

Aula 15 - Layouts

Layouts

Define a estrutura da interface gráfica

View

São elementos da interface que ocorrem a interação com o usuário

ViewGroup

Definem o comportamento dos elementos na tela. Funciona como um agrupador

Layouts - XML



Xtensible Markup Language

Usada para montar o
protótipo de uma tela e
prever seu comportamento

```
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@color/blue_600"
    android:gravity="center"
    android:orientation="vertical"
    tools:ignore="HardcodedText"
>

    <TextView
        android:id="@+id/textView3"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Um Texto"
    >

    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Um Botão"
    >

    <EditText
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:hint="Um Campo de Edição de Texto"
    >

    <ImageView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:contentDescription="Uma imagem"
    >

</LinearLayout>
```



```
<TextView
```

```
    android:id="@+id/textView3"
```

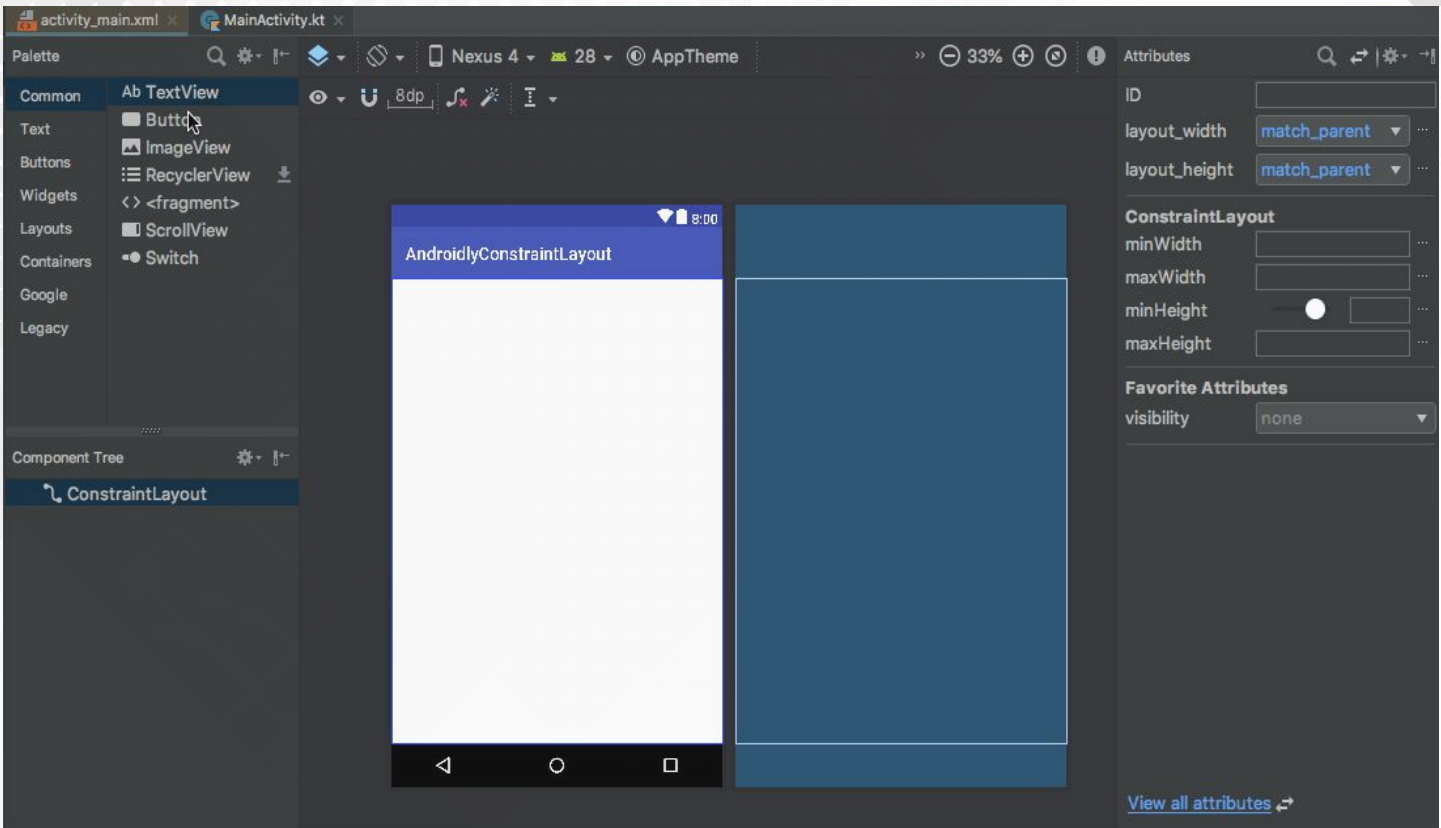
```
    android:layout_width="wrap_content"
```

```
    android:layout_height="wrap_content"
```

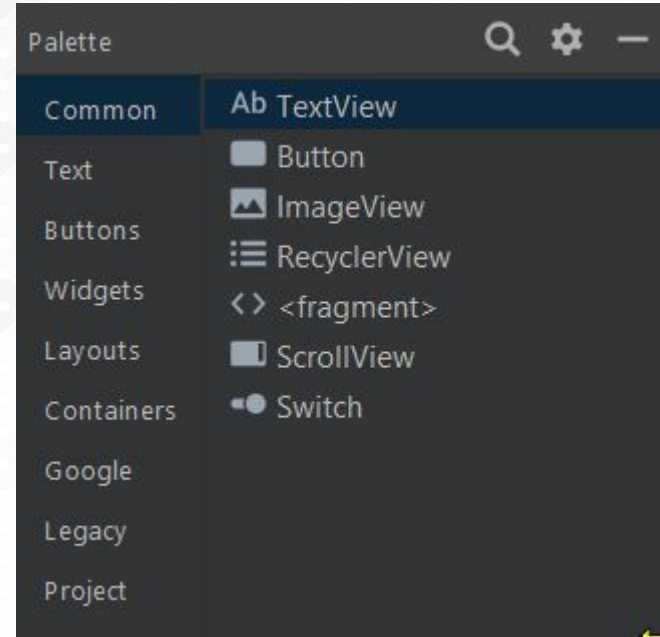
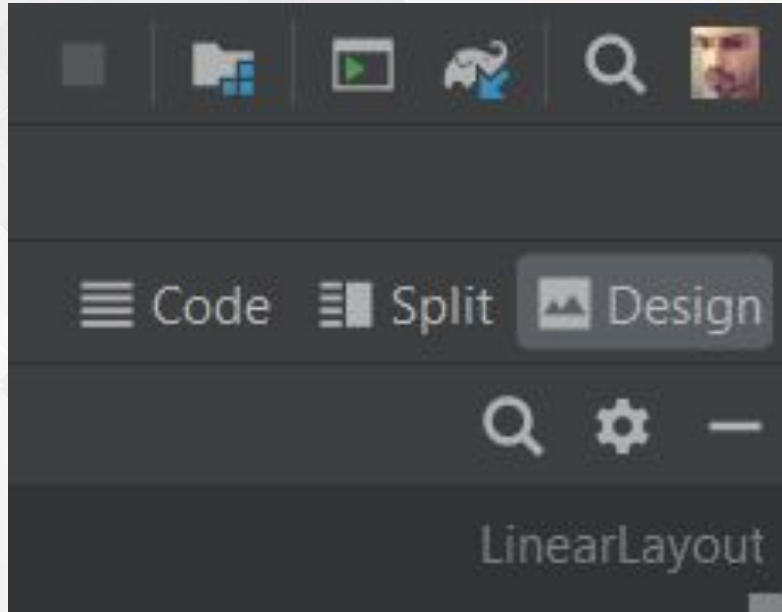
```
    android:text="Um Texto"
```

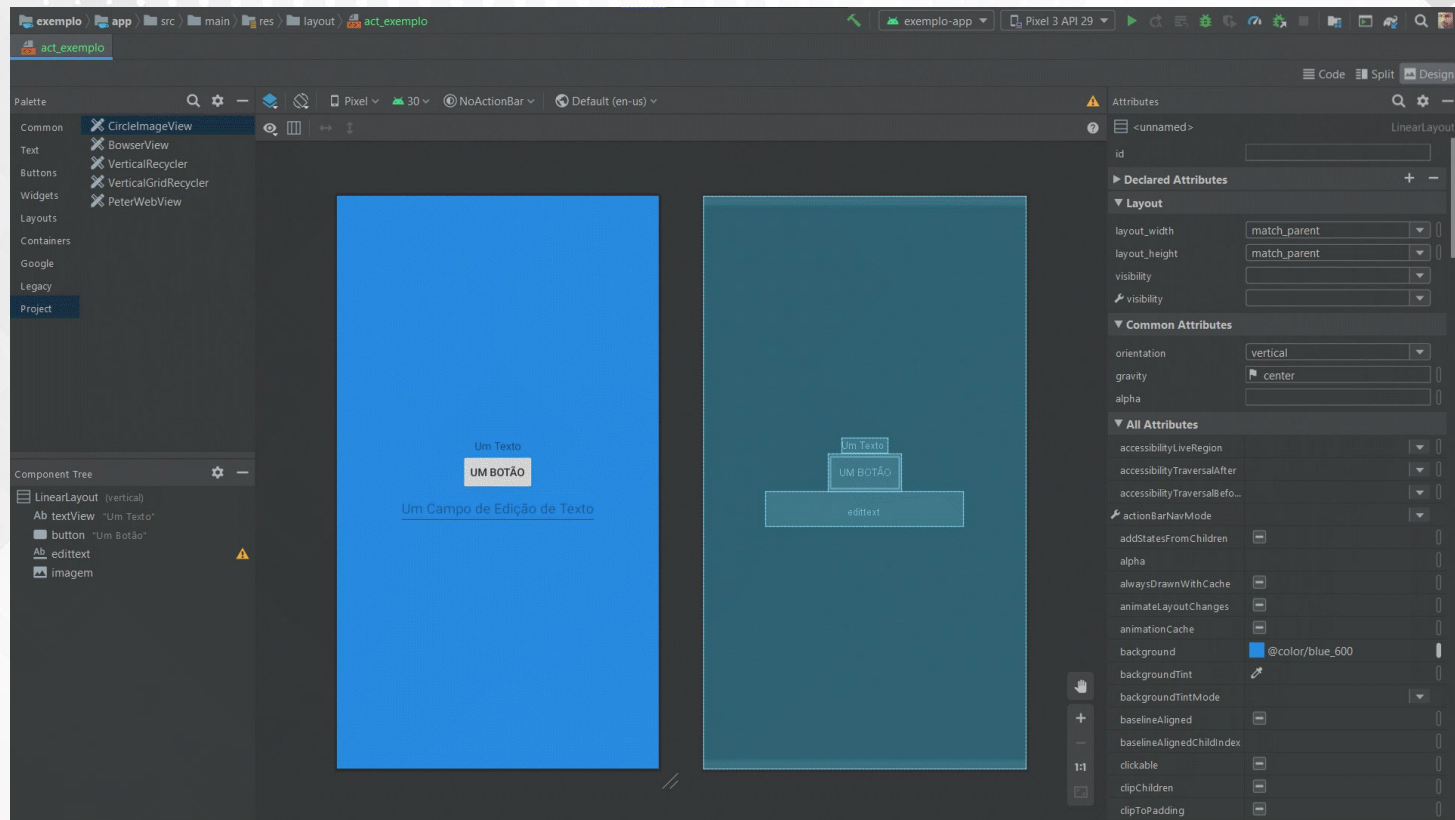
```
>
```





Menus importantes:

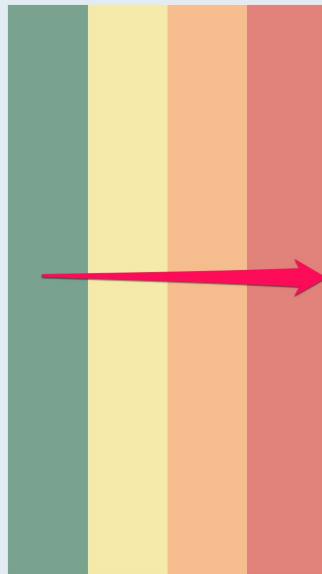




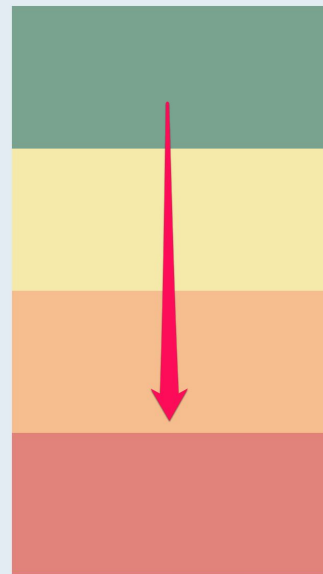
LinearLayout

Alinha os elementos um após o outro, horizontal ou verticalmente

`android:orientation="horizontal"`



`android:orientation="vertical"`



```
1 <?xml version="1.0" encoding="utf-8"?>
2 <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
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    <TextView
11        android:layout_width="wrap_content"
12        android:layout_height="wrap_content"
13        android:padding="16dp"
14        android:text="@string/text_label"
15        android:textSize="22sp" />
16
17    <TextView
18        android:layout_width="wrap_content"
19        android:layout_height="wrap_content"
20        android:padding="16dp"
21        android:text="@string/text_label"
22        android:textSize="22sp" />
23
24 </LinearLayout>
```

Convert orientation to horizontal

Nexus 4

28

» 33% + - !

LinearLayout

TutorialsBuzz

TutorialsBuzz

Propriedades

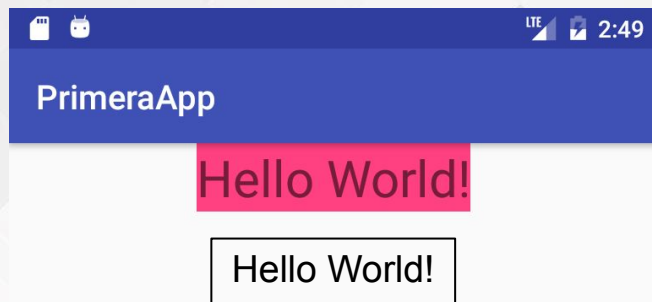
A maioria dos elementos possuem as mesmas propriedades:

- **Width:** Determina a largura
`android:layout_width`
- **Height:** Determina a altura
`android:layout_height`

Determinando largura e altura

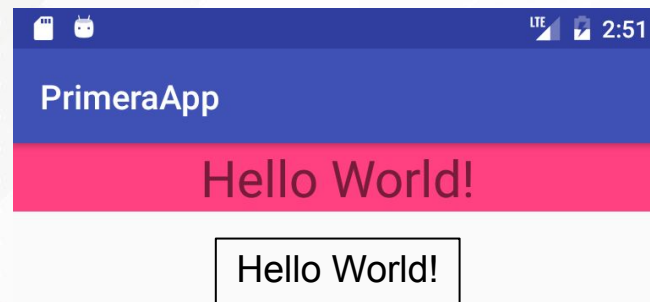
`wrap_content`

Determina que o tamanho da visualização seja igual ao seu conteúdo.



`match_parent`

Determina que o tamanho da visualização será o mesmo que de seu pai.

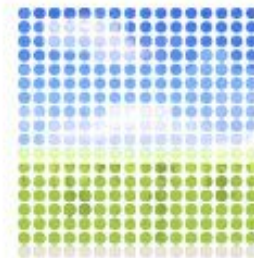


Determinando largura e altura

Caso queiramos que um elemento tenha um tamanho específico, um valor de **dp** (densidade de pixels) pode ser atribuído a ele.

Equivale a uma quantidade de pixels
de acordo com resolução do dispositivo

```
<TextView  
  android:layout_width="90dp"  
  android:layout_height="50dp"  
  android:text="@string/texto"  
  android:id="@+id/textView"/>
```



Propriedades

Margin

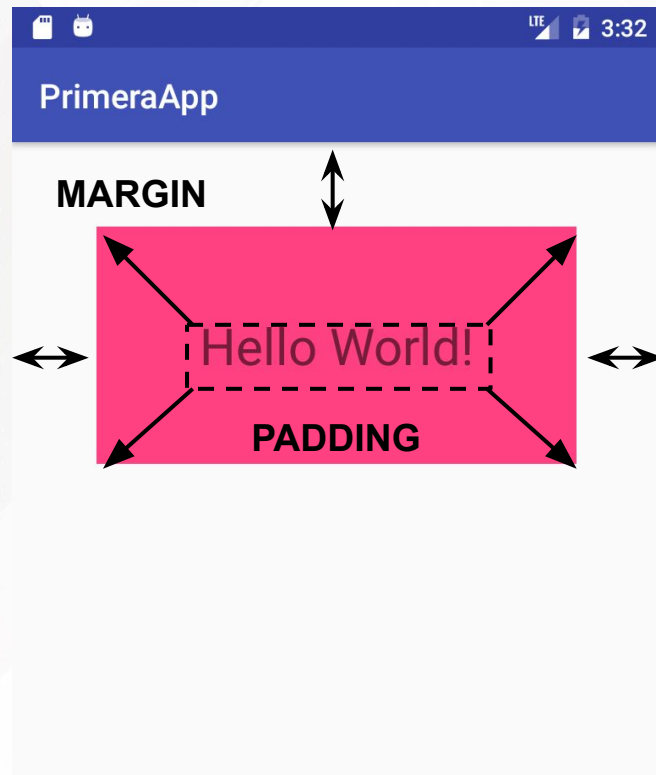
Distância entre os elementos de um mesmo layout.

`android:layout_margin`

Padding

Distância entre a borda e o texto.

`android:padding`

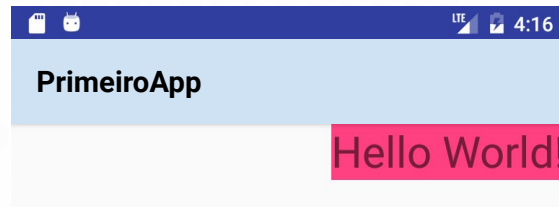
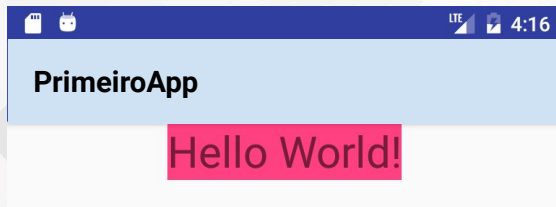
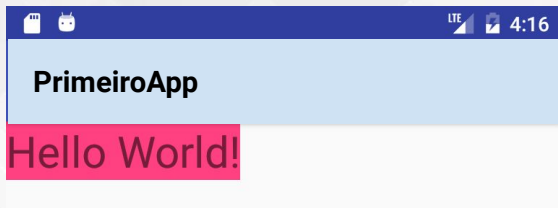


Propriedades

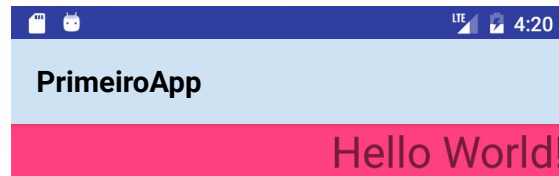
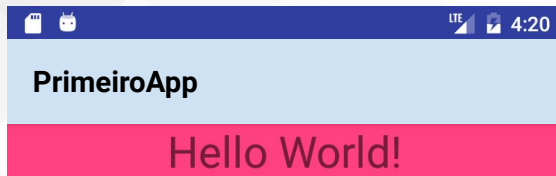
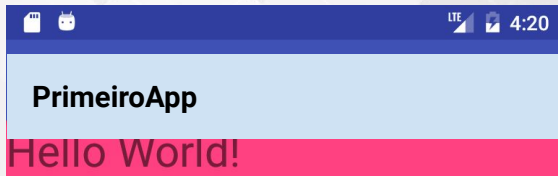
Gravity

Determina a posição do conteúdo dentro de uma visualização.

`android:layout_gravity`



`android:gravity`



Exercício

<div>Text</div> <div>Text</div>	
A	B

Thank you...



Captain Obvious.