



**ABAS**

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# Adicionando as Bibliotecas

Para criarmos nosso App com Abas, precisaremos adicionar algumas bibliotecas que servirão de recursos para trabalharmos com essa configuração, para isso vamos acessar:

<https://github.com/ogaclejapan/SmartTabLayout> copie e adicione essas duas linhas de código em **build.gradle(Module:app)**, em seguida clique em [Sync Now](#) para fazer o download.

```
implementation 'com.ogaclejapan.smarttablayout:library:2.0.0@aar'  
implementation 'com.ogaclejapan.smarttablayout:utils-v4:2.0.0@aar'
```

```
}  
}  
  
dependencies {  
  
    implementation 'com.ogaclejapan.smarttablayout:library:2.0.0@aar'  
    implementation 'com.ogaclejapan.smarttablayout:utils-v4:2.0.0@aar'  
  
    implementation 'androidx.appcompat:appcompat:1.6.1'  
    implementation 'com.google.android.material:material:1.9.0'  
    implementation 'androidx.constraintlayout:constraintlayout:2.1.4'  
    testImplementation 'junit:junit:4.13.2'  
    androidTestImplementation 'androidx.test.ext:junit:1.1.5'  
    androidTestImplementation 'androidx.test.espresso:espresso-core:3.5.0'
```

# Layout



Acesse a página indicada e copie o código proposto para criação dos menus



Cria o Layout das abas

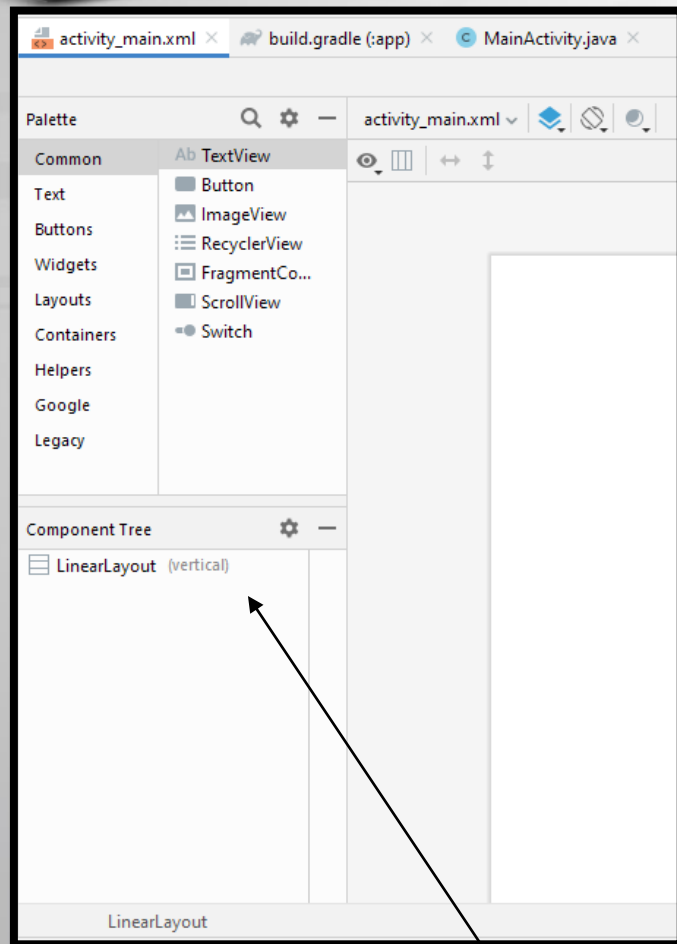
Exibe os conteúdos das abas

github.com/ogaclejapan/SmartTabLayout

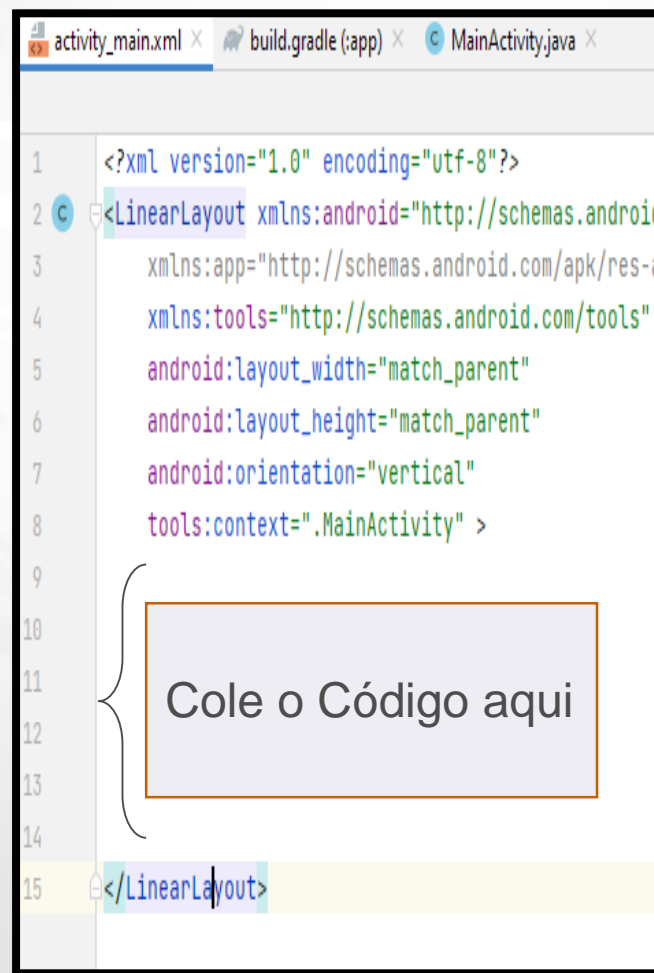
README.md

```
com.ogaclejapan.smarttablayout.SmartTabLayout
    android:id="@+id/viewpagertab"
    android:layout_width="match_parent"
    android:layout_height="48dp"
    app:stl_indicatorAlwaysInCenter="false"
    app:stl_indicatorWithoutPadding="false"
    app:stl_indicatorInFront="false"
    app:stl_indicatorInterpolation="smart"
    app:stl_indicatorGravity="bottom"
    app:stl_indicatorColor="#40C4FF"
    app:stl_indicatorThickness="4dp"
    app:stl_indicatorWidth="auto"
    app:stl_indicatorCornerRadius="2dp"
    app:stl_overlineColor="#40000000"
    app:stl_overlineThickness="0dp"
    app:stl_underlineColor="#40000000"
    app:stl_underlineThickness="1dp"
    app:stl_dividerColor="#40000000"
    app:stl_dividerThickness="1dp"
    app:stl_defaultTabBackground="?attr/selectableItemBackground"
    app:stl_defaultTabTextAllCaps="true"
    app:stl_defaultTabTextColor="#FC000000"
    app:stl_defaultTabTextSize="12sp"
    app:stl_defaultTabTextHorizontalPadding="16dp"
    app:stl_defaultTabTextMinWidth="0dp"
    app:stl_distributeEvenly="false"
    app:stl_clickable="true"
    app:stl_titleOffset="24dp"
    app:stl_drawDecorationAfterTab="false"
/>

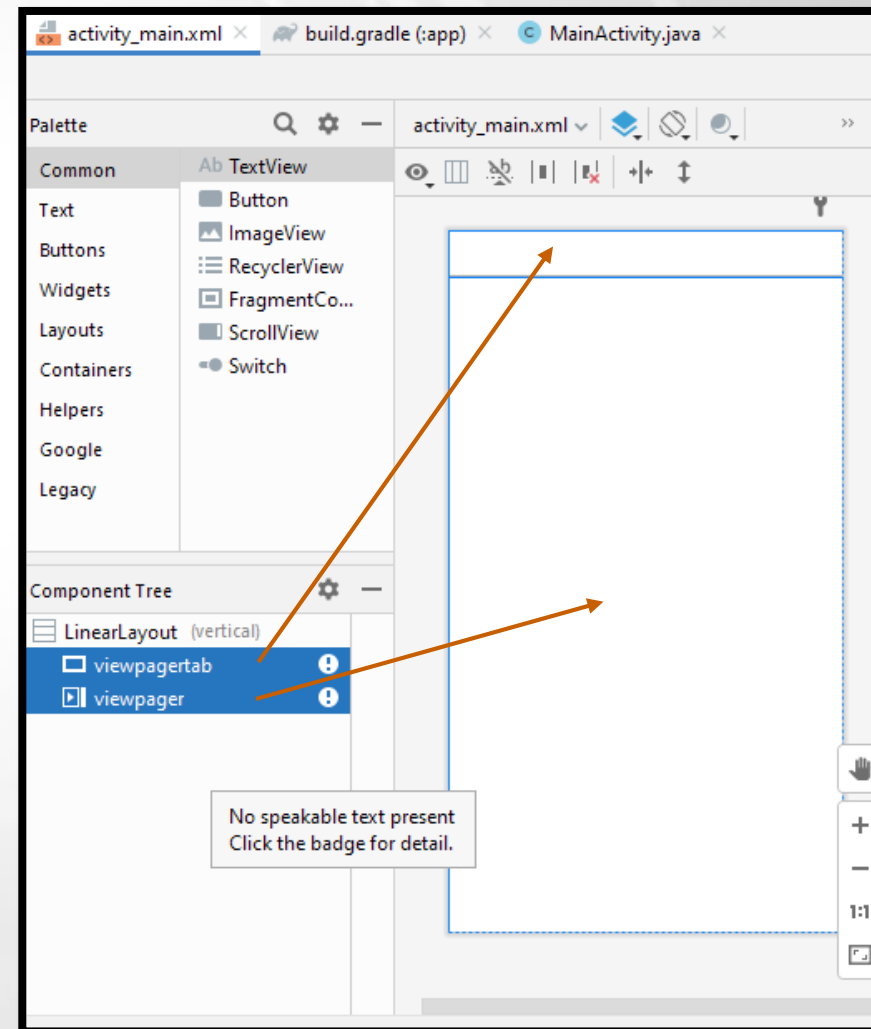
<androidx.viewpager.widget.ViewPager
    android:id="@+id/viewpager"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:layout_below="@id/viewpagertab"
/>
```



Modifique para LinearLayout (Vertical)



Texto copiado do link







```
build.gradle (:app) x MainActivity.java x activity_main.xml x
10 public class MainActivity extends AppCompatActivity {
11
12     SmartTabLayout smartTabLayout;
13     private ViewPager viewPager;
14
15     @Override
16     protected void onCreate(Bundle savedInstanceState) {
17         super.onCreate(savedInstanceState);
18         setContentView(R.layout.activity_main);
19
20         smartTabLayout = findViewById(R.id.viewPagerTab);
21         viewPager = findViewById(R.id.viewPager);
22     }
23 }
```

```
activity_main.xml x build.gradle (:app) x MainActivity.java x
1 <?xml version="1.0" encoding="utf-8"?>
2 <LinearLayout xmlns:android="http://schemas.android.com/apk/res-
3     xmlns:app="http://schemas.android.com/apk/res-auto"
4     xmlns:tools="http://schemas.android.com/tools"
5     android:layout_width="match_parent"
6     android:layout_height="match_parent"
7     android:orientation="vertical"
8     tools:context=".MainActivity" >
9
10     <com.ogaclejapan.smarttablayout.SmartTabLayout
11         android:id="@+id/viewPagerTab"
12         android:layout_width="match_parent"
13         android:layout_height="48dp"
14         app:stl_indicatorAlwaysInCenter="false"
15         app:stl_indicatorWithoutPadding="false"
16         app:stl_indicatorInFront="false"
17         app:stl_indicatorInterpolation="smart"
18         app:stl_indicatorGravity="bottom"
19         app:stl_indicatorColor="#40C4FF"
20     />
21
22     <androidx.viewpager.widget.ViewPager
23         android:id="@+id/viewPager"
24         android:layout_width="match_parent"
25         android:layout_height="match_parent"
26         android:layout_below="@id/viewPagerTab"
27     />
28
29 </LinearLayout>
```

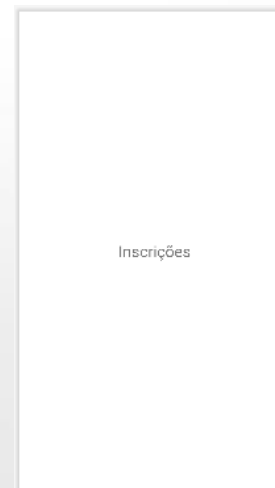
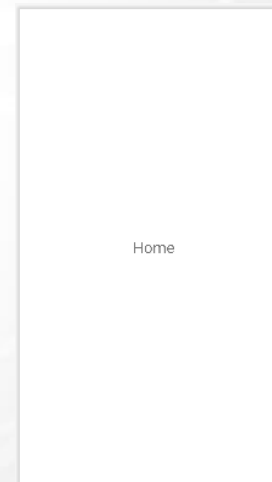
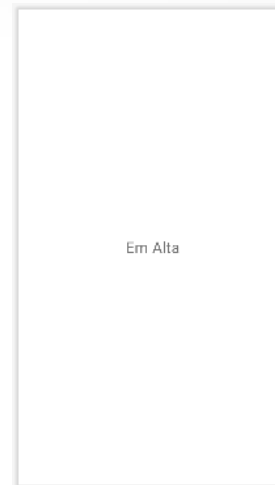
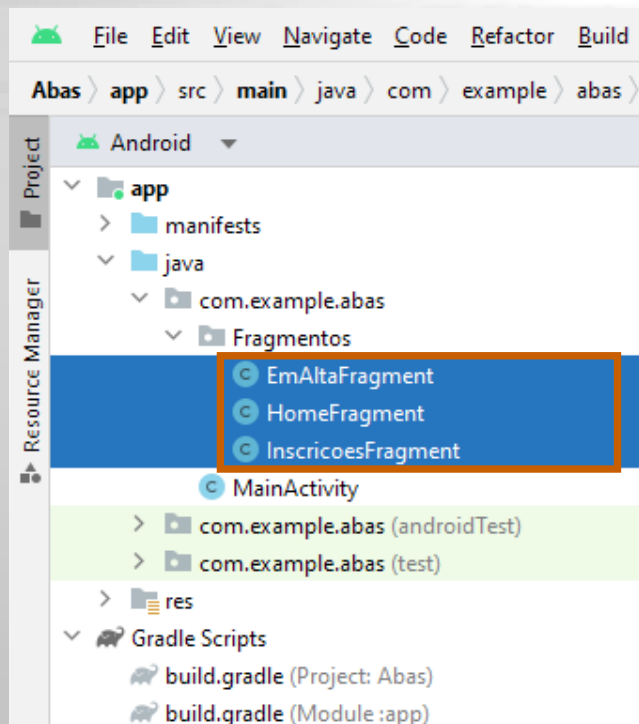
```
gradle (:app) x activity_main.xml x MainActivity.java x
1 app:stl_distributeEvenly="false"
2 app:stl_clickable="true"
3 app:stl_titleOffset="24dp"
4 app:stl_drawDecorationAfterTab="false"
5 />
6
7 <androidx.viewpager.widget.ViewPager
8     android:id="@+id/viewPager"
9     android:layout_width="match_parent"
10    android:layout_height="match_parent"
11    android:layout_below="@id/viewPagerTab"
12 />
13
14 </LinearLayout>
```

No MainActivity, crie referencias para os layouts



# Criando os Fragmentos

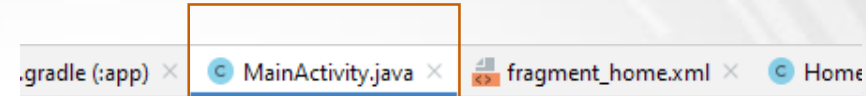
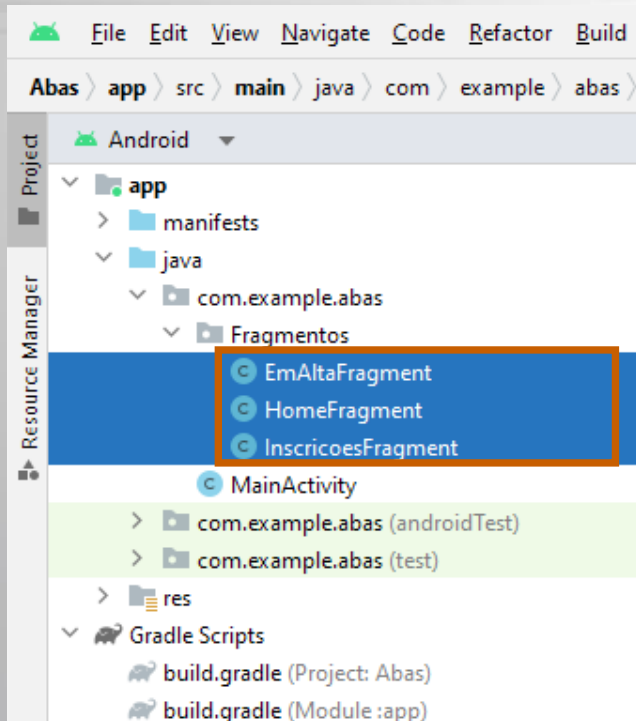
Crie um package e adicione três Fragmentos





# Configurando os Fragmentos

Configure os fragmentos, dentro da Classe MainActivity



```
public class MainActivity extends AppCompatActivity {
```

```
    SmartTabLayout smartTabLayout;  
    private ViewPager viewPager;
```

```
    @Override
```

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

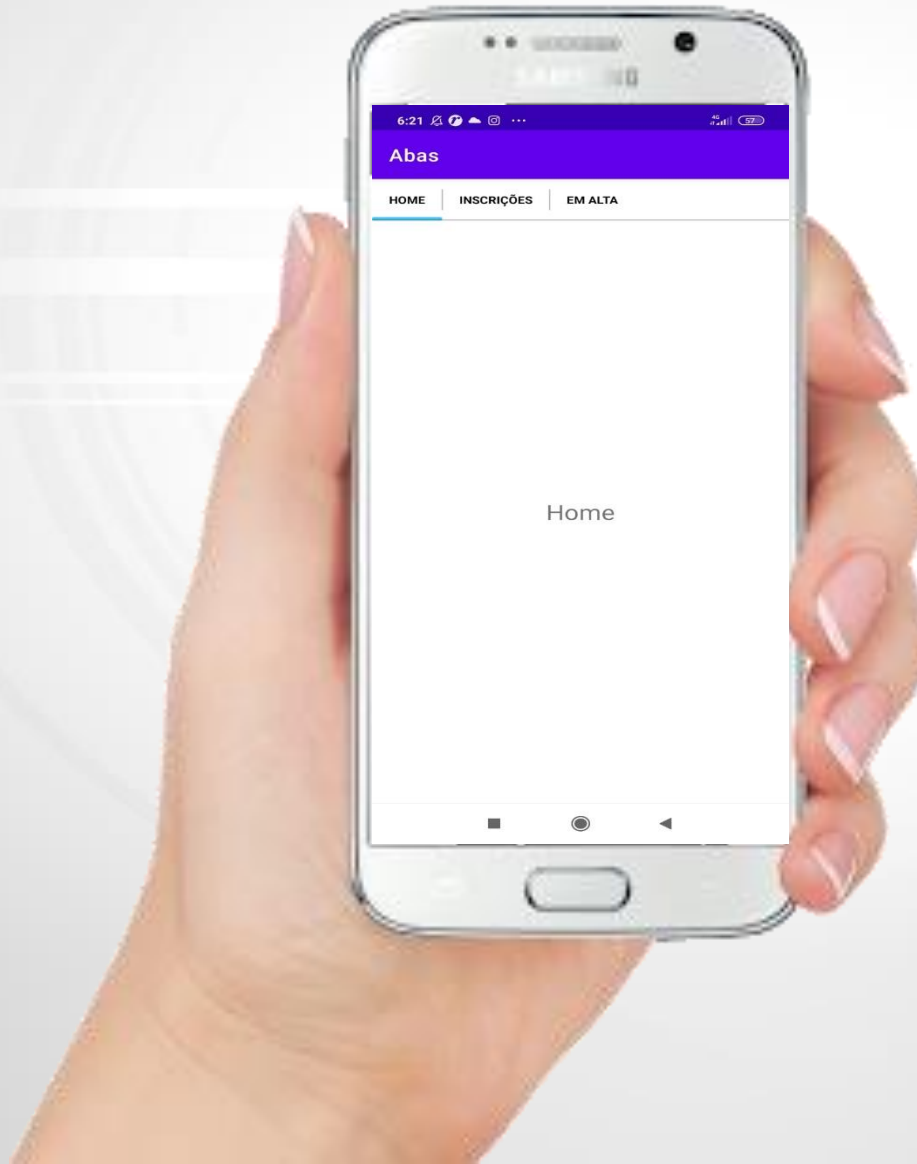
```
        smartTabLayout = findViewById(R.id.viewPagerTab);  
        viewPager = findViewById(R.id.viewPager);
```

```
        FragmentPagerAdapter pageAdpt = new FragmentPagerAdapter(  
            getSupportFragmentManager(),  
            FragmentPagerAdapter.Items.with(this)  
                .add("Home", HomeFragment.class)  
                .add("Inscrições", InscricoesFragment.class)  
                .add("Em Alta", EmAltaFragment.class)  
            ).create()
```

```
        );  
        viewPager.setAdapter(pageAdpt);  
        smartTabLayout.setViewPager(viewPager);  
    }
```



# Executando o App







# Customizar as Abas

The screenshot shows the Android Studio interface with the 'themes.xml' file open. The code defines a theme named 'Theme.Abas' with various color attributes. Arrows point from the code to a mobile app preview on the right.

```
1 <resources xmlns:tools="http://schemas.android.com/tools">
2   <!-- Base application theme. -->
3   <style name="Theme.Abas" parent="Theme.MaterialComponents.DayNight">
4     <!-- Primary brand color. -->
5     <item name="colorPrimaryVariant">@color/cordostatusbar</item>
6     <item name="colorPrimary">@color/cordoapp</item> <!-- barra fit -->
7     <item name="colorOnPrimary">@color/white</item>
8     <!-- Cor Secundária da Marca. -->
9     <item name="colorSecondary">@color/teal_200</item>
10    <item name="colorSecondaryVariant">@color/teal_700</item>
11    <item name="colorOnSecondary">@color/black</item>
12    <!-- Status bar color. -->
13    <item name="android:statusBarColor"?attr/colorPrimaryVariant<
14    <!-- Customize your theme here. -->
15  </style>
16 </resources>
```

The mobile app preview on the right shows a purple header bar with the title 'Abas' and three tabs: 'HOME', 'INSCRIÇÕES', and 'EM ALTA'. The 'HOME' tab is selected, and the main content area displays the word 'Home'.

Em **themes.xml**, você pode alterar as cores das barras de acordo com seu gosto

Lembre-se de criar essas cores em values/**colors.xml**



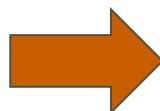
# Customizar as Abas

<https://github.com/ogaclejapan/SmartTabLayout>

```
github.com/ogaclejapan/SmartTabLayout
: README.md

<com.ogaclejapan.smarttablayout.SmartTabLayout
    android:id="@+id/viewpagertab"
    android:layout_width="match_parent"
    android:layout_height="48dp"
    app:stl_indicatorAlwaysInCenter="false"
    app:stl_indicatorWithoutPadding="false"
    app:stl_indicatorInFront="false"
    app:stl_indicatorInterpolation="smart"
    app:stl_indicatorGravity="bottom"
    app:stl_indicatorColor="#40C4FF"
    app:stl_indicatorThickness="4dp"
    app:stl_indicatorWidth="auto"
    app:stl_indicatorCornerRadius="2dp"
    app:stl_overlineColor="#4D000000"
    app:stl_overlineThickness="0dp"
    app:stl_underlineColor="#4D000000"
    app:stl_underlineThickness="1dp"
    app:stl_dividerColor="#4D000000"
    app:stl_dividerThickness="1dp"
    app:stl_defaultTabBackground="?attr/selectableItemBackground"
    app:stl_defaultTabTextAllCaps="true"
    app:stl_defaultTabTextColor="#FC000000"
    app:stl_defaultTabTextSize="12sp"
    app:stl_defaultTabTextHorizontalPadding="16dp"
    app:stl_defaultTabTextMinWidth="0dp"
    app:stl_distributeEvenly="false"
    app:stl_clickable="true"
    app:stl_titleOffset="24dp"
    app:stl_drawDecorationAfterTab="false"
/>

<androidx.viewpager.widget.ViewPager
    android:id="@+id/viewpager"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:layout_below="@id/viewpagertab"
/>
```



Attributes	
There are several attributes you can set:	
attr	description
stl_indicatorAlwaysInCenter	If set to true, active tab is always displayed in center (like google app), default false
stl_indicatorWithoutPadding	If set to true, draw the indicator without padding of
stl_indicatorInFront	Draw the indicator in front of the underline, default f
stl_indicatorInterpolation	Behavior of the indicator: 'linear' or 'smart'
stl_indicatorGravity	Drawing position of the indicator: 'bottom' or 'top' or 'center' or 'bottom'
stl_indicatorColor	Color of the indicator
stl_indicatorColors	Multiple colors of the indicator, can set the color for
stl_indicatorThickness	Thickness of the indicator
stl_indicatorWidth	Width of the indicator, default 'auto'
stl_indicatorCornerRadius	Radius of rounded corner the indicator
stl_overlineColor	Color of the top line
stl_overlineThickness	Thickness of the top line
stl_underlineColor	Color of the bottom line
stl_underlineThickness	Thickness of the bottom line

No link fornecido anteriormente, você tem a descrição de cada atributo da barra das Abas, vamos alterar alguns desse atributos



# Customizar as Abas

```
app:stl_defaultTabTextAllCaps="false"  
app:stl_defaultTabTextColor="@color/cortextoabas"  
app:stl_defaultTabTextSize="14sp"
```

→ Maiúsculo ou Minúsculo  
→ A cor do texto  
→ Tamanho da fonte

```
app:stl_dividerColor="#4D000000"  
app:stl_dividerThickness="1dp"
```

→ Cor do divisor de menu  
→ Espessura do divisor de menu

```
app:stl_indicatorGravity="bottom"  
app:stl_indicatorColor="#FFFFFF"  
app:stl_indicatorThickness="4dp"  
app:stl_indicatorCornerRadius="2dp"
```

→ A posição do indicador  
→ A cor do indicador  
→ Espessura do indicador  
→ O Arredondamento do indicador

```
app:stl_distributeEvenly="true"
```

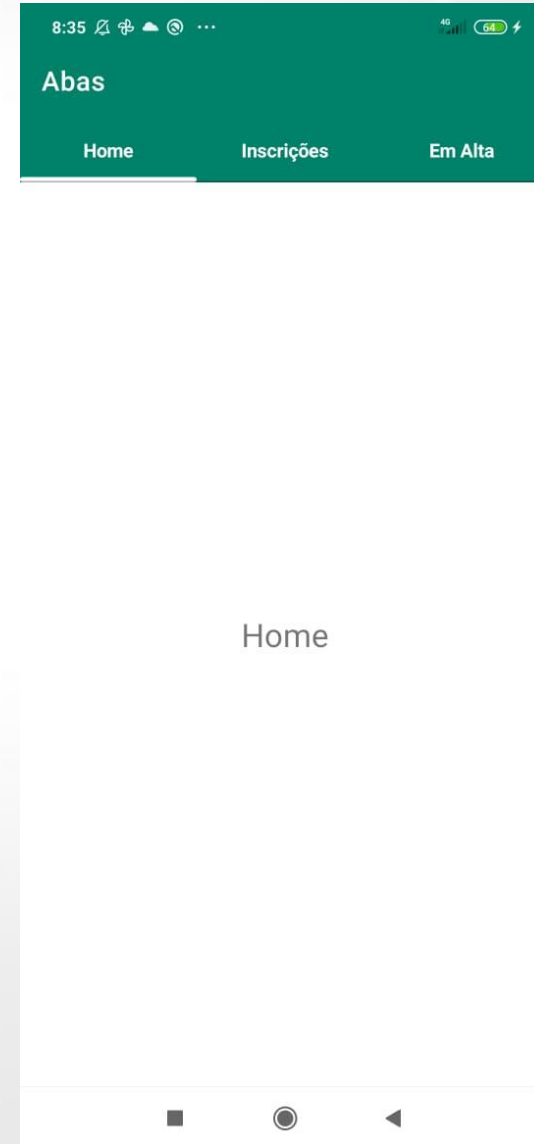
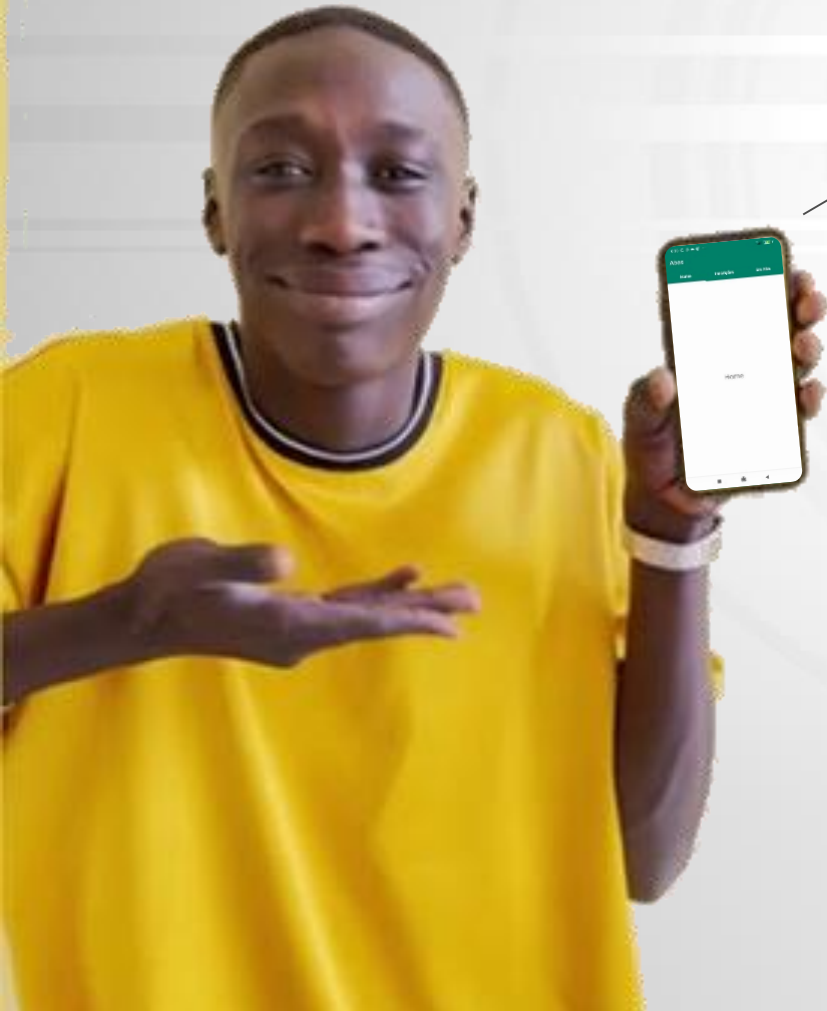
→ **True:** Defini o as abas do tamanho do seu conteúdo  
→ **False:** Usa o espaço disponível no App

```
android:background="@color/cordoapp"
```

→ A cor das Abas

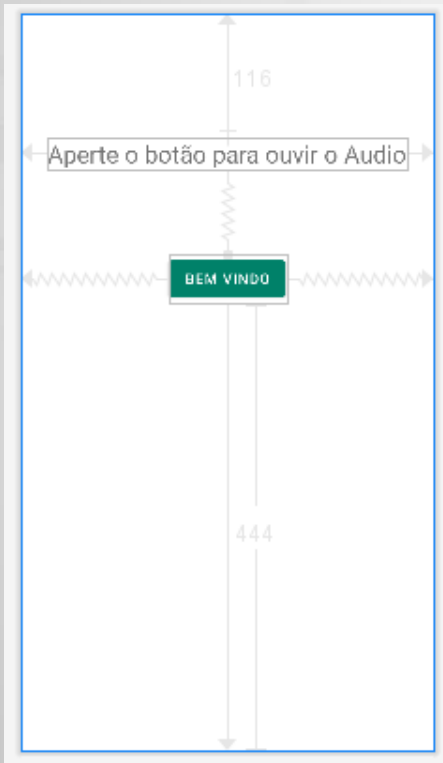


# Execute se App





# Adicionando botão com áudio



Adicione esse Layout no Fragment Home

```
activity.java × fragment_home.xml × HomeFragment.java × activity_main.xml × themes.xml

3 usages
public class HomeFragment extends Fragment implements View.OnClickListener{

2 usages
private Button buttonBemVindo;

public HomeFragment() {
    // Required empty public constructor
}

@Override
public View onCreateView(LayoutInflater inflater, ViewGroup container,
    Bundle savedInstanceState) {
    View homeFrag = inflater.inflate(R.layout.fragment_home, container,

    buttonBemVindo = homeFrag.findViewById(R.id.buttonAudio);
    buttonBemVindo.setOnClickListener(this);

    return homeFrag;
}
```

Adicione o **implements** para que o evento de clique possa acontecer em toda classe, com um evento global

Adicione o evento de clique ao botão





## Atividade: Aprenda inglês

Crie um App, que possua três Abas: **Bichos, Números e Vogais.**

Adicione às abas, imagens que correspondente ao seu nome.

Ao usuário, clicar em cima da imagem, será reproduzido um áudio correspondente a imagem.

Exemplo Abas Bichos

**Áudio:** dog, cat, lion ....

Exemplo Aba Números

**Áudio:** one, two, three...

