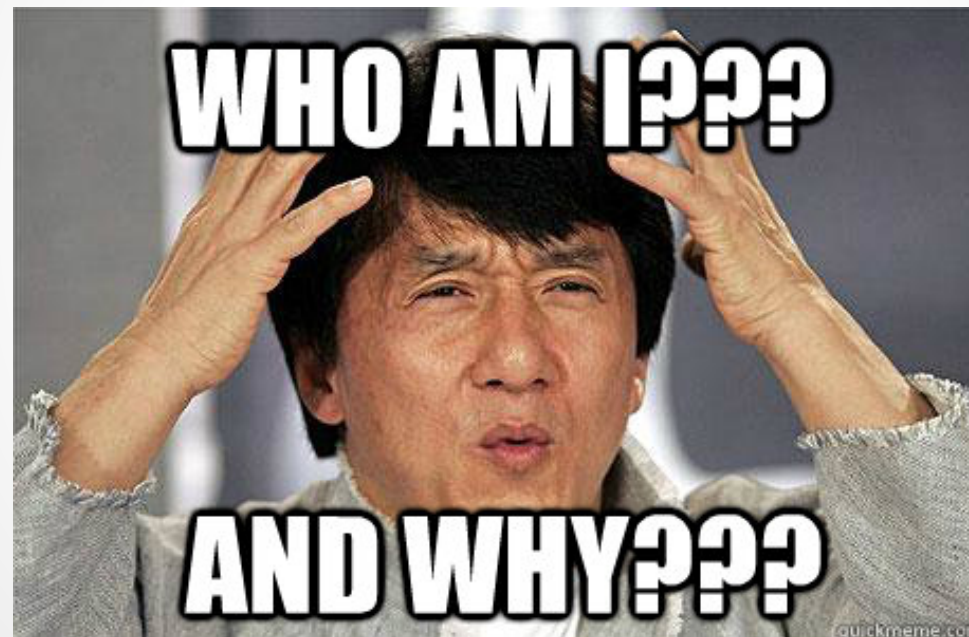


AndroidManifest.xml



Manifesto do aplicativo

Todo aplicativo tem que ter um arquivo `AndroidManifest.xml` (precisamente com esse nome) no diretório raiz. O arquivo de manifesto apresenta informações essenciais sobre o aplicativo ao sistema Android, necessárias para o sistema antes que ele possa executar o código do aplicativo.

Entre outras coisas, o arquivo do manifesto serve para:

- Nomear o pacote Java para o aplicativo. O nome do pacote serve como identificador exclusivo para o aplicativo.
- Descrever os componentes do aplicativo, que abrangem atividades, serviços, receptores de transmissão e provedores de conteúdo que compõem o aplicativo. Ele também nomeia a classe que implementa cada um dos componentes e publica suas capacidades, como as mensagens `Intent` que podem lidar. Essas declarações informam ao sistema Android os componentes e as condições em que eles podem ser inicializados.
- Determinar os processos que hospedam os componentes de aplicativo.
- Declarar as permissões que o aplicativo deve ter para acessar partes protegidas da API e interagir com outros aplicativos. Ele também declara as permissões que outros devem ter para interagir com os componentes do aplicativo.
- Listar as classes `Instrumentation` que fornecem geração de perfil e outras informações durante a execução do aplicativo. Essas declarações estão presentes no manifesto somente enquanto o aplicativo está em desenvolvimento e são removidas antes da publicação do aplicativo.
- Declarar o nível mínimo da Android API que o aplicativo exige.
- Listar as bibliotecas às quais o aplicativo deve se vincular.

Neste documento

- > [Estrutura do arquivo do manifesto](#)
- > [Convenções de arquivo](#)
- > [Recursos de arquivo](#)
 - > [Filtros de intent](#)
 - > [Ícones e rótulos](#)
 - > [Permissões](#)
 - > [Bibliotecas](#)

AndroidManifest.xml

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="pacote.da.sua.app"
    android:versionCode="1"
    android:versionName="1.0" >

    <uses-sdk android:minSdkVersion="7" />

    <application
        android:icon="@drawable/ic_launcher"
        android:label="@string/app_name" >
        <activity
            android:name=".MeuProjetoActivity"
            android:label="@string/app_name" >
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>

</manifest>
```



The screenshot shows an IDE window with the AndroidManifest.xml file open. The code is as follows:

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="pacote.da.sua.app"
    android:versionCode="1"
    android:versionName="1.0" >

    <uses-sdk android:minSdkVersion="7" />

    <application
        android:icon="@drawable/ic_launcher"
        android:label="@string/app_name" >
        <activity
            android:name=".MeuProjetoActivity"
            android:label="@string/app_name" >
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>

</manifest>
```

The IDE's tab bar at the bottom shows the following tabs: Manifest, Application, Permissions, Instrumentation, and AndroidManifest.xml.

AndroidManifest.xml

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="pacote.da.sua.app"
    android:versionCode="1"
    android:versionName="1.0" >

    <uses-sdk android:minSdkVersion="7" />

    <application
        android:icon="@drawable/ic_launcher"
        android:label="@string/app_name" >
        <activity
            android:name=".MeuProjetoActivity"
            android:label="@string/app_name" >
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>

</manifest>
```

Manifest Application Permissions Instrumentation AndroidManifest.xml

AndroidManifest.xml



```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="pacote.da.sua.app"
    android:versionCode="1"
    android:versionName="1.0" >

    <uses-sdk android:minSdkVersion="7" />

    <application
        android:icon="@drawable/ic_launcher"
        android:label="@string/app_name" >
        <activity
            android:name=".MeuProjetoActivity"
            android:label="@string/app_name" >
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>

</manifest>
```

The screenshot shows an IDE window with the AndroidManifest.xml file open. The file content is as follows:

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="pacote.da.sua.app"
    android:versionCode="1"
    android:versionName="1.0" >

    <uses-sdk android:minSdkVersion="7" />

    <application
        android:icon="@drawable/ic_launcher"
        android:label="@string/app_name" >
        <activity
            android:name=".MeuProjetoActivity"
            android:label="@string/app_name" >
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>

</manifest>
```

A red rectangle highlights the `android:versionCode="1"` and `android:versionName="1.0"` attributes. The IDE's tab bar at the bottom shows the following tabs: Manifest, Application, Permissions, Instrumentation, and AndroidManifest.xml.

AndroidManifest.xml

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="pacote.da.sua.app"
    android:versionCode="1"
    android:versionName="1.0" >

    <uses-sdk android:minSdkVersion="7" />

    <application
        android:icon="@drawable/ic_launcher"
        android:label="@string/app_name" >
        <activity
            android:name=".MeuProjetoActivity"
            android:label="@string/app_name" >
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>

</manifest>
```

Manifest Application Permissions Instrumentation AndroidManifest.xml

AndroidManifest.xml

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="pacote.da.sua.app"
    android:versionCode="1"
    android:versionName="1.0" >

    <uses-sdk android:minSdkVersion="7" />

    <application
        android:icon="@drawable/ic_launcher"
        android:label="@string/app_name" >
        <activity
            android:name=".MeuProjetoActivity"
            android:label="@string/app_name" >
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>

</manifest>
```

Manifest Application Permissions Instrumentation AndroidManifest.xml

AndroidManifest.xml

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="pacote.da.sua.app"
    android:versionCode="1"
    android:versionName="1.0" >

    <uses-sdk android:minSdkVersion="7" />

    <application
        android:icon="@drawable/ic_launcher"
        android:label="@string/app_name" >
        <activity
            android:name=".MeuProjetoActivity"
            android:label="@string/app_name" >
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>

</manifest>
```

Manifest Application Permissions Instrumentation AndroidManifest.xml



Tela

=



Activity (Java)



Tela



=

Activity (Java)

+



Tela



Activity (Java)

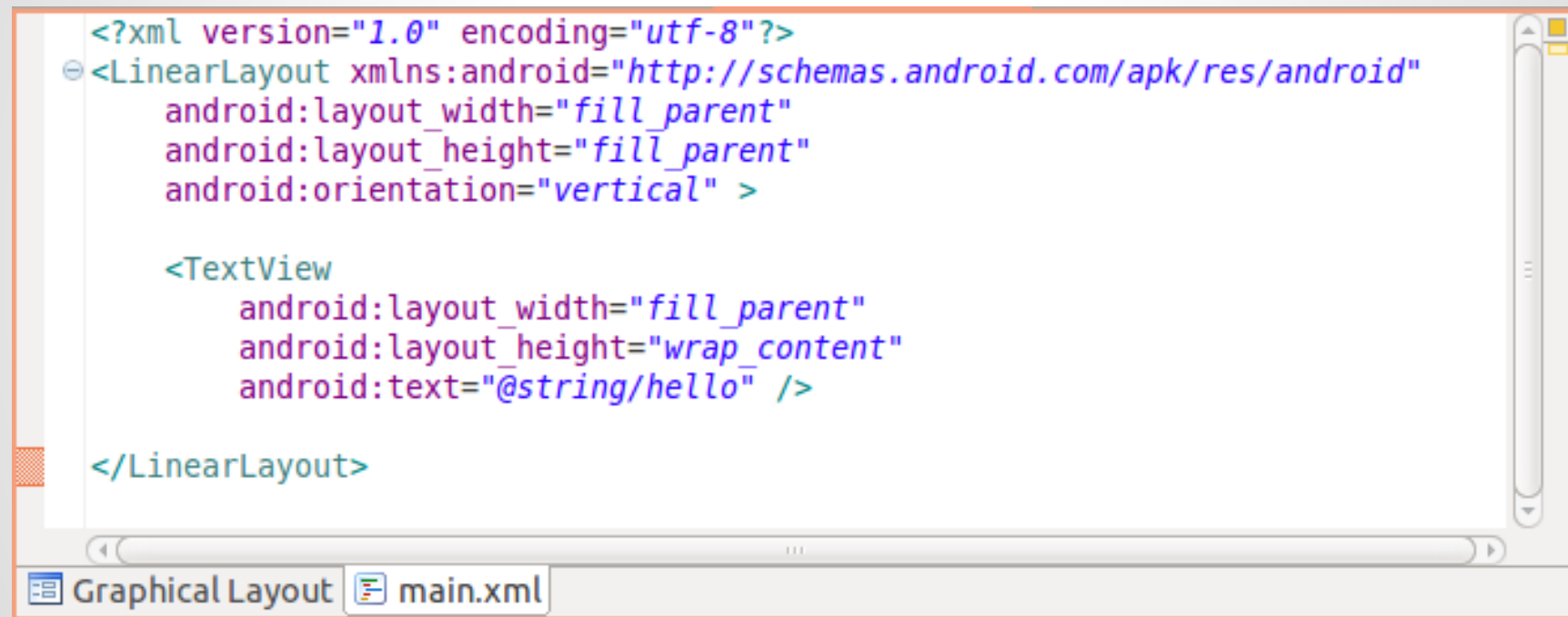
=

+

layout (xml)



Layout XML



```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="fill_parent"
    android:layout_height="fill_parent"
    android:orientation="vertical" >

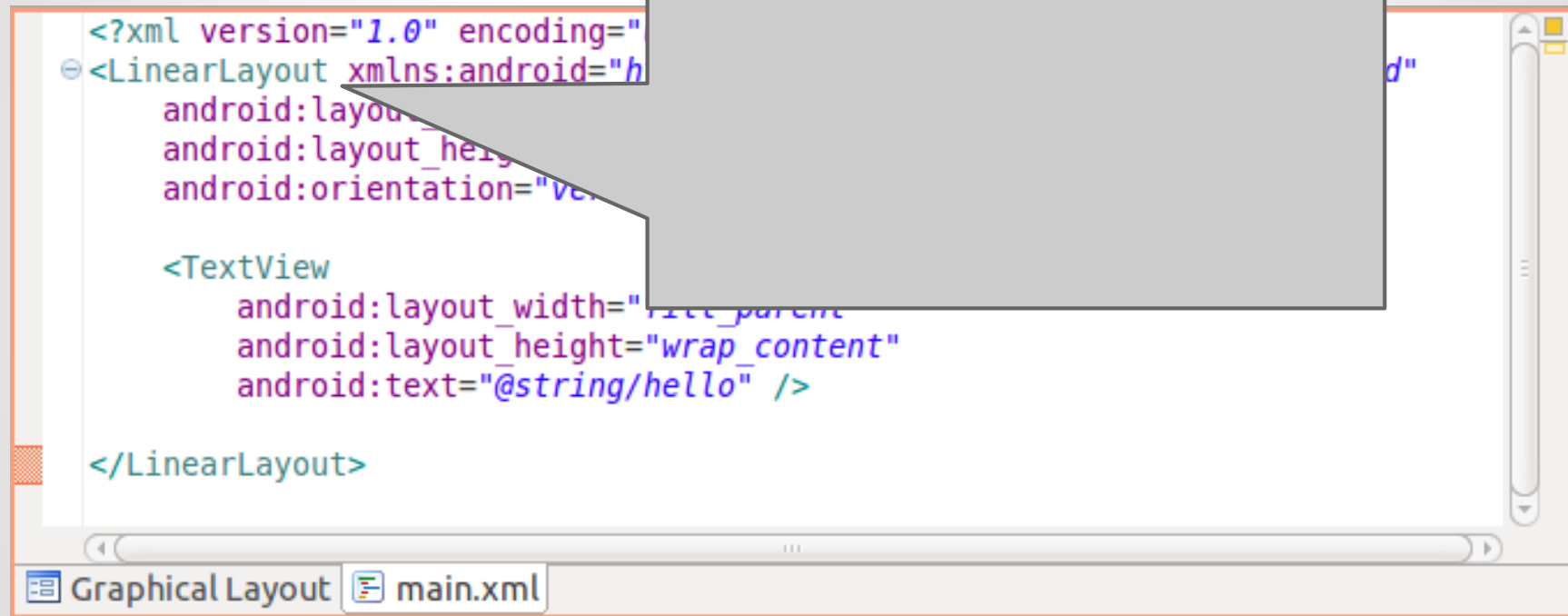
    <TextView
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:text="@string/hello" />

</LinearLayout>
```

Graphical Layout main.xml

Layout XML

LinearLayout
(vertical)



Layout XML

LinearLayout
(vertical)



```
<?xml version="1.0" encoding="utf-8"
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="vertical"

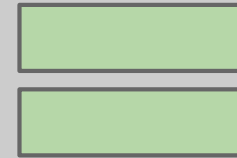
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="@string/hello" />

</LinearLayout>
```

Graphical Layout | main.xml

Layout XML

LinearLayout
(vertical)



```
<?xml version="1.0" encoding="utf-8" android:windowBackground="@android:color/white">
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="vertical"
    >

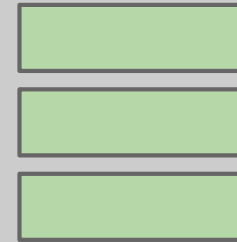
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="@string/hello" />

</LinearLayout>
```

Graphical Layout | main.xml

Layout XML

LinearLayout
(vertical)



```
<?xml version="1.0" encoding="utf-8" android:windowBackground="@color/white">
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="vertical"
    >

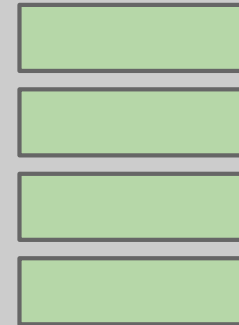
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="@string/hello" />

</LinearLayout>
```

Graphical Layout | main.xml

Layout XML

LinearLayout
(vertical)



```
<?xml version="1.0" encoding="utf-8" android:windowBackground="@color/white">
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="vertical"
    >

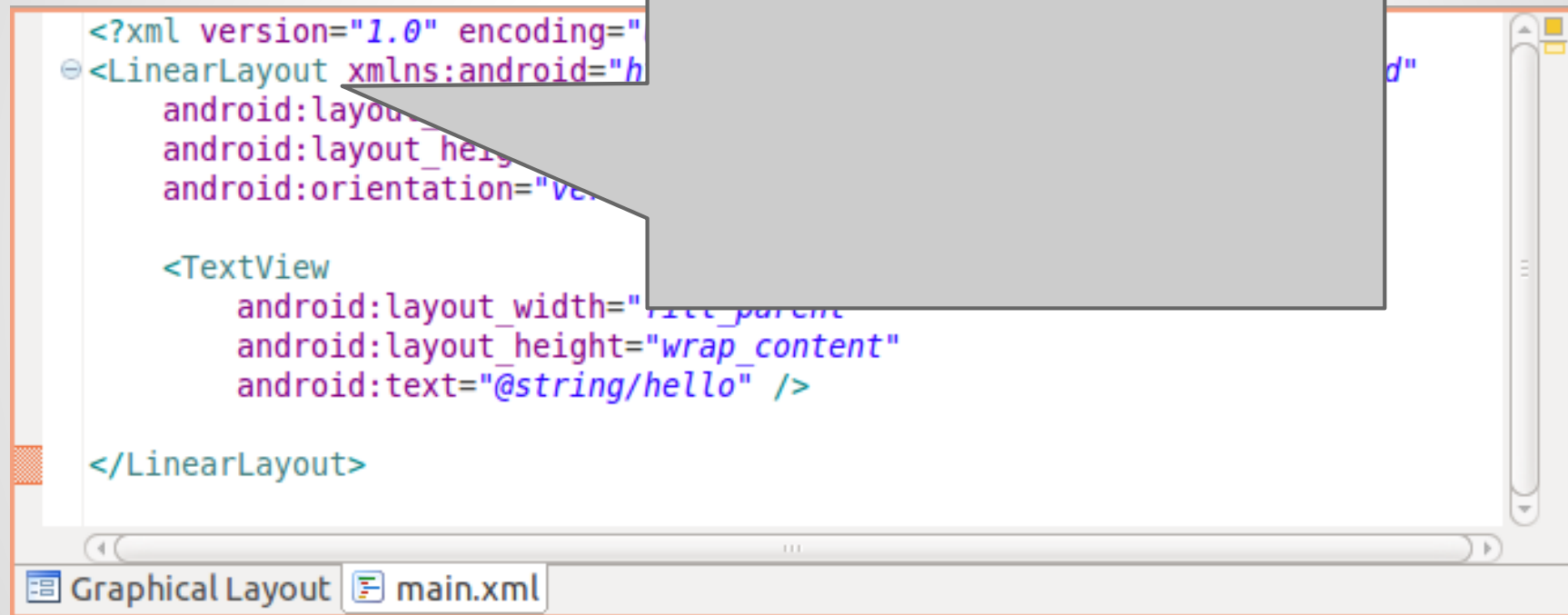
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="@string/hello" />

</LinearLayout>
```

Graphical Layout | main.xml

Layout XML

LinearLayout
(horizontal)



The screenshot shows an IDE window with a tab labeled 'main.xml'. The XML code is as follows:

```
<?xml version="1.0" encoding="utf-8" android:namespace="http://schemas.android.com/apk/res/android"
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:orientation="vertical">

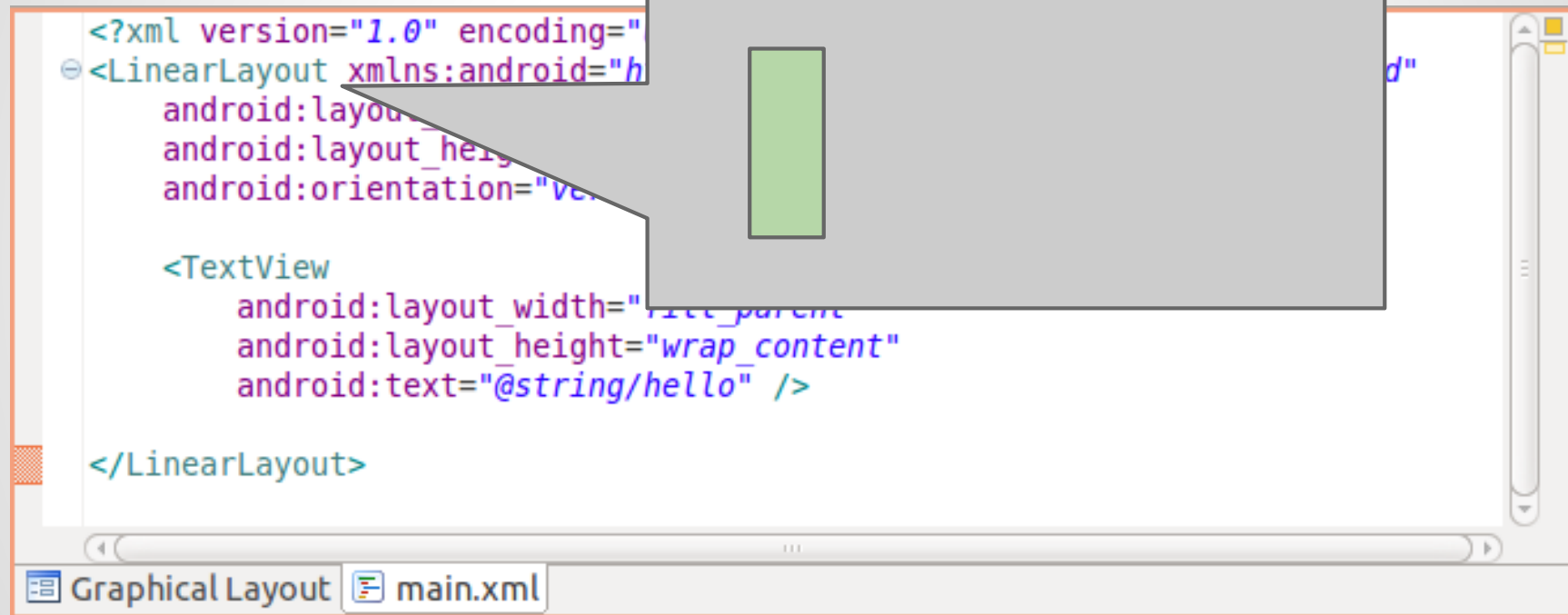
    <TextView
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:text="@string/hello" />

</LinearLayout>
```

A grey callout box with a pointer to the `<LinearLayout>` tag contains the text 'LinearLayout (horizontal)'.

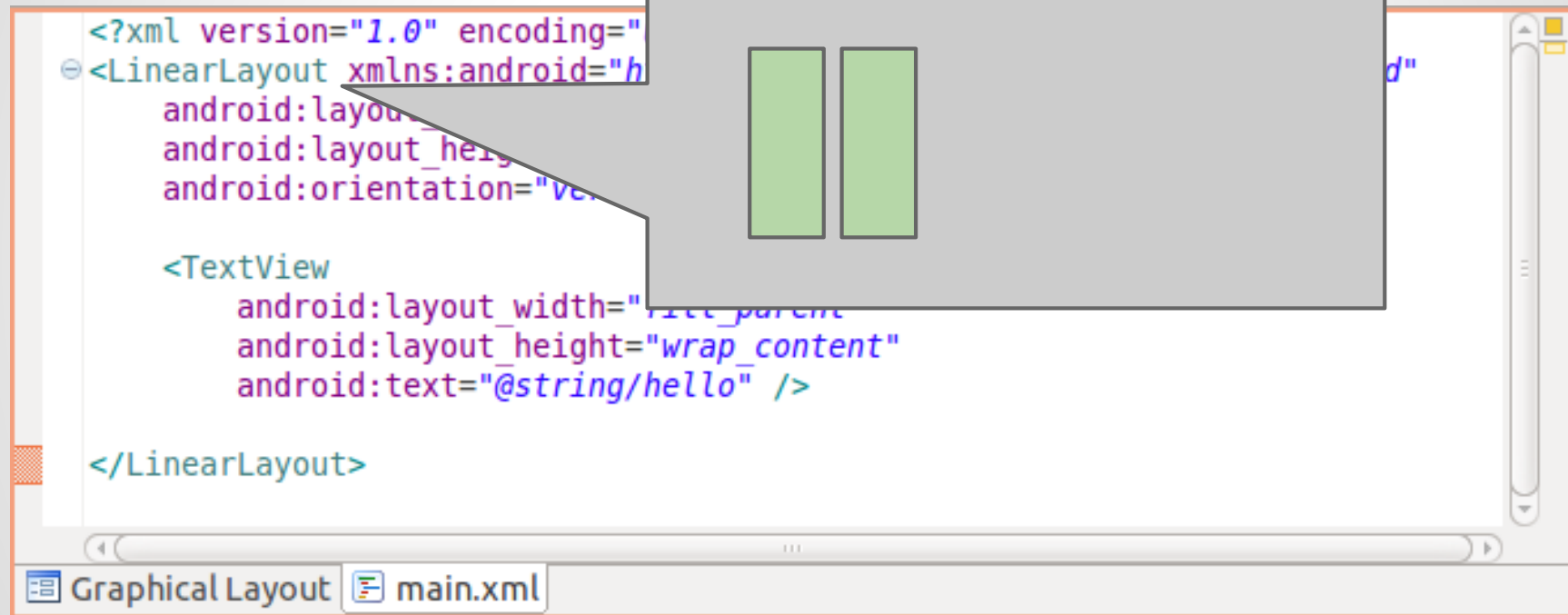
Layout XML

LinearLayout
(horizontal)



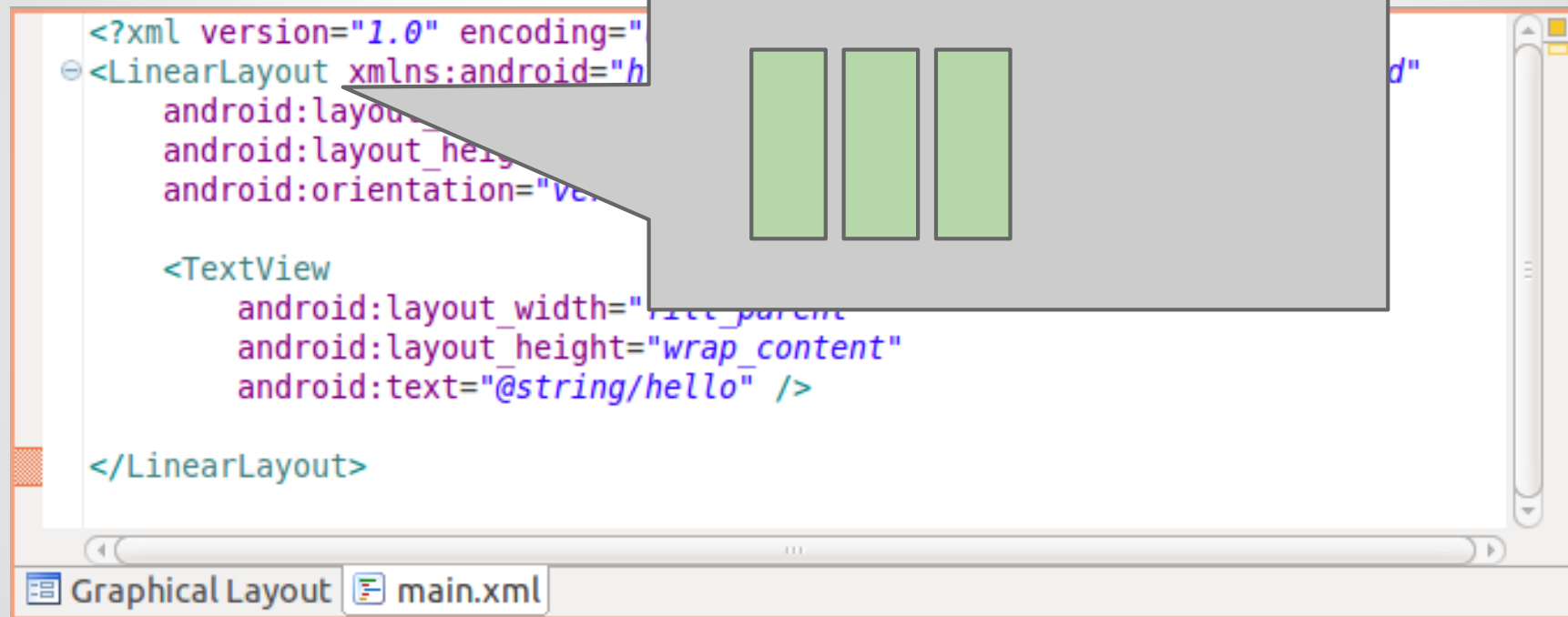
Layout XML

LinearLayout
(horizontal)



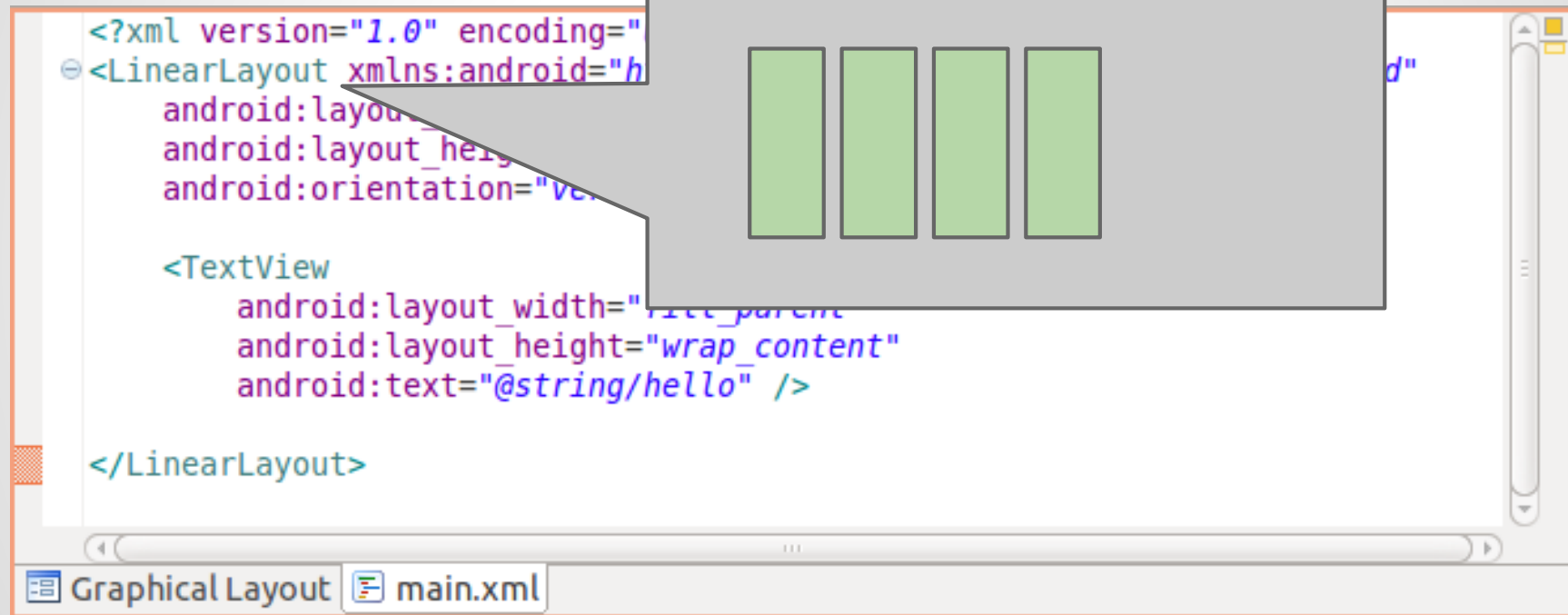
Layout XML

LinearLayout
(horizontal)



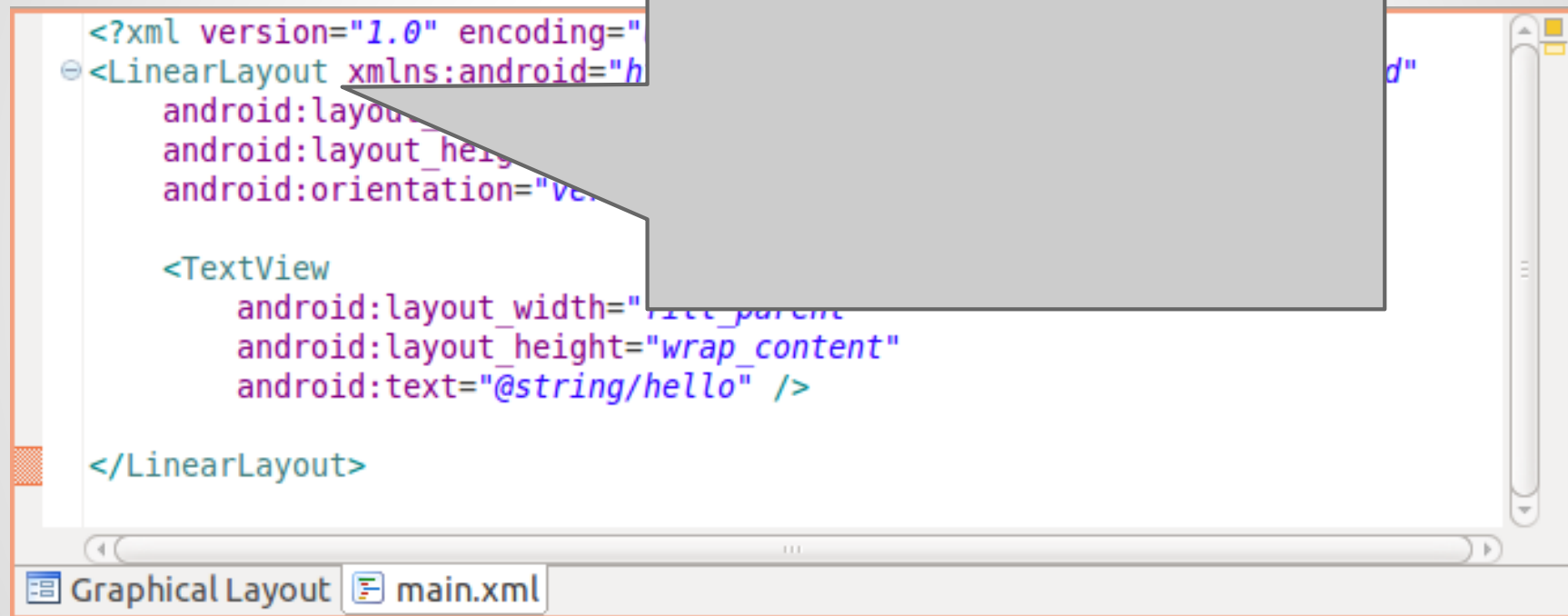
Layout XML

LinearLayout
(horizontal)



Layout XML

RelativeLayout



```
<?xml version="1.0" encoding="utf-8" android:windowBackground="@color/white">
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:background="@color/white">

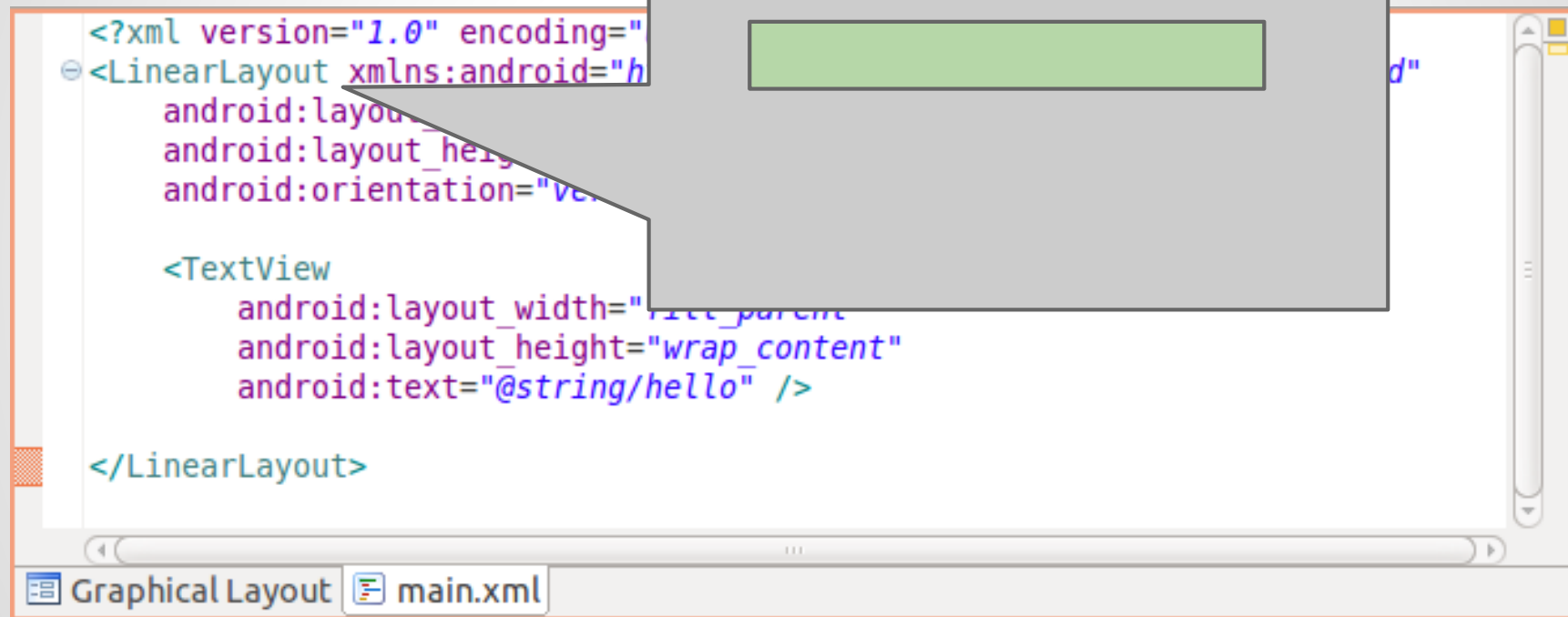
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="@string/hello" />

</RelativeLayout>
```

Graphical Layout | main.xml

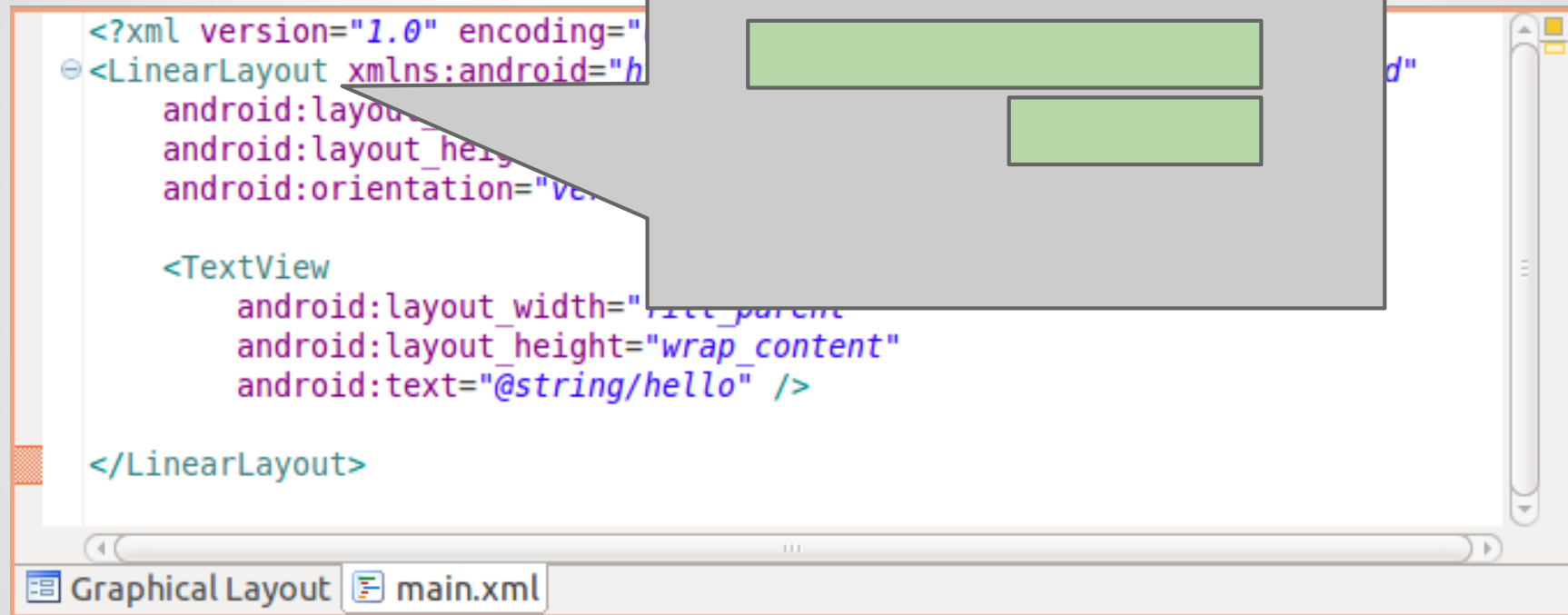
Layout XML

RelativeLayout



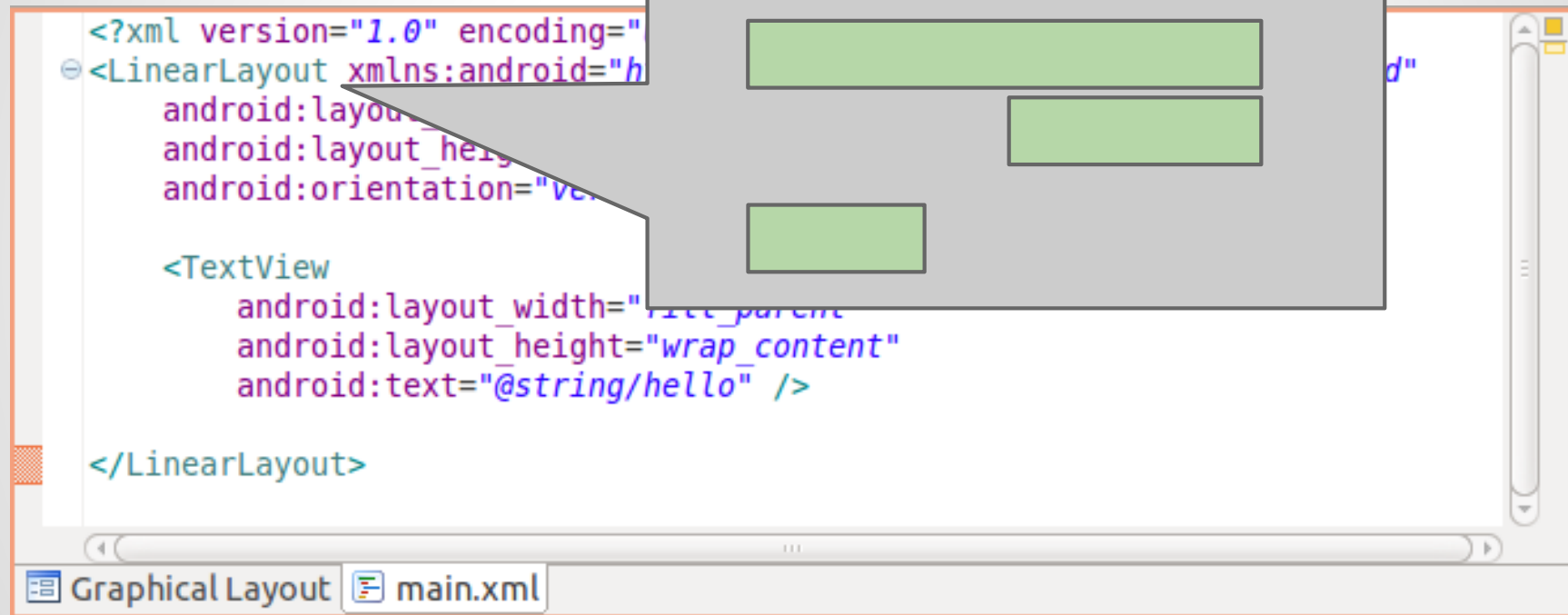
Layout XML

RelativeLayout



Layout XML

RelativeLayout



Views

Views

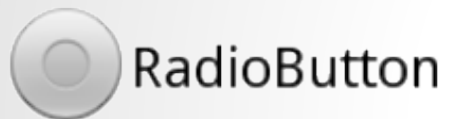
<RadioButton>



RadioButton

Views

<RadioButton>

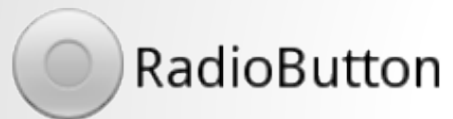


<DatePicker>



Views

<RadioButton>



<RatingBar>



<DatePicker>

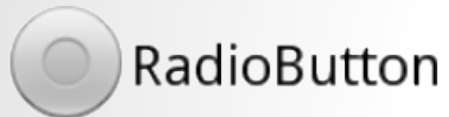


Views

<TextView>

Texto

<RadioButton>



<RatingBar>



<DatePicker>



Views

<TextView>

Texto

<RadioButton>



<RatingBar>



<Button>



<DatePicker>

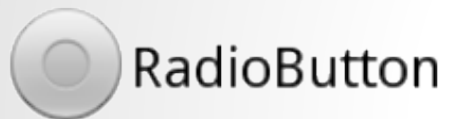


Views

<TextView>

Texto

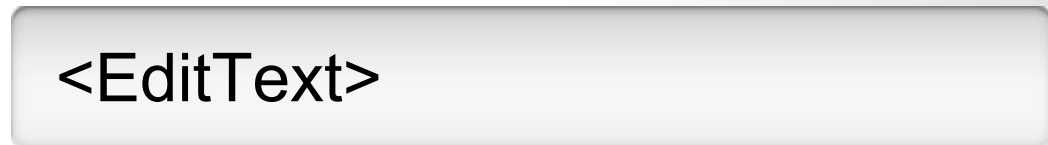
<RadioButton>



<RatingBar>



<EditText>



<Button>



<DatePicker>



Views

<TextView>

Text

<CheckBox>



CheckBox

<RadioButton>



RadioButton

<RatingBar>



<EditText>

<Button>



<DatePicker>



Views

<TextView>

Text

<CheckBox>



CheckBox

<RadioButton>



RadioButton

<RatingBar>



Etc...

<EditText>

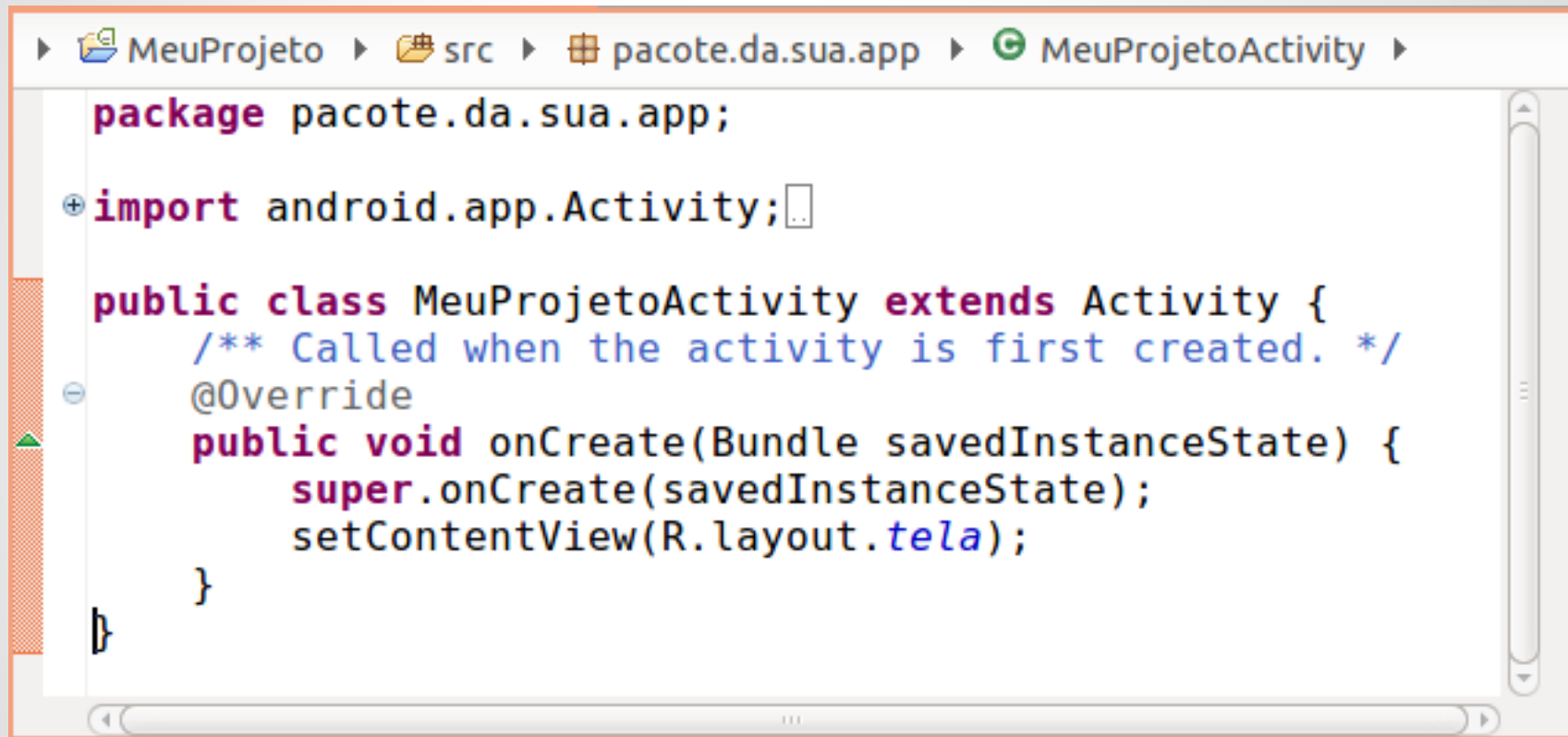
<Button>

Button

<DatePicker>

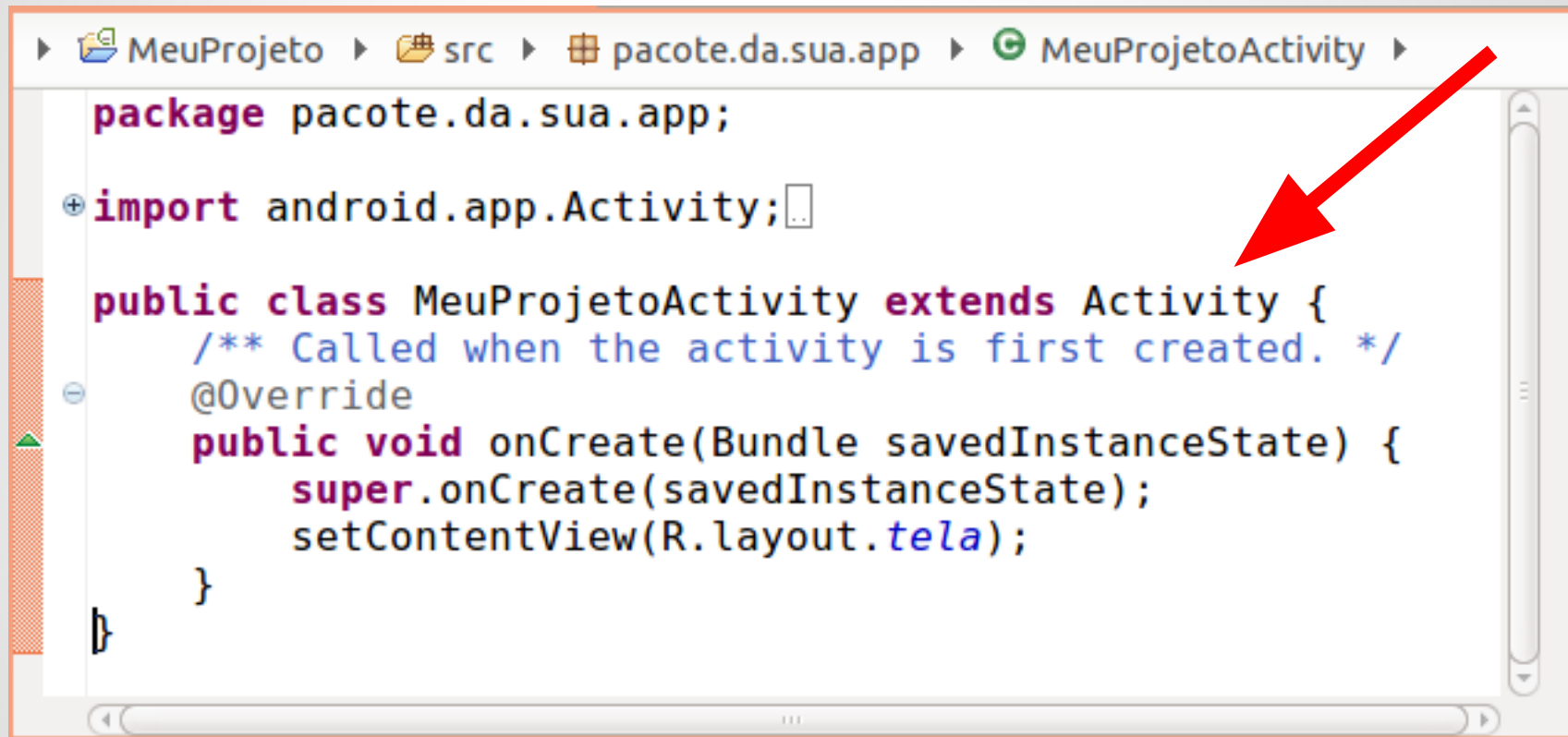


Activity



```
MeuProjeto ▸ src ▸ pacote.da.sua.app ▸ MeuProjetoActivity ▸  
  
package pacote.da.sua.app;  
  
import android.app.Activity;  
  
public class MeuProjetoActivity extends Activity {  
    /** Called when the activity is first created. */  
    @Override  
    public void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.tela);  
    }  
}
```


Activity

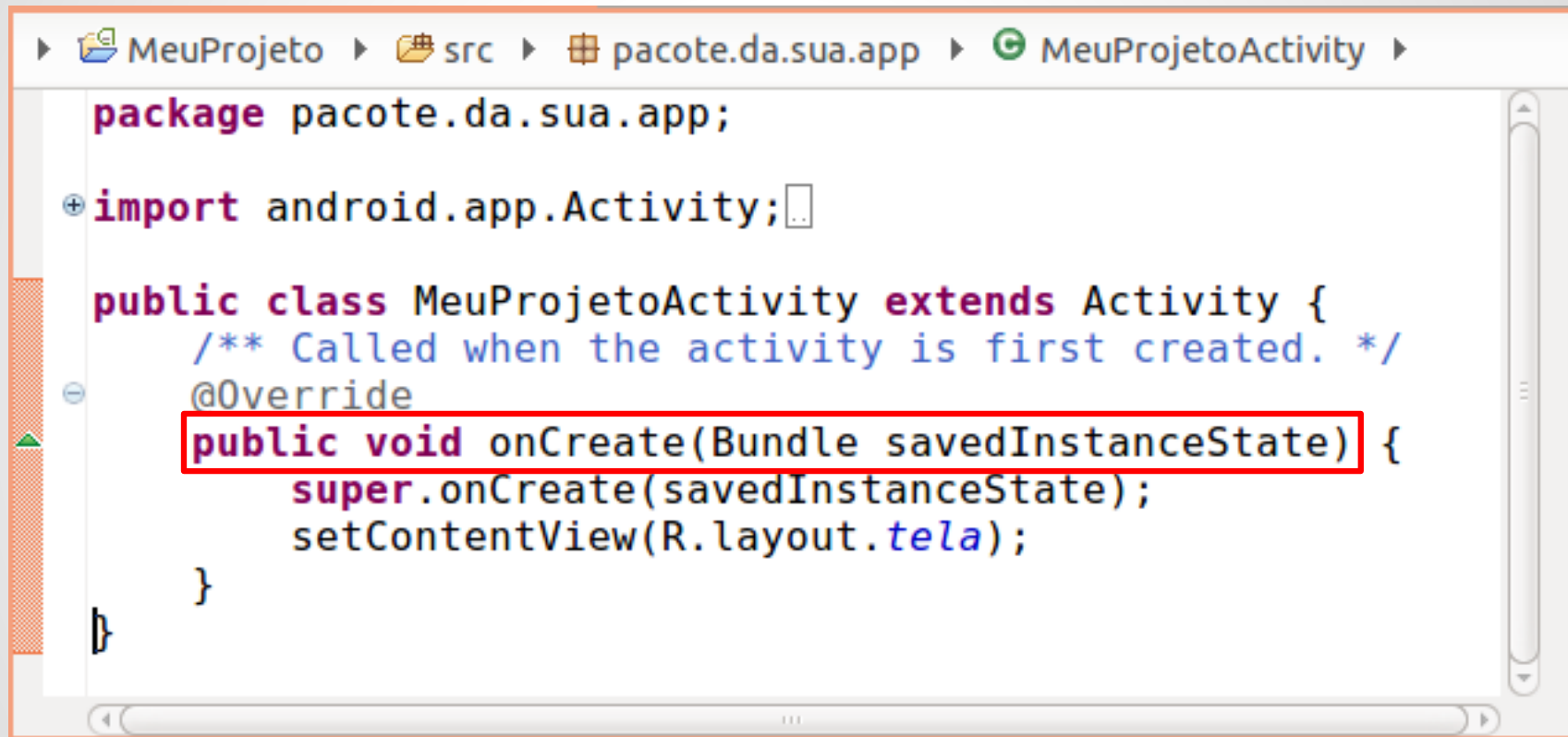


```
MeuProjeto ▸ src ▸ pacote.da.sua.app ▸ MeuProjetoActivity ▸
package pacote.da.sua.app;

import android.app.Activity;

public class MeuProjetoActivity extends Activity {
    /** Called when the activity is first created. */
    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.tela);
    }
}
```

Activity



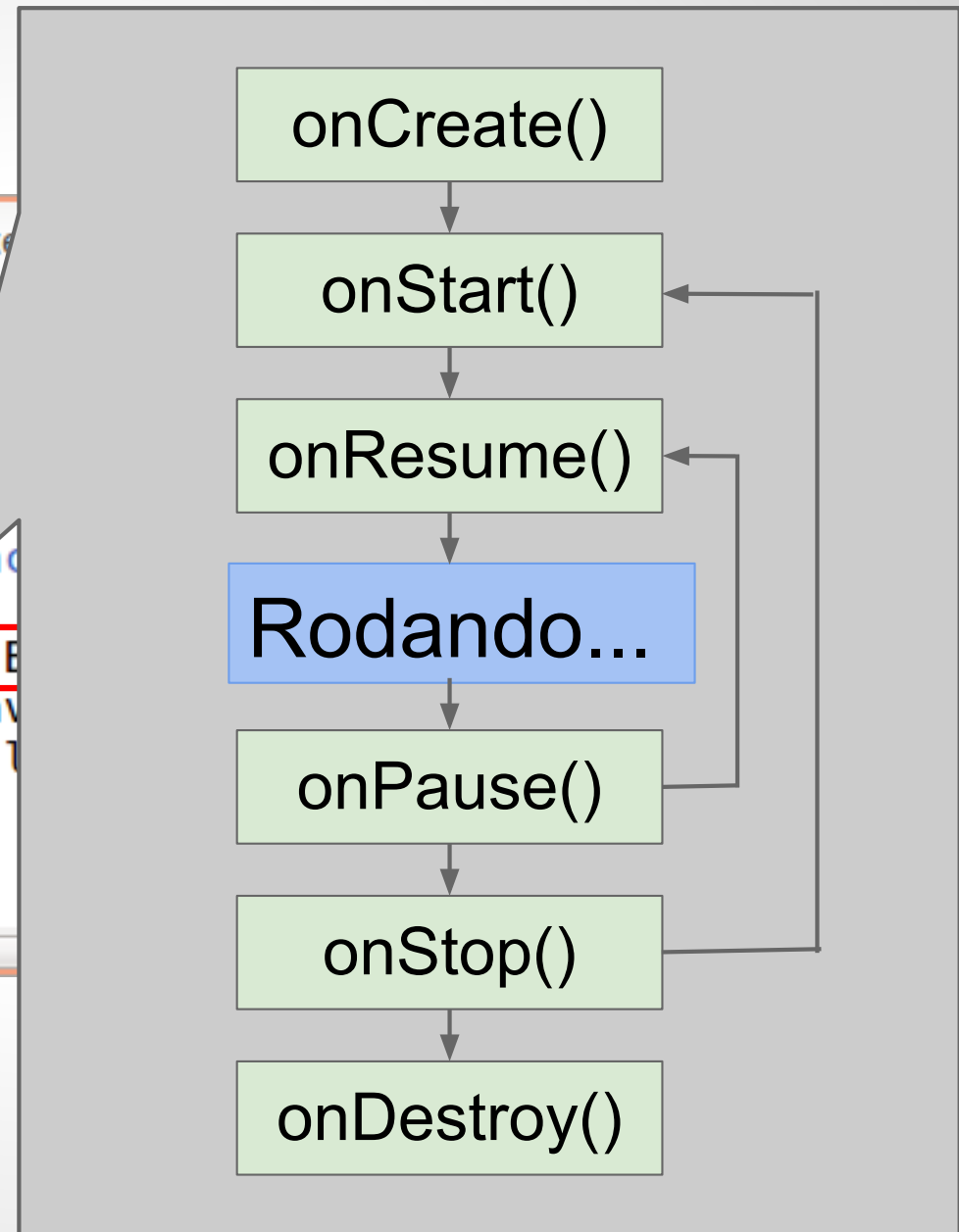
```
MeuProjeto ▸ src ▸ pacote.da.sua.app ▸ MeuProjetoActivity ▸  
  
package pacote.da.sua.app;  
  
import android.app.Activity;  
  
public class MeuProjetoActivity extends Activity {  
    /** Called when the activity is first created. */  
    @Override  
    public void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.tela);  
    }  
}
```

Activity

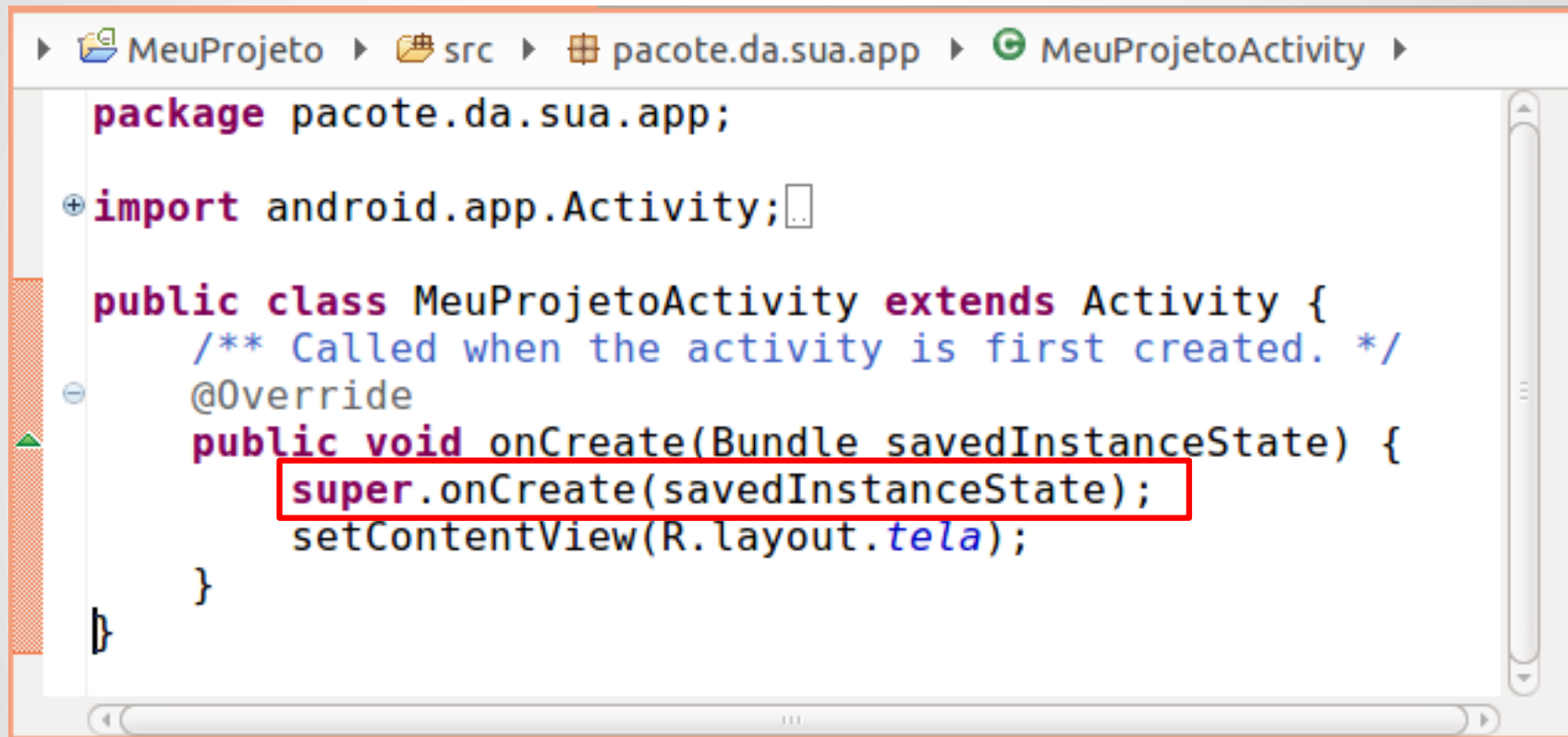
```
MeuProjeto ▸ src ▸ pacote
package pacote.da.sua.app

import android.app.Activity

public class MeuProjeto
    /** Called when the activity is first created. */
    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }
}
```



Activity

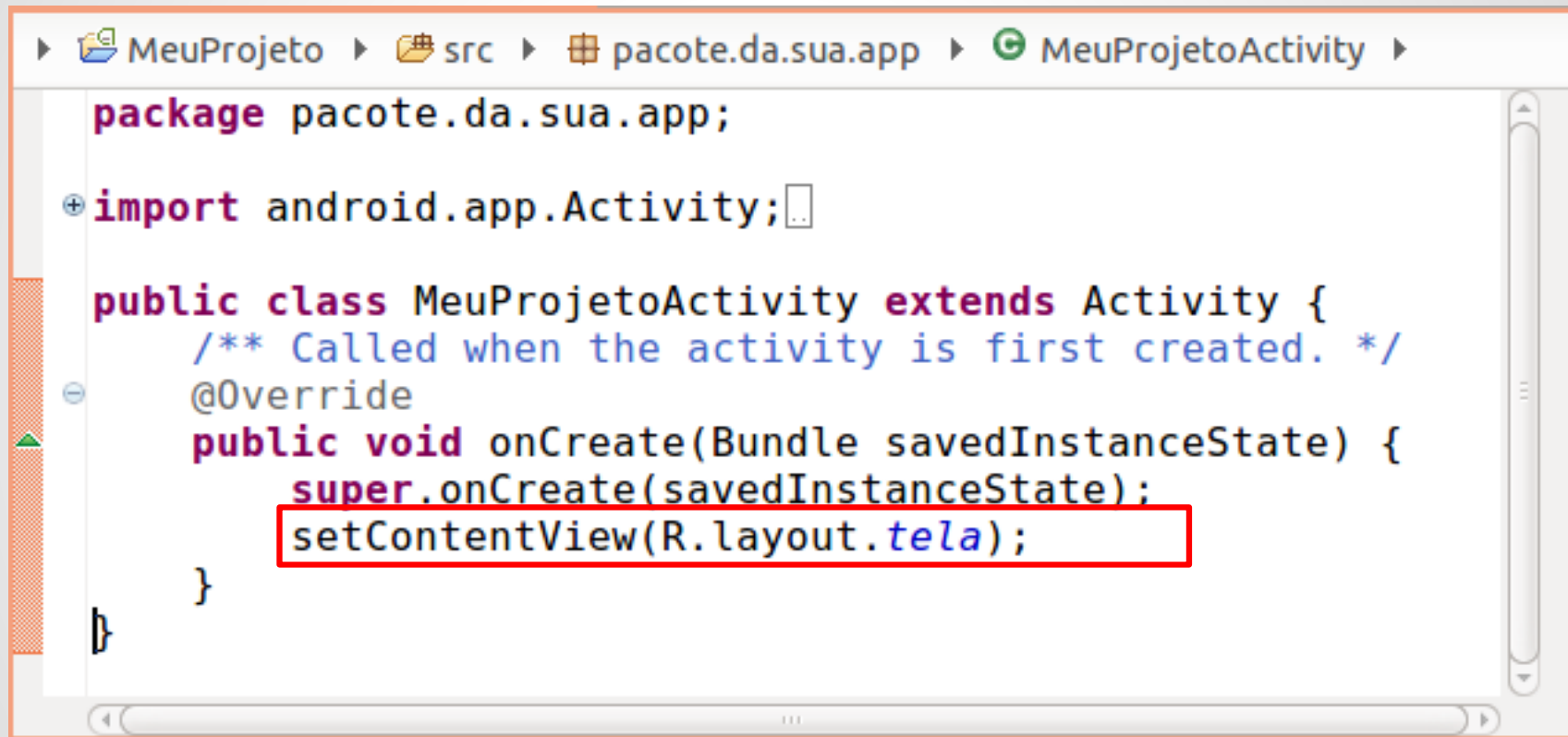


```
MeuProjeto ▸ src ▸ pacote.da.sua.app ▸ MeuProjetoActivity ▸
package pacote.da.sua.app;

import android.app.Activity;

public class MeuProjetoActivity extends Activity {
    /** Called when the activity is first created. */
    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.tela);
    }
}
```

Activity



```
MeuProjeto ▸ src ▸ pacote.da.sua.app ▸ MeuProjetoActivity ▸  
  
package pacote.da.sua.app;  
  
import android.app.Activity;  
  
public class MeuProjetoActivity extends Activity {  
    /** Called when the activity is first created. */  
    @Override  
    public void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.tela);  
    }  
}
```

Activ

Activity



XML

```
@Override  
public void onCreate(Bundle savedInstanceState) {  
    super.onCreate(savedInstanceState);  
    setContentView(R.layout.tela);  
}
```

Referência para uma View

Activity  Layout XML

• ?  `<Button
 android:layout_width="..."
 android:layout_height="..."
 android:layout_id="@+id/botao"
/>`

Referência para uma View

Activity  Layout XML

• ? findViewById(?)  `<Button
 android:layout_width="..."
 android:layout_height="..."
 android:layout_id="@+id/botao"
/>`