APLICATIVO JOGO DA PALAVRA

Código res\values\styles.xml

```
<resources>

  <!-- Base application theme. -->
  <style name="AppTheme" parent="Theme.AppCompat.Light.NoActionBar">
    <!-- Customize your theme here. -->
    <item name="colorPrimary">@color/colorPrimary</item>
    <item name="colorPrimaryDark">@color/colorPrimaryDark</item>
    <item name="colorAccent">@color/colorAccent</item>
  </style>

</resources>
```

Código res\values\colors.xml

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

```
<resources>
   <color name="colorPrimary">#008577</color>
   <color name="colorPrimaryDark">#474946</color>
   <color name="colorAccent">#D81B60</color>

   <color name="colorPurple">#AB47BC</color>
   <color name="colorDarkPurple">#641570</color>
   <color name="colorThinMagenta">#F196BA</color>
   <color name="colorRed">#FF0000</color>
   <color name="colorDarkRed">#7E0A0A</color>

   <color name="colorGradientStart">#474946</color>
   <color name="colorGradientCenter">#AB47BC</color>
   <color name="colorGradientEnd">#181818</color>
</resources>
```

Código res\anim\smalltobig.xml

```
<?xml version="1.0" encoding="utf-8"?>
<set xmlns:android="http://schemas.android.com/apk/res/android"
   android:interpolator="@android:anim/accelerate_interpolator"
   android:startOffset="300"
   >

   <scale
      android:fromYScale="0.0"
      android:fromXScale="0.0"
      android:toYScale="1.0"
      android:toXScale="1.0"
      android:duration="400"
```

```
    android:pivotY="50%"

    android:pivotX="50%"

    />


</set>
```

Arquivo de imagem res\drawable\marcos.png

Código res\drawable\toast\background_image.xml

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

<layer-list xmlns:android="http://schemas.android.com/apk/res/android">


  <item>

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

      android:shape="rectangle"

      >

    <corners android:bottomRightRadius="10dp"

      android:radius="10dp"

      />

    <gradient android:angle="45"

      android:endColor="@color/colorDarkRed"

      android:startColor="@color/colorRed"

      android:gradientRadius="270"
```

```
        android:type="linear"
        />

        <size android:width="123dp"
          android:height="41dp"/>

        <stroke android:dashGap="2dp"
          android:dashWidth="2dp"
          android:width="2dp"
          android:color="#FFFFFF"/>

      </shape>
    </item>

    <item android:drawable="@drawable/marcos"
      android:width="32dp"
      android:height="32dp"
      android:left="2dp"
      android:gravity="center_vertical">

    </item>

</layer-list>
```

Código arquivo res\drawable\back.xml

```
<?xml version="1.0" encoding="utf-8"?>
<shape xmlns:android="http://schemas.android.com/apk/res/android"
  android:shape="rectangle">
```

```
    <solid android:color="@android:color/white"/>

    <stroke android:width="2dp"
        android:color="@color/colorThinMagenta"/>

    <corners android:radius="8dp"/>

    <size android:width="61dp"
        android:height="68dp"/>

</shape>
```

Código arquivo res\drawable\bgapp.xml

```
<?xml version="1.0" encoding="utf-8"?>
<shape xmlns:android="http://schemas.android.com/apk/res/android"
    android:shape="rectangle">

    <solid android:color="@android:color/white"/>

    <stroke android:width="2dp"
        android:color="@color/colorThinMagenta"/>

    <corners android:radius="8dp"/>

    <size android:width="61dp"
        android:height="68dp"/>

</shape>
```

Código arquivo res\layout\activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
  xmlns:tools="http://schemas.android.com/tools"
  android:id="@+id/coordinatorLayout"
  android:layout_width="match_parent"
  android:layout_height="match_parent"
  android:background="@drawable/bgapp">

  <ScrollView
    android:layout_width="match_parent"
    android:layout_height="match_parent">

    <LinearLayout
      android:layout_width="match_parent"
      android:layout_height="wrap_content"
      android:orientation="vertical" >


      <TextView
        android:id="@+id/textViewScreen"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center"
        android:layout_marginTop="30dp"
        android:text="Vamos Começar!"
        android:textColor="#FFF"
        android:textSize="22sp" />
```

```
<LinearLayout
  android:layout_width="290dp"
  android:layout_height="150dp"
  android:layout_gravity="center"
  android:layout_marginTop="20dp"
  android:background="@drawable/bgquestion"
  android:orientation="vertical">

  <TextView
    android:id="@+id/textViewQuestion"
    android:layout_width="200dp"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:layout_marginTop="24dp"
    android:lineSpacingExtra="2dp"
    android:text="Palavra representa uma fruta em português"
    android:textAlignment="center"
    android:textColor="#AB47BC"
    android:textSize="22sp" />

</LinearLayout>

<EditText
  android:id="@+id/editTextInput"
  android:layout_width="290dp"
  android:layout_height="80dp"
  android:layout_gravity="center"
  android:layout_marginTop="30dp"
  android:layout_marginBottom="10dp"
  android:background="@drawable/bgpurple"
  android:clickable="false"
  android:focusable="false"
  android:gravity="center"
  android:padding="10dp"
  android:textColor="#AB47BC"
  android:textSize="32sp" />

<TextView
  android:text="Letras"
  android:textSize="24dp"
  android:textColor="#FFF"
  android:id="@+id/textViewTitle"
  android:layout_marginRight="28dp"
  android:layout_marginLeft="28dp"
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  android:layout_marginBottom="16dp"/>



<LinearLayout
  android:id="@+id/layoutParentLine1"
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  android:layout_marginLeft="24dp"
  android:layout_marginRight="24dp"
  android:layout_marginBottom="16dp"
  android:orientation="horizontal" />

<LinearLayout
```

```
        android:id="@+id/layoutParentLine2"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginLeft="24dp"
        android:layout_marginRight="24dp"
        android:layout_marginBottom="16dp"
        android:orientation="horizontal" />


      <LinearLayout
        android:id="@+id/layoutParentLine3"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginLeft="24dp"
        android:layout_marginRight="24dp"
        android:layout_marginBottom="16dp"
        android:orientation="horizontal" />


    </LinearLayout>


  </ScrollView>
</androidx.constraintlayout.widget.ConstraintLayout>
```

Código arquivo res\layout\activity_show_correct.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
  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"
android:orientation="vertical"
android:background="@drawable/bgapp"
tools:context=".MainActivity">

<TextView
   android:id="@+id/textScreen"
   android:layout_width="wrap_content"
   android:layout_height="wrap_content"
   android:layout_gravity="center"
   android:layout_marginTop="40dp"
   android:text="Ponto de Verificação"
   android:textColor="#FFF"
   android:textSize="22sp" />



<ImageView
   android:id="@+id/bigboss"
   android:layout_width="180dp"
   android:layout_height="180dp"
   android:layout_gravity="center"
   android:layout_marginTop="30dp"
   android:src="@drawable/marcos" />



<TextView
   android:id="@+id/textQuestion"
   android:layout_width="230dp"
```

```
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:layout_marginTop="20dp"
    android:text="Aí sim! Parabéns! Vamos para a próxima?"
    android:textAlignment="center"
    android:textColor="#FFF"
    android:textSize="28sp" />

  <Button
    android:id="@+id/textTitle"
    android:layout_width="280dp"
    android:layout_height="70dp"
    android:layout_gravity="center"
    android:layout_marginTop="40dp"
    android:background="@drawable/bgbtn"
    android:paddingBottom="10dp"
    android:text="Continuar"
    android:textAllCaps="false"
    android:textColor="@color/colorPurple"
    android:textSize="28sp" />

  <TextView
    android:id="@+id/textBtn"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:layout_marginTop="30dp"
    android:text="Voltar ao Início"
    android:textColor="#AD87FF"
    android:textSize="22sp" />
```

```
</LinearLayout>
```

Código arquivo MainActivity.java

```
package com.example.jogodapalavra;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.os.Bundle;
import android.view.Gravity;
import android.view.View;
import android.widget.EditText;
import android.widget.LinearLayout;
import android.widget.TextView;
import android.widget.Toast;

import org.w3c.dom.Text;

import java.util.ArrayList;
import java.util.Random;

public class MainActivity extends AppCompatActivity {

    private LinearLayout mLinearLayoutLine1, mLinearLayoutLine2, mLinearLayoutLine3;
    private EditText mEditTextInput;
    private TextView mTextViewScreen, mTextViewQuestion, mTextViewTitle;

    private Random rnd = new Random();
private int pressCounter = 0;

private int maxPresCounter = 0;

private int lengthKeysEmpty = 0;


private String[] keys;

ArrayList<String> mStringArrayList = new ArrayList<String>();


private String textAnswer = "PITANGATUBA";  // uva   laranja


private void adicionarLetraExtra(){

  String[] listaLetras = {"X", "Y", "Z", "W", "K", "B", "G", "E" };

  int posicao = rnd.nextInt( listaLetras.length + 1  );

  mStringArrayList.add( listaLetras[posicao] ) ;

}


private void adicionarEspacosVazios(String textAnswer){

  lengthKeysEmpty=0;

  if( textAnswer.length() < 5 ){

    lengthKeysEmpty = 5 - textAnswer.length() -1;

  } else if( textAnswer.length() < 10 ) {

    lengthKeysEmpty = 10 - textAnswer.length() -1;

  } else if ( textAnswer.length() < 15 ) {

    lengthKeysEmpty = 15 - textAnswer.length() -1;

  }


  for(int j = 1; j <= lengthKeysEmpty ; j++){

    mStringArrayList.add("");

  }
```

```
}

private void obterMinhasLetras(String textAnswer){
  for(int i = 0; i < textAnswer.length(); i++){
    mStringArrayList.add(String.valueOf(textAnswer.charAt(i)));
  }
  adicionarLetraExtra();
  adicionarEspacosVazios(textAnswer);
}

private String[] embaralharListaLetras(String[] param){
  int posicao = 0;
  String s = "";
  for(int i = param.length-1 ; i > 0; i--) { //TORRE DE HANOI
    posicao = rnd.nextInt( i + 1);
    s = param[posicao];
    param[posicao] = param[i];
    param[i] = s;
    if(s==""){
      lengthKeysEmpty++;
    }
  }

  return param;
}

private void fazerValidacaoInput(){
  if( mEditTextInput.getText().toString().equals(textAnswer) ){
    Intent intent = new Intent(this, ShowCorrectActivity.class);
    startActivity(intent);
```

```
            mEditTextInput.setText("");
        } else {
            Toast toastMessage = Toast.makeText(getApplicationContext(), "Errada", Toast.LENGTH_SHORT);
            View toastView = toastMessage.getView();
            toastView.setBackgroundResource(R.drawable.toast_background_image);
            toastMessage.show();
            pressCounter=0;
            mEditTextInput.setText("");
            keys = embaralharListaLetras(keys);
            mLinearLayoutLine1.removeAllViews();
            mLinearLayoutLine2.removeAllViews();
            mLinearLayoutLine3.removeAllViews();
            criarVisualizacaoLetras(keys);
        }
    }


    private void criarVisualizacaoLetras(String[] keys){


        int qteLetras = 0;
        for( String key : keys ){
            if( qteLetras < 5 ){
                adicionarView( (LinearLayout)findViewById(R.id.layoutParentLine1) , key,
(EditText)findViewById(R.id.editTextInput) );  //line 1
            } else if ( qteLetras < 10) {
                adicionarView( (LinearLayout)findViewById(R.id.layoutParentLine2) , key,
(EditText)findViewById(R.id.editTextInput) );  //line 2
            } else if( qteLetras < 15) {
                adicionarView( (LinearLayout)findViewById(R.id.layoutParentLine3) , key,
(EditText)findViewById(R.id.editTextInput) );  //line 3
            } else{
                Toast.makeText(this, "Palavra muito grande", Toast.LENGTH_SHORT).show();
```

```
      }
      qteLetras++;
    }

  }

  private void adicionarView(LinearLayout viewParent, final String text, final EditText editText){
    LinearLayout.LayoutParams linearLayoutParams = new
LinearLayout.LayoutParams(LinearLayout.LayoutParams.WRAP_CONTENT,
        LinearLayout.LayoutParams.WRAP_CONTENT, 1.0f);
    linearLayoutParams.rightMargin=20;
    final TextView textView = new TextView(this);
    textView.setLayoutParams(linearLayoutParams);
    textView.setBackground(this.getResources().getDrawable(R.drawable.back));
    textView.setTextColor(this.getResources().getColor(R.color.colorPurple));
    textView.setGravity(Gravity.CENTER);
    textView.setText(text);
    textView.setClickable(true);
    textView.setFocusable(true);
    textView.setTextSize(32);

    textView.setOnClickListener(new View.OnClickListener() {
      @Override
      public void onClick(View v) {
        if(pressCounter < maxPresCounter){
          if(pressCounter == 0){
            editText.setText("");
          }
          editText.setText(editText.getText().toString() + text);
          textView.animate().alpha(0).setDuration(300);
```

```
                if(text != ""){
                    pressCounter++;
                }
                if(pressCounter == maxPresCounter){
                    fazerValidacaoInput();
                }
                textView.setOnClickListener(null); //corrige bug pressionamento no vácuo
            }
        }
    });

    viewParent.addView(textView);

}



@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);

    mEditTextInput = findViewById(R.id.editTextInput);

    mLinearLayoutLine1 = findViewById(R.id.layoutParentLine1);
    mLinearLayoutLine2 = findViewById(R.id.layoutParentLine2);
    mLinearLayoutLine3 = findViewById(R.id.layoutParentLine3);

    mTextViewQuestion = findViewById(R.id.textViewQuestion);
    mTextViewScreen = findViewById(R.id.textViewScreen);
    mTextViewTitle = findViewById(R.id.textViewTitle);
```

```
        maxPresCounter = textAnswer.length();


        obterMinhasLetras(textAnswer);


        keys = mStringArrayList.toArray(new String[mStringArrayList.size()]);
        keys = embaralharListaLetras(keys);


        criarVisualizacaoLetras(keys);


    }
}
```

Código arquivo ShowCorrectActitivy.java

```
package com.example.jogodapalavra;


import android.os.Bundle;
import android.view.animation.Animation;
import android.view.animation.AnimationUtils;
import android.widget.ImageView;


import androidx.appcompat.app.AppCompatActivity;


public class ShowCorrectActivity extends AppCompatActivity {


    private ImageView mBigImage;
    private Animation mSmallToBig;


    @Override
    protected void onCreate(Bundle savedInstance){
        super.onCreate(savedInstance);
        setContentView(R.layout.activity_show_correct);

        mSmallToBig = AnimationUtils.loadAnimation(this, R.anim.smalltobig);
        mBigImage = findViewById(R.id.bigboss);
        mBigImage.startAnimation(mSmallToBig);

    }

}
```

Código arquivo AndroidManifest.xml

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.jogodapalavra">
    <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>

      <activity android:name=".ShowCorrectActivity"
        android:parentActivityName=".MainActivity"></activity>

    </application>
</manifest>
```