/*

package com.example.tarea2;

public final class BuildConfig {

public static final boolean *DEBUG* = Boolean.*parseBoolean*("true");

public static final String *APPLICATION\_ID* = "com.example.tarea2";

public static final String *BUILD\_TYPE* = "debug";

public static final String *FLAVOR* = "";

public static final int *VERSION\_CODE* = 1;

public static final String *VERSION\_NAME* = "1.0";

}

BuildConfig.java

*/\*\**

*\* Automatically generated file. DO NOT MODIFY*

*\*/*

package com.example.tarea2.test;

public final class BuildConfig {

public static final boolean *DEBUG* = Boolean.*parseBoolean*("true");

public static final String *APPLICATION\_ID* = "com.example.tarea2.test";

public static final String *BUILD\_TYPE* = "debug";

public static final String *FLAVOR* = "";

public static final int *VERSION\_CODE* = 1;

public static final String *VERSION\_NAME* = "1.0";

}

ExampleInstrumentedTest.java

package com.example.tarea2;

import android.content.Context;

import androidx.test.platform.app.InstrumentationRegistry;

import androidx.test.ext.junit.runners.AndroidJUnit4;

import org.junit.Test;

import org.junit.runner.RunWith;

import static org.junit.Assert.\*;

*/\*\**

*\* Instrumented test, which will execute on an Android device.*

*\**

*\** ***@see*** *<a href="http://d.android.com/tools/testing">Testing documentation</a>*

*\*/*

@RunWith(AndroidJUnit4.class)

public class ExampleInstrumentedTest {

@Test

public void useAppContext() {

// Context of the app under test.

Context appContext = InstrumentationRegistry.*getInstrumentation*().getTargetContext();

*assertEquals*("com.example.tarea2", appContext.getPackageName());

}

}

ExampleUnitTest.java

package com.example.tarea2;

import org.junit.Test;

import static org.junit.Assert.\*;

*/\*\**

*\* Example local unit test, which will execute on the development machine (host).*

*\**

*\** ***@see*** *<a href="http://d.android.com/tools/testing">Testing documentation</a>*

*\*/*

public class ExampleUnitTest {

@Test

public void addition\_isCorrect() {

*assertEquals*(4, 2 + 2);

}

}

ic\_launcher.xml

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

<adaptive-icon xmlns:android="http://schemas.android.com/apk/res/android">

<background android:drawable="@drawable/ic\_launcher\_background" />

<foreground android:drawable="@drawable/ic\_launcher\_foreground" />

</adaptive-icon>

ic\_launcher\_round.xml

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

<adaptive-icon xmlns:android="http://schemas.android.com/apk/res/android">

<background android:drawable="@drawable/ic\_launcher\_background" />

<foreground android:drawable="@drawable/ic\_launcher\_foreground" />

</adaptive-icon>