

# UNIVERSIDAD PRIVADA FRANZ TAMAYO CARRERA INGENIERIA DE SISTEMAS

# TAREA FINAL HITO3 - SOME

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# TAREA FINAL HITO 3

# SISTEMAS MOVILES Y EMBEBIDOS

# 1. Historia de usuario

Dado el enunciado se debe de generar Capturas del onboarding de la App desarrollada.



Figura I

Captura del primer onboarding de presentación (elaboración propia, herramienta Android studio)



Figura II

Captura del segundo onboarding de presentación del contenido (elaboración propia, herramienta Android studio)



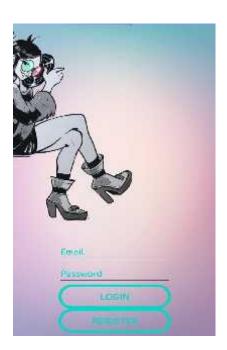


Figura III

Captura del tercer onboarding el cual presenta el login del usuario (elaboración propia, herramienta Android studio)

# 2. Historia de usuario

Mostrar capturas más relevantes de la calculadora y posteriormente añadir el código .java y xml



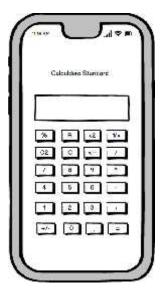
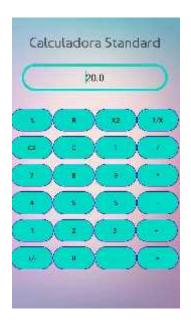


Figura IV

Captura del diseño de la calculadora y el ejemplo propuesto (elaboración propia, herramienta Android studio)



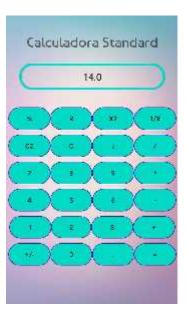


Figura V

Captura de la calculadora en funcionamiento (elaboración propia, herramienta Android studio)

# 2.1. Código Java

```
Onboarding 1
package com.example.hito3tareafinal.Onboarding;
import android.os.Bundle;
import androidx.fragment.app.Fragment;
import androidx.viewpager.widget.ViewPager;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.TextView;
import com.example.hito3tareafinal.R;
 * A simple {@link Fragment} subclass.
public class pag1 extends Fragment {
   private TextView textNext;
    private ViewPager viewPager;
   private View view;
    public pag1() {
        // Required empty public constructor
    }
    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container,
                             Bundle savedInstanceState) {
        //initialize viewpager from main activity
        _initializeInflater(inflater, container);
        //initialize components
        _initialize();
        //add click event to text Next
        _addClickTextNext();
        //return
        return view;
    }
    private void _initialize() {
        viewPager = getActivity().findViewById(R.id.viewPagerContainer);
        textNext = view.findViewById(R.id.textNextWelcome);
    private void _initializeInflater(LayoutInflater inflater, ViewGroup container) {
        view = inflater.inflate(R.layout.fragment_pag1, container, false);
    private void _addClickTextNext() {
        textNext.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                viewPager.setCurrentItem(1);
        });
```

#### Onboarding2

```
package com.example.hito3tareafinal.Onboarding;
import android.os.Bundle;
import androidx.fragment.app.Fragment;
import androidx.viewpager.widget.ViewPager;

import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.TextView;

import com.example.hito3tareafinal.R;

/**
    * A simple {@link Fragment} subclass.
    */
public class pag2 extends Fragment {
    private TextView textNextAwards, textPrevAwards;
    private ViewPager viewPager;
    private View view;

    public pag2() {
```

```
// Required empty public constructor
   @Override
   public View onCreateView(LayoutInflater inflater, ViewGroup container,
                            Bundle savedInstanceState) {
       //initialize viewpager from main activity
       _initializeInflater(inflater, container);
       //initialize components
       _initialize();
       //add click event to text Next and prev text
        _addClickNextAndPrev();
       //return
       return view;
   }
   private void _initialize() {
       viewPager = getActivity().findViewById(R.id.viewPagerContainer);
       textNextAwards = view.findViewById(R.id.textNextTextRecognition);
       textPrevAwards = view.findViewById(R.id.textPrevTextRecognition);
   }
```

```
private void _addClickNextAndPrev() {
    textNextAwards.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            viewPager.setCurrentItem(2);
        }
    });

    textPrevAwards.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            viewPager.setCurrentItem(0);
        }
    });
    }

    private void _initializeInflater(LayoutInflater inflater, ViewGroup container) {
        view = inflater.inflate(R.layout.fragment_pag2, container, false);
    }
}
```

#### Onboarding3- login

```
package com.example.hito3tareafinal.Onboarding;
import android.content.Intent;
import android.os.Bundle;
import androidx.fragment.app.Fragment;
import androidx.viewpager.widget.ViewPager;
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 com.example.hito3tareafinal.R;
 * A simple {@link Fragment} subclass.
public class login extends Fragment {
   private TextView textdonelogin,textprevlogin;
   private ViewPager viewPager;
    private View view;
    private Button btnlogin;
    private EditText etEmailuser, etpasswordd;
    public login() {
        // Required empty public constructor
```

```
@Override
   public View onCreateView(LayoutInflater inflater, ViewGroup container,
                             Bundle savedInstanceState) {
        //initialize view pager from main activity
        _initializeInflater(inflater, container);
        //initialize components
        _initialize();
        //add click event to text Next and prev text
        _addClickDoneAndPrev();
        //return
        return view;
    private void _initialize() {
        viewPager = getActivity().findViewById(R.id.viewPagerContainer);
        textdonelogin = view.findViewById(R.id.textDonelogin);
        textprevlogin = view.findViewById(R.id.textPrevlogin);
        btnlogin = view.findViewById(R.id.idlogin);
   }
```

```
private void _initializeInflater(LayoutInflater inflater, ViewGroup
container) {
    view = inflater.inflate(R.layout.fragment_login, container,
false);
    }

private void _addClickDoneAndPrev() {
    textdonelogin.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            viewPager.setCurrentItem(3);
        }
}
```

```
textprevlogin.setOnClickListener(new View.OnClickListener() {
         @Override
         public void onClick(View v) {
               viewPager.setCurrentItem(1);
         }
    });
    btnlogin.setOnClickListener(new View.OnClickListener() {
         @Override
         public void onClick(View v) {
              Intent intent = new Intent(getActivity(), calculadora.class);
               startActivity(intent);
         }
    });
}
```

```
calculadora
package com.example.hito3tareafinal.Onboarding;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import com.example.hito3tareafinal.R;
public class calculadora extends AppCompatActivity implements View.OnClickListener {
    public EditText txt;
    public Button btn1, btn2, btn3, btn4, btn5, btn6, btn7, btn8, btn9, btn0, btnigual, btnsuma,
btnresta, btndiv, btnmul;
    public Button btncuadrado, btnfraccion, btnmasmenos, btneliminar, btnraiz,btnc,
btnpunto,btnc2,btnporcentaje;
    //public String operador; //no la uso
    public String reserva; // auxiliar que agarra un numero
    public double resultado;
    int operacion; //identifica operaciones
    public double op1= 0.0;
    public double op2;
    int c=0;
    double op3=1.0;
```

```
@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_calculadora);
    initializeVariables();
public void initializeVariables() {
    //para mostrar en pantalla
    txt= findViewById(R.id.pantalla);
    btn1 = findViewById(R.id.num1);
    btn2 = findViewById(R.id.num2);
    btn3 = findViewById(R.id.num3);
    btn4 = findViewById(R.id.num4);
    btn5 = findViewById(R.id.num5);
    btn6 = findViewById(R.id.num6);
    btn5 = findViewById(R.id.num5);
    btn6 = findViewById(R.id.num6);
    btn7 = findViewById(R.id.num7);
    btn8 = findViewById(R.id.num8);
    btn9 = findViewById(R.id.num9);
    btn0 = findViewById(R.id.num0);
```

```
//operaiones
       btnsuma = findViewById(R.id.sum);
       btnresta=findViewById(R.id.resta2);
       btndiv=findViewById(R.id.div);
       btnmul=findViewById(R.id.multi);
       btnigual = findViewById(R.id.igual);
        //operaciones extra
       btncuadrado = findViewById(R.id.cuadrado);
       btnfraccion = findViewById(R.id.fraccion);
       btnmasmenos = findViewById(R.id.masmenos);
       btneliminar = findViewById(R.id.eliminar);
       btnraiz = findViewById(R.id.numraiz);
       btnc = findViewById(R.id.numc);
       btnpunto = findViewById(R.id.punto);
       btnc2 = findViewById(R.id.numc2);
       btnporcentaje = findViewById(R.id.porcentaje);
       txt.setOnClickListener(this);
       btn1.setOnClickListener(this);
       btn2.setOnClickListener(this);
       btn3.setOnClickListener(this);
       btn4.setOnClickListener(this);
       btn5.setOnClickListener(this);
       btn6.setOnClickListener(this);
       btn7.setOnClickListener(this);
       btn8.setOnClickListener(this);
       btn9.setOnClickListener(this);
       btn0.setOnClickListener(this);
       btnsuma.setOnClickListener(this);
       btnigual.setOnClickListener(this);
       btnresta.setOnClickListener(this);
       btndiv.setOnClickListener(this);
       btnmul.setOnClickListener(this);
       btncuadrado.setOnClickListener(this);
       btnfraccion.setOnClickListener(this);
       btnmasmenos.setOnClickListener(this);
       btneliminar.setOnClickListener(this);
       btnraiz.setOnClickListener(this);
       btnc.setOnClickListener(this);
       btnpunto.setOnClickListener(this);
       btnc2.setOnClickListener(this);
       btnporcentaje.setOnClickListener(this);
```

```
@Override
public void onClick(View v) {
    switch (v.getId()) {
        case R.id.num1:
            String valor = txt.getText().toString();
            valor = valor + "1";
            txt.setText(valor);
            break;
        case R.id.num2:
            String valor2 = txt.getText().toString();
            valor2 = valor2 + "2";
            txt.setText(valor2);
            break;
        case R.id.num3:
            String valor3 = txt.getText().toString();
            valor3 = valor3 + "3";
            txt.setText(valor3);
            break;
        case R.id.num4:
            String valor4 = txt.getText().toString();
            valor4 = valor4 + "4";
            txt.setText(valor4);
            break;
        case R.id.num5:
            String valor5 = txt.getText().toString();
            valor5= valor5 + "5";
            txt.setText(valor5);
            break;
        case R.id.num6:
            String valor6 = txt.getText().toString();
            valor6 = valor6 + "6";
            txt.setText(valor6);
            break;
        case R.id.num7:
            String valor7 = txt.getText().toString();
            valor7 = valor7 + "7";
            txt.setText(valor7);
            break;
        case R.id.num8:
            String valor8 = txt.getText().toString();
            valor8 = valor8 + "8";
            txt.setText(valor8);
            break;
        case R.id.num9:
            String valor9 = txt.getText().toString();
            valor9 = valor9 + "9";
            txt.setText(valor9);
            break;
        case R.id.num0:
            String valor0 = txt.getText().toString();
            valor0 = valor0 + "0";
            txt.setText(valor0);
            break;
```

```
case R.id.sum:
    suma();
    break;
case R.id.resta2:
   resta();
    break;
case R.id.multi:
    multi();
    break;
case R.id.div:
    div();
    break;
case R.id.igual:
    identificarOperacion();
    break;
case R.id.cuadrado:
    cuadrado();
    break;
case R.id.porcentaje:
    porcentaje();
    break;
case R.id.numc:
    botonC();
    break;
case R.id.masmenos:
   ConvertirMasMenos();
    break;
case R.id.fraccion:
    funcionfracccion();
    break;
case R.id.punto:
    puntoo();
    break;
case R.id.eliminar:
    flechaEliminar();
    break;
case R.id.numraiz:
    botonR();
    break;
case R.id.numc2:
    botonC2();
    break;
```

```
public void identificarOperacion(){
        try {
            String reserva2 = txt.getText().toString();
            op2 = Double.parseDouble(reserva2);
        catch (NumberFormatException e){
        //limpiar
        txt.setText("");
        if(operacion==1)
            resultado = op1+ op2;
            txt.setText(""+resultado);
        else if(operacion==2)
            resultado = op1-op2;
txt.setText(""+resultado);
        else if(operacion==3){
            resultado =op1*op2;
            txt.setText(""+resultado);
        else if (operacion==4){
            if(op2 == 0){
                txt.setText("No es posible dividir entre 0");
                // Toast.makeText.getText(), "no es posible dividir entre 0 ",  
Toast.LENGTH_LONG).show();
            }
            else {
                resultado = op1 / op2;
                 txt.setText(""+resultado);
        }
        op1 = 0.0;
        op3=1.0;
        c=0;
    }
```

```
public void suma() {
        //if (operador.equals("+")) {
             Resultado = Double.parseDouble(reserva) +
Double.parseDouble(txt.getText().toString());
        // txt.setText(String.valueOf(Resultado));
        reserva = txt.getText().toString();
        op1 = op1 + Double.parseDouble(reserva);
        txt.setText("");
        operacion=1;
    }
    public void resta() {
    // if (operador.equals("-")) {
        //Resultado = Double.parseDouble(reserva) -
Double.parseDouble(txt.getText().toString());
        //
               txt.setText(String.valueOf(Resultado));
        // }
        op1=0;
        if(c<1)
            reserva = txt.getText().toString();
            op1= (Double.parseDouble(reserva))- op1;
            op3=op1;
        else if(c>0)
            reserva = txt.getText().toString();
            op1 = op3 -(Double.parseDouble(reserva));
        //limpiamos la pantalla
        txt.setText("");
        operacion =2;
        C++;
    }
```

```
public void multi() {
        // if (operador.equals("*")) {
               Resultado = Double.parseDouble(reserva) *
        //
Double.parseDouble(txt.getText().toString());
               txt.setText(String.valueOf(Resultado));
        //
        op1 =1;
        reserva = txt.getText().toString();
        op1 = op3 * Double.parseDouble(reserva);
        op3 = op1;
        //limpiar
        txt.setText("");
        operacion= 3;
    public void div() {
        //if (operador.equals("/")) {
             Resultado = Double.parseDouble(reserva) /
Double.parseDouble(txt.getText().toString());
              txt.setText(String.valueOf(Resultado));
        //}
        if(c<1){
            reserva = txt.getText().toString();
            op1 = Double.parseDouble(reserva)/op3;
            op3 = op1;
        }
        else if(c>0)
            reserva = txt.getText().toString();
            op1 = op3/Double.parseDouble(reserva);
            op3 =op1;
        //limpiar
        txt.setText("");
        operacion= 4;
        C++;
    }
```

```
public void cuadrado(){
    String a = txt.getText().toString();
    Double cuadra = Double.parseDouble(a);
    Double respuesta = Math.pow(cuadra,2);
    txt.setText(""+respuesta);
}

public void porcentaje(){
    String b = txt.getText().toString();
    Double porcen = Double.parseDouble(b);
    Double respe = porcen /100;
    txt.setText(""+respe);
}

public void botonC(){
    txt.setText("");
}
```

```
public void ConvertirMasMenos(){
        String m = txt.getText().toString();
        Double masmenos = Double.parseDouble(m);
        Double respes = masmenos * -1;
        txt.setText(""+respes);
    public void funcionfracccion(){
        String m1 = txt.getText().toString();
        Double mas1 = Double.parseDouble(m1);
        Double respes1 = 1/mas1;
        txt.setText(""+respes1);
    }
   public void puntoo(){
        String c = txt.getText().toString();
        if(c.length() <=0)</pre>
        {
            txt.setText("0.");
        }
        else
        {
            c=c+".";
        }
        txt.setText(c);
    public void flechaEliminar(){
        String cc = txt.getText().toString();
        if(cc.length()>0)
            cc = cc.substring(0,cc.length()-1);
            txt.setText(cc);
        }
    public void botonR(){
        String cc1 = txt.getText().toString();
        if(cc1.length()>0) {
            Double res = Math.sqrt(Double.parseDouble(cc1));
            txt.setText(""+res);
        }
   public void botonC2(){
        txt.setText("");
   }
}
```

#### 2.2 Codigo XML

#### Onboarding 1

```
<ImageView
        android:id="@+id/imgWelcome"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:scaleType="centerCrop"
        android:layout_gravity="center"
        android:layout_marginTop="0dp"
        android:src="@drawable/d"
       />
    <TextView
        android:id="@+id/textTitle1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="40dp"
        android:fontFamily="@font/aclonica"
        android:gravity="center"
        android:text="@string/title1"
        android:textColor="@android:color/background_light"
        android:textSize="28sp" />
    <TextView
        android:id="@+id/textDesc1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout marginTop="20dp"
        android:fontFamily="@font/baumans"
        android:gravity="center"
        android:text="@string/desc1"
        android:textColor="@android:color/background_light"
        android:textSize="18sp" />
```

```
LinearLayout
        android:id="@+id/layoutNext"
        android:layout_width="match_parent"
        android:layout height="match parent"
        android:orientation="horizontal">
            android:id="@+id/textNextWelcome"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="bottom|end"
            android:layout_marginEnd="8dp"
            android:layout_marginBottom="2dp"
            android:layout_weight="1"
            android:fontFamily="@font/baumans"
            android:gravity="bottom|end"
            android:text="@string/next"
            android:textColor="@android:color/white"
            android:textSize="20sp"
            android:clickable="true"
            android:focusable="true"/>
</LinearLayout>
```

#### Onboarding 2

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

```
android:src="@drawable/go" />
<TextView
    android:id="@+id/textTitle2"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginTop="40dp"
    android:fontFamily="@font/aclonica"
    android:gravity="center"
    android:text="@string/title2"
    android:textColor="@android:color/background_light"
    android:textSize="28sp" />
<TextView
    android:id="@+id/textDesc2"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginTop="20dp"
    android:fontFamily="@font/baumans"
    android:gravity="center"
    android:text="@string/desc2"
    android:textColor="@android:color/background_light"
    android:textSize="18sp" />
```

```
<LinearLayout
       android:id="@+id/layoutNext"
       android:layout_width="match_parent"
       android:layout_height="match_parent"
       android:orientation="horizontal">
        <TextView
           android:id="@+id/textPrevTextRecognition"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="bottom|start"
            android:layout_marginStart="8dp"
            android:layout_marginBottom="2dp"
            android:layout_weight="1"
            android:clickable="true"
            android:focusable="true"
            android:fontFamily="@font/baumans"
            android:gravity="bottom|start"
            android:text="@string/back"
            android:textColor="@android:color/background_light"
            android:textSize="20sp" />
```

```
<TextView
            android:id="@+id/textNextTextRecognition"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="bottom|end"
            android:layout_marginEnd="8dp"
            android:layout_marginBottom="2dp"
            android:layout_weight="1"
            android:clickable="true"
            android:focusable="true"
            android:fontFamily="@font/baumans"
            android:gravity="bottom|end"
            android:text="@string/next"
            android:textColor="@android:color/background_light"
            android:textSize="20sp" />
    </LinearLayout>
</LinearLayout>
```

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"</pre>
   xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
   android:layout_height="match_parent"
   tools:context=".Onboarding.login"
    android:orientation="vertical"
   android:background="@drawable/bgg">
    <ImageView</pre>
        android:id="@+id/imgIns"
        android:layout_width="wrap_content"
        android:layout_height="390dp"
        android:layout_gravity="center"
        android:layout_marginTop="0dp"
        android:scaleType="centerCrop"
        android:src="@drawable/imge"
        android:layout_marginEnd="100dp"
        />
    <LinearLayout</pre>
        android:layout width="match parent"
        android:layout_height="match_parent"
        android:orientation="vertical"
        android:layout_marginTop="40dp">
```

```
<EditText
            android:id="@+id/etemail"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:layout_marginLeft="80dp"
            android:layout_marginRight="80dp"
            android:fontFamily="@font/baumans"
            android:gravity="left"
            android:hint="@string/textemail"
            android:textColorHint="@color/colorAccent"
            android:textColor="@android:color/background_light"
            android:textSize="18sp" />
        <EditText
            android:id="@+id/etpassword"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:layout_marginLeft="80dp"
            android:layout_marginRight="80dp"
            android:fontFamily="@font/baumans"
```

android:gravity="left"

```
android:hint="@string/textpassword"
    android:textColorHint="@color/colorAccent"
    android:textColor="@android:color/background_light"
    android:textSize="18sp" />
<Button
    android:id="@+id/idlogin"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginLeft="80dp"
    android:layout_marginRight="80dp"
    android:background="@drawable/ovalo"
    android:text="@string/login"
    android:textColor="@color/colorAccent"
    android:textSize="18sp">
</Button>
<Button
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginLeft="80dp"
    android:layout_marginRight="80dp"
    android:background="@drawable/ovalo"
    android:text="@string/register"
    android:textColor="@color/colorAccent"
    android:textSize="18sp">
</Button>
```

```
<LinearLayout
    android:id="@+id/layoutNextlogin"
    android:layout width="match parent"
   android:layout_height="match_parent"
   android:orientation="horizontal">
    <TextView
       android:id="@+id/textPrevlogin"
       android:layout_width="60dp"
        android:layout_height="wrap_content"
        android:layout_gravity="bottom|start"
        android:layout marginStart="8dp"
       android:layout_marginBottom="2dp"
       android:layout weight="1"
        android:clickable="true"
        android:focusable="true"
        android:fontFamily="@font/baumans"
       android:gravity="bottom|start"
       android:text="@string/back"
       android:textColor="@android:color/background_light"
```

```
android:textSize="20sp" />
            <TextView
                android:id="@+id/textDonelogin"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_gravity="bottom|end"
                android:layout_marginEnd="8dp"
                android:layout_marginBottom="2dp"
                android:gravity="bottom|end"
                android:layout_weight="1"
                android:text="@string/done"
                \verb"android:textColor="@android:color/background_light"" \\
                android:textSize="20sp"
                android:fontFamily="@font/baumans"
                android:clickable="true"
                android:focusable="true"/>
        </LinearLayout>
    </LinearLayout>
</LinearLayout>
```

```
Calculadora
<?xmlversion="1.0"encoding="utf-8"?>
<LinearLayoutxmlns:android="http://schemas.android.com/apk/res/android"</pre>
    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"
    android:background="@drawable/bgg"
    tools:context=".Onboarding.calculadora">
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:gravity="center"
        android:layout_marginTop="40dp"
        android:orientation="vertical"
    <TextView
        android:id="@+id/textview1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="CalculadorStandard"
```

```
android:textSize="30dp"
        android:fontFamily="@font/baumans"
        />
        <EditText
            android:id="@+id/pantalla"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:background="@drawable/ovalo"
            android:layout_margin="27dp"
            android:gravity="center"
            android:padding="15dp"
            android:textSize="20sp"
        <LinearLayout
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginTop="10dp"
            <Button
                android:id="@+id/porcentaje"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:text="@string/porcentaje"
                android:background="@drawable/ovalo_botones"/>
```

```
<Button
        android:id="@+id/numraiz"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/R"
        android:background="@drawable/ovalo_botones"/>
    <Button
        android:id="@+id/cuadrado"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/X2"
        android:background="@drawable/ovalo_botones"/>
    <Button
        android:id="@+id/fraccion"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/fraccion"
        android:background="@drawable/ovalo_botones"/>
</LinearLayout>
```

```
<LinearLayout</pre>
    android:layout width="wrap content"
    android:layout_height="wrap_content"
    android:layout_marginTop="10dp">
    android:id="@+id/numc2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="@string/c2"
    android:background="@drawable/ovalo_botones"/>
    <Button
        android:id="@+id/numc"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/C"
        android:background="@drawable/ovalo_botones"/>
    <Button
        android:id="@+id/eliminar"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/flecha"
        android:background="@drawable/ovalo_botones"/>
    <Button
        android:id="@+id/div"
        android:layout width="wrap content"
        android:layout_height="wrap_content"
        android:text="@string/divi'
        android:background="@drawable/ovalo_botones"/>
</LinearLayout>
```

```
<LinearLayout
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginTop="10dp">
    android:id="@+id/num7"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="@string/num7"
    android:background="@drawable/ovalo_botones"/>
<Button
    android:id="@+id/num8"
    android:layout_width="wrap_content"
    android:layout height="wrap content"
    android:text="@string/num8"
    android:background="@drawable/ovalo_botones"/>
<Button
    android:id="@+id/num9"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="@string/num9"
    android:background="@drawable/ovalo_botones"/>
```

```
<Button
    android:id="@+id/multi"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="@string/multi"
    android:background="@drawable/ovalo_botones"/>
</LinearLayout>
    <LinearLayout
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="10dp">
        <Button
            android:id="@+id/num4"
            android:layout_width="wrap_content"
            android:layout height="wrap content"
            android:text="@string/num4"
            android:background="@drawable/ovalo_botones"/>
        <Button
            android:id="@+id/num5"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="@string/num5"
            android:background="@drawable/ovalo_botones"/>
```

```
<Button
        android:id="@+id/num6"
        android:layout width="wrap content"
        android:layout_height="wrap_content"
        android:text="@string/num6"
        android:background="@drawable/ovalo_botones"/>
    <Button
        android:id="@+id/resta2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/resta"
        android:background="@drawable/ovalo_botones"/>
</LinearLayout>
    <LinearLayout</pre>
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="10dp"
        <Button
            android:id="@+id/num1"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="@string/num1"
            android:background="@drawable/ovalo_botones"/>
        <Button
            android:id="@+id/num2"
            android:layout width="84dp"
            android:layout_height="47dp"
```

```
android:text="@string/num2"
            android:background="@drawable/ovalo_botones"/>
            android:id="@+id/num3"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="@string/num3"
            android:background="@drawable/ovalo_botones"/>
        <Button
            android:id="@+id/sum"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="@string/suma"
            android:background="@drawable/ovalo_botones"/>
    </LinearLayout>
<LinearLayout
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="10dp">
        <Button
        android:id="@+id/masmenos"
        android:layout_width="wrap_content"
        android:layout height="wrap content"
        android:text="@string/botonultimo"
        android:background="@drawable/ovalo_botones"/>
        <Button
            android:id="@+id/num0"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="@string/num0"
            android:background="@drawable/ovalo_botones"/>
```

# 3. Historia de usuario

Genera un video de la application corriendo

Enlace: https://drive.google.com/open?id=15RNnspT4Z8VVWOMlmDcAMuR\_p27R1Rws

Enlace de la aplicacion: <a href="https://github.com/Adriana-Contreras/some/tree/master/Hito3">https://github.com/Adriana-Contreras/some/tree/master/Hito3</a>