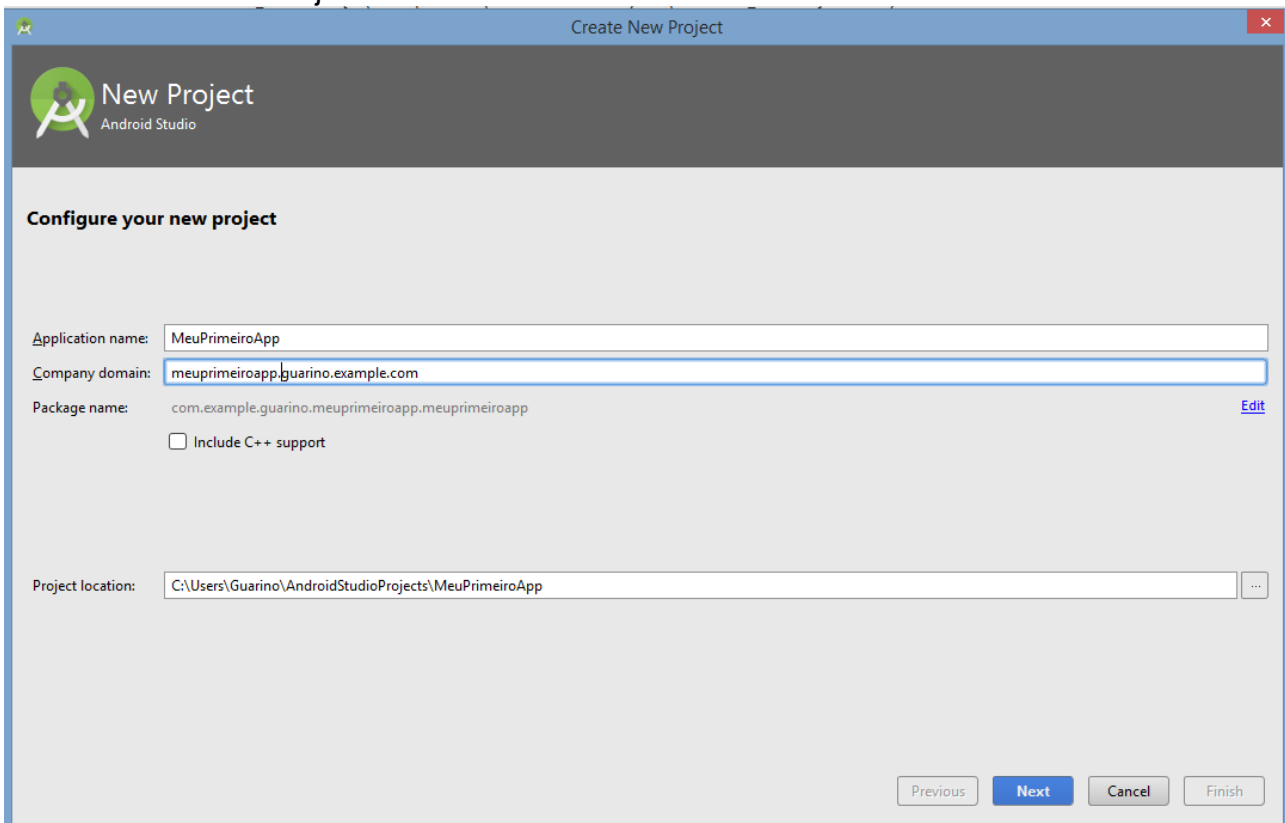


Criando as primeiras telas (Activity)

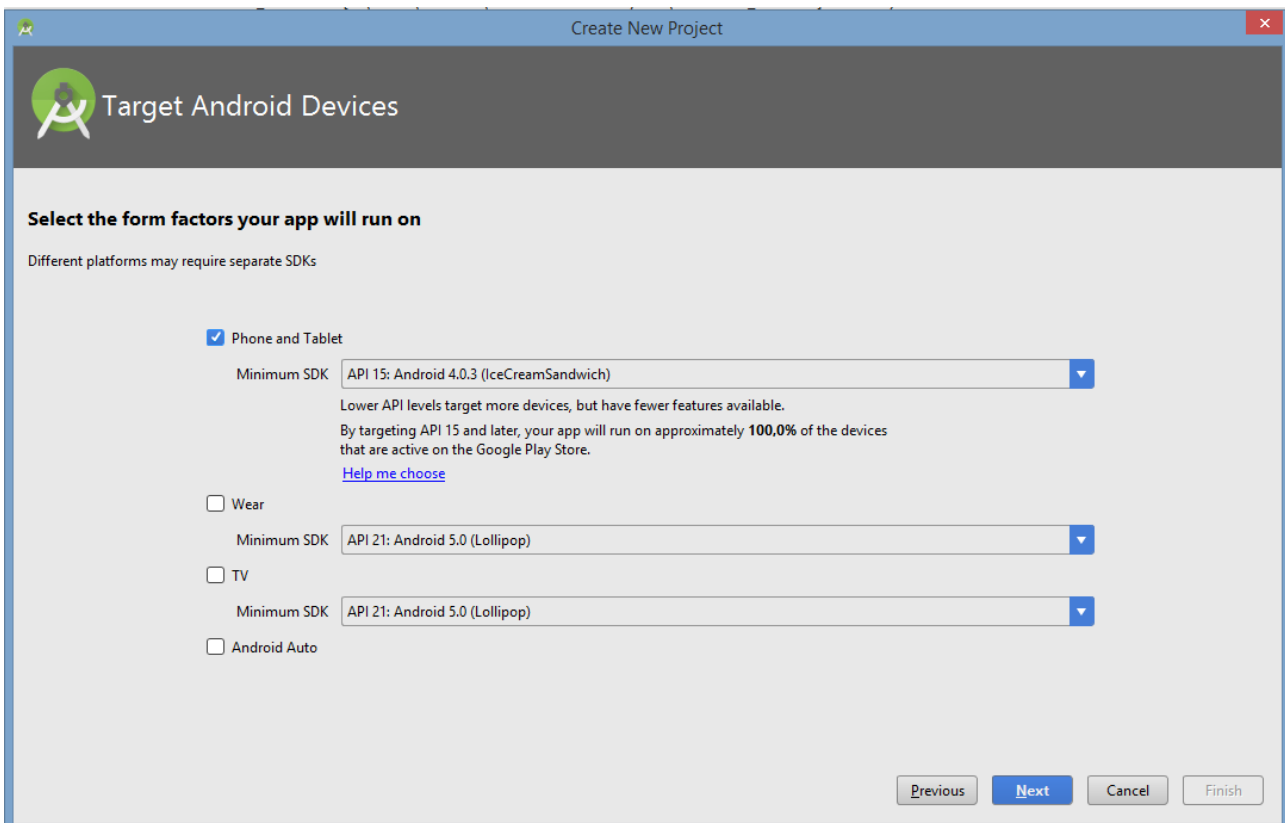
File > New > New Project



The screenshot shows the 'Create New Project' dialog in Android Studio. The title bar reads 'Create New Project'. The main header area contains the Android Studio logo and the text 'New Project' and 'Android Studio'. Below this, the section is titled 'Configure your new project'. The form includes the following fields and options:

- Application name:** MeuPrimeiroApp
- Company domain:** meuprimeiroapp.guarino.example.com
- Package name:** com.example.guarino.meuprimeiroapp.meuprimeiroapp (with an [Edit](#) link)
- Include C++ support
- Project location:** C:\Users\Guarino\AndroidStudioProjects\MeuPrimeiroApp

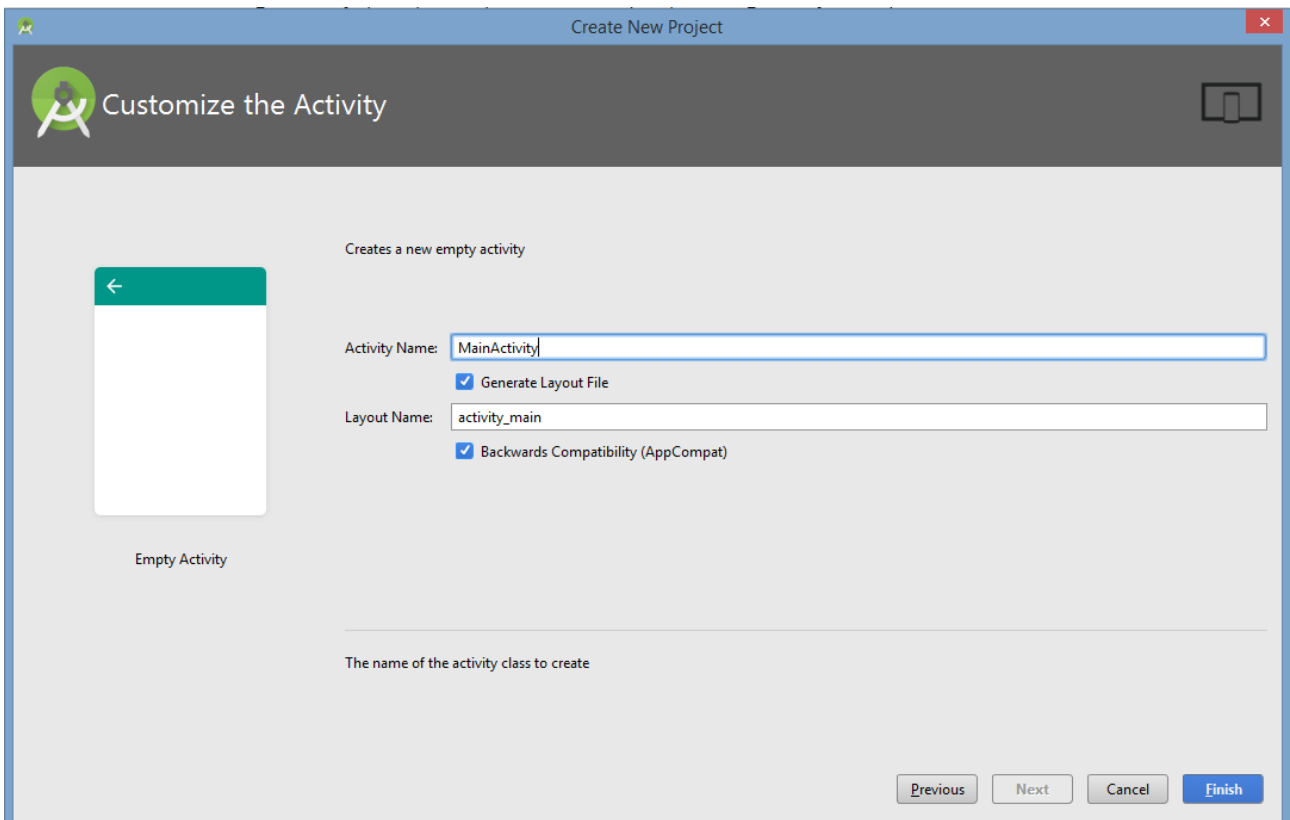
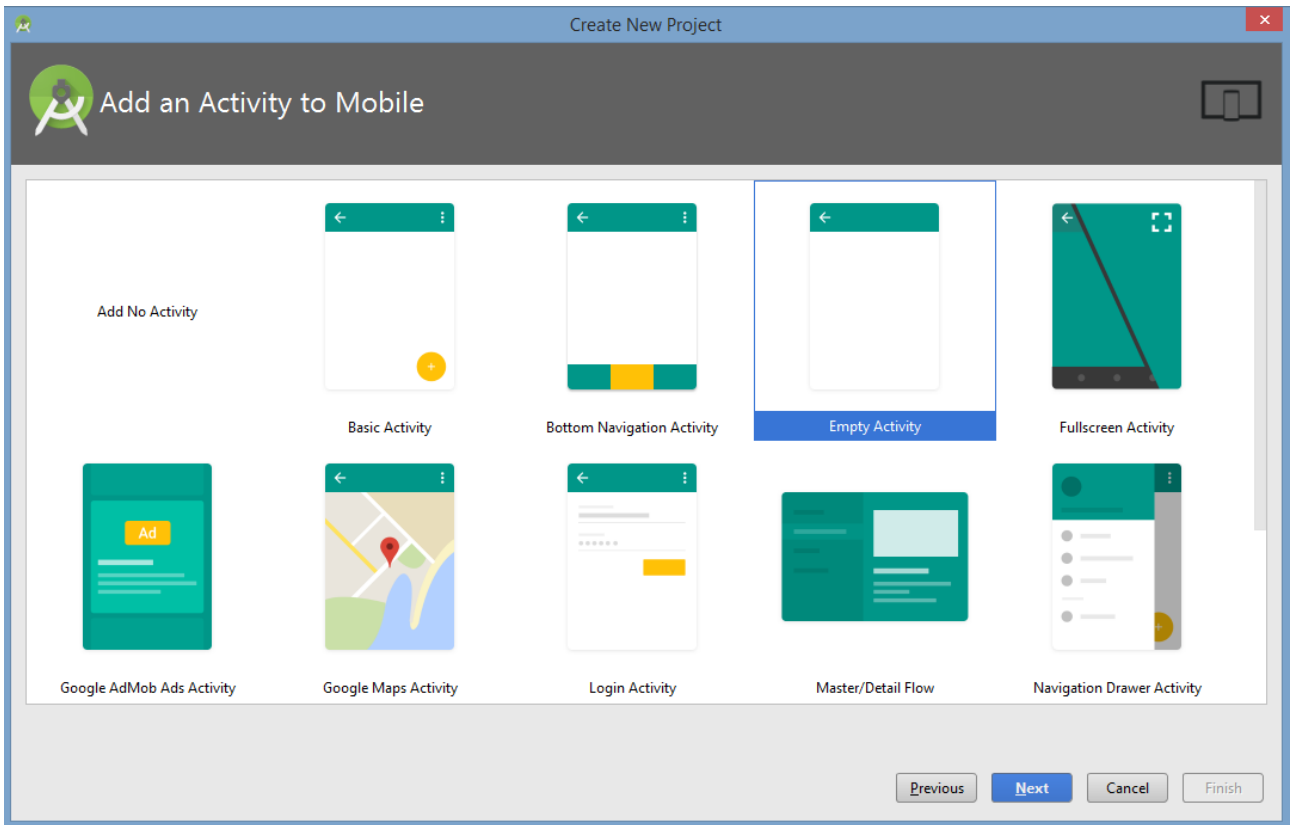
At the bottom right, there are four buttons: 'Previous', 'Next', 'Cancel', and 'Finish'.



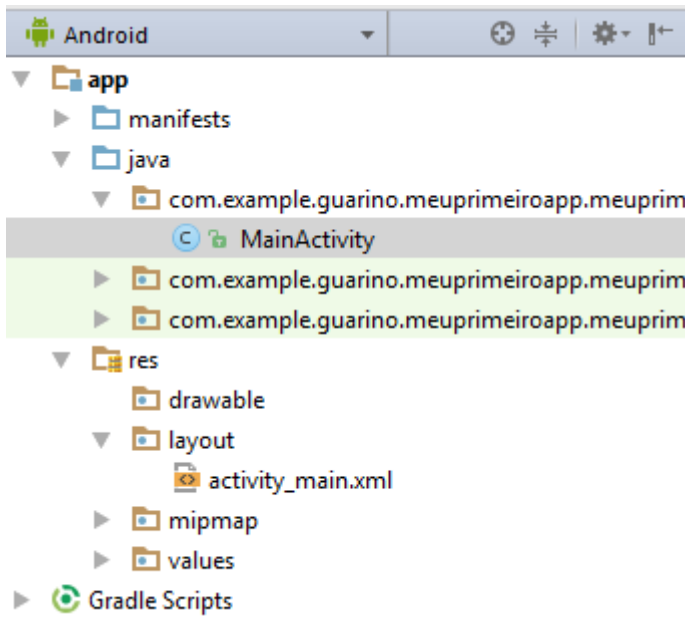
The screenshot shows the 'Create New Project' dialog in Android Studio, specifically the 'Target Android Devices' step. The title bar reads 'Create New Project'. The main header area contains the Android Studio logo and the text 'Target Android Devices'. Below this, the section is titled 'Select the form factors your app will run on'. A note states: 'Different platforms may require separate SDKs'. The form includes the following options and fields:

- Phone and Tablet
 - Minimum SDK:** API 15: Android 4.0.3 (IceCreamSandwich)
 - Lower API levels target more devices, but have fewer features available.
 - By targeting API 15 and later, your app will run on approximately **100.0%** of the devices that are active on the Google Play Store.
 - [Help me choose](#)
- Wear
 - Minimum SDK:** API 21: Android 5.0 (Lollipop)
- TV
 - Minimum SDK:** API 21: Android 5.0 (Lollipop)
- Android Auto

At the bottom right, there are four buttons: 'Previous', 'Next', 'Cancel', and 'Finish'.



Observe o conteúdo dos arquivos MainActivity e activity_main.xml.



Alterar strings.xml

```
<resources>  
  <string name="app_name">Primeiro app</string>  
</resources>
```

Usar FindUsages para ver onde app_name é usado.

Executar a app no AVD

Alterar activiy_main.xml para RelativeLayout

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

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Hello World!" />

</RelativeLayout>
```

Adicionar mais um TextView

```
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Hello World!"
/>

<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Hello World 2 2 2 2!"
/>
```

Executar a app no AVD

Alterar para LinearLayout e orientaiion 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="match_parent"
    android:orientation="vertical">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Hello World!"
        />

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Hello World 2 2 2 2!"
        />

</LinearLayout>
```

Executar a app no AVD

Criar ListView e remover TextViews

```
<?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="match_parent"
    android:orientation="vertical">

    <ListView
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:id="@+id/lista_questoes"
    />

</LinearLayout>
```

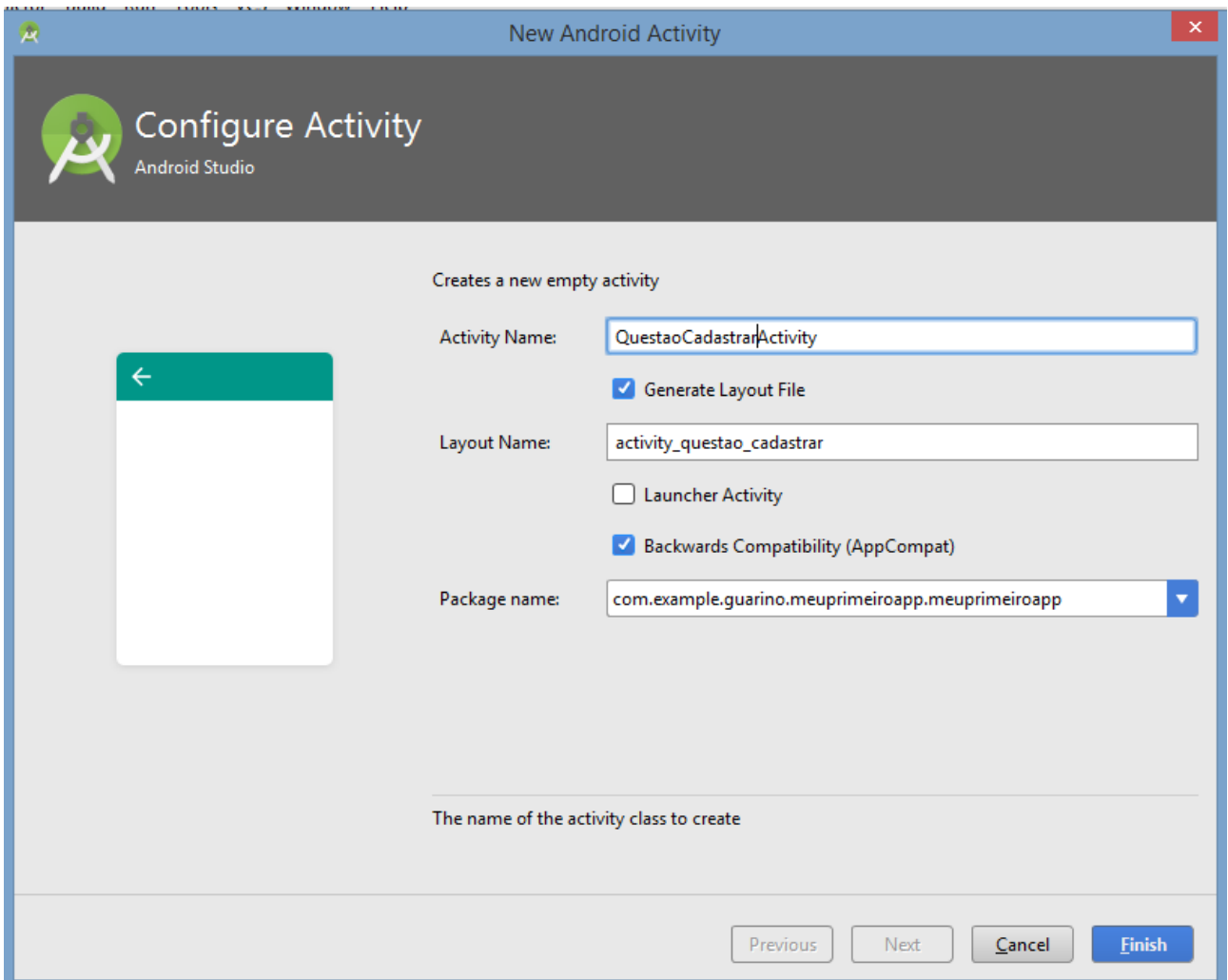
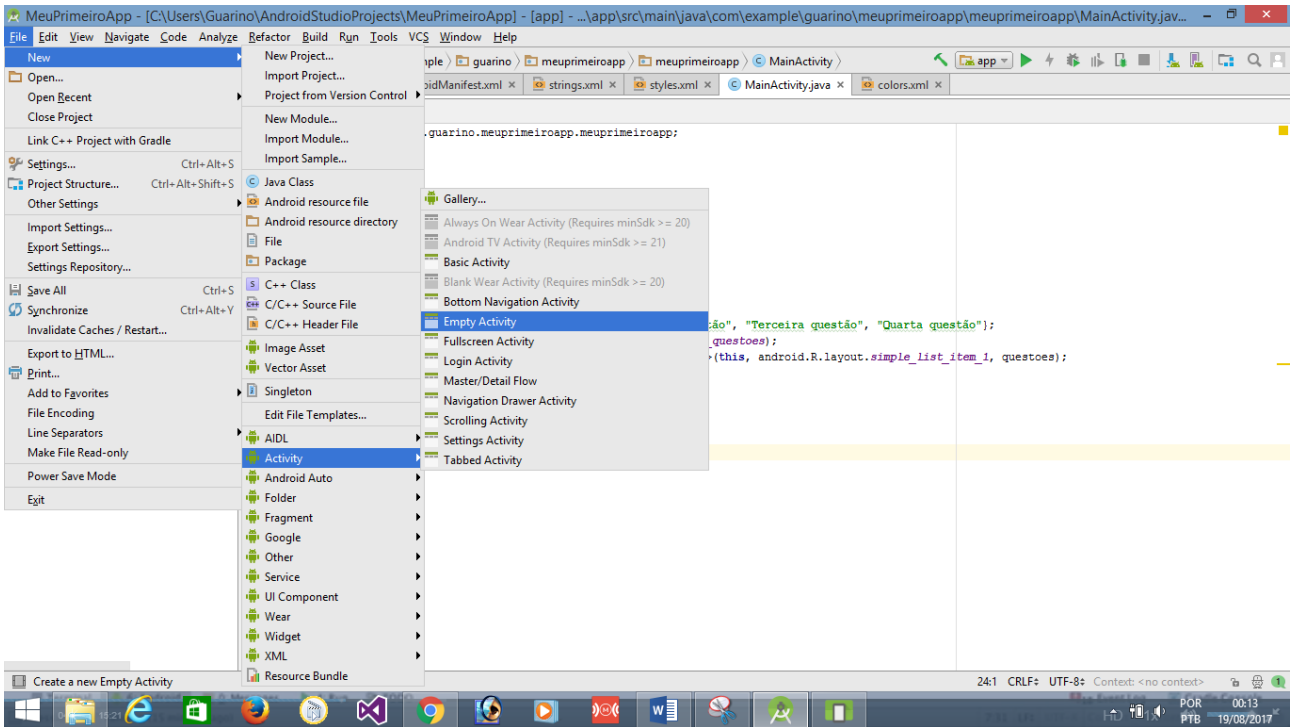
Na MainActivity, preencher o ListView

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

    String[] questoes = {"Primeira questão", "Segunda questão", "Terceira questão", "Quarta questão"};
    ListView listView = (ListView) findViewById(R.id.lista_questoes);
    ArrayAdapter<String> adapter = new ArrayAdapter<String>(this, android.R.layout.simple_list_item_1,
questoes);
    listView.setAdapter(adapter);
}
}
```

Executar no AVD

Adicionar nova Activity:



Alterar a tela de cadastro

```
<?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="match_parent"
    android:orientation="vertical"
    >

    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Questão"
    />

    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Resposta Padrão"/>

</LinearLayout>
```

Alterar o Manifest para chamar o Cadastro

Alterar o intente para o Cadastro

```
<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">

        </activity>
        <activity android:name=".QuestaoCadastrActivity">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

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

        </activity>
    </application>
```

Executar AVD

Melhorando o layout do Cadastro

```
<?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="match_parent"
    android:orientation="vertical"
    >

    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Questão"/>

    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Digite a questão"
        />

    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Resposta padrão"/>

    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Digite a resposta padrão"/>

</LinearLayout>
```

Executar no AVD

Usando RatingBar e Button

```
<?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="match_parent"
    android:orientation="vertical"
    >

    <TextView
        android:paddingTop="20dp"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Questão"/>

    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Digite a questão"
        />

    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Resposta padrão"/>

    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Digite a resposta padrão"/>

    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Dificuldade"/>

    <RatingBar
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:numStars="5"
        android:max="10"
        android:layout_gravity="center"/>

    <Button
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Salvar"/>

</LinearLayout>
```

Executar no AVD

- Ctrl+F11 para girar.
- Digite algum texto com múltiplas linhas em algum TextView.
- Observe que não será possível descer a tela até o final.

Implementar ScrollView – para permitir descer a tela até o final.

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

```
</LinearLayout>  
</ScrollView>
```

Executar no AVD

Colocar nomes (id) nos components do Cadastro

EditText - `android:id="@+id/questao_cadastrar_questao"`
EditText - `android:id="@+id/questao_cadastrar_resposta"`
RatingBar - `android:id="@+id/questao_cadastrar_dificuldade"`
Button - `android:id="@+id/questao_cadastrar_salvar"`

Exibindo uma mensagem (Toast) na QuestaoCadastrarActivity

```
protected void onCreate(Bundle savedInstanceState) {  
    super.onCreate(savedInstanceState);  
    setContentView(R.layout.activity_questao_cadastrar);  
  
    Button button = (Button) findViewById(R.id.questao_cadastrar_salvar);  
    button.setOnClickListener(new View.OnClickListener() {  
        @Override  
        public void onClick(View view) {  
            Toast.makeText(QuestaoCadastrarActivity.this, "Salvo com sucesso",  
                Toast.LENGTH_LONG).show();  
        }  
    });  
}
```

Executar no AVD

Criando um floating button

No Manifest, voltar o Intent para a MainActivity

```
<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=".QuestaoCadastrarActivity">

</activity>
```

MainActivity

Adicionar mais questões

```
String[] questoes = {"Primeira questão", "Segunda questão", "Terceira questão", "Quarta questão",
"Primeira questão", "Segunda questão", "Terceira questão", "Quarta questão", "Primeira questão",
"Segunda questão", "Terceira questão", "Quarta questão"};
```

Alterando o layout (activity_main.xml)

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
  android:layout_width="match_parent"
  android:layout_height="match_parent"
  android:orientation="vertical">

  <ListView
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:id="@+id/lista_questoes"
    />

  <Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="+"/>

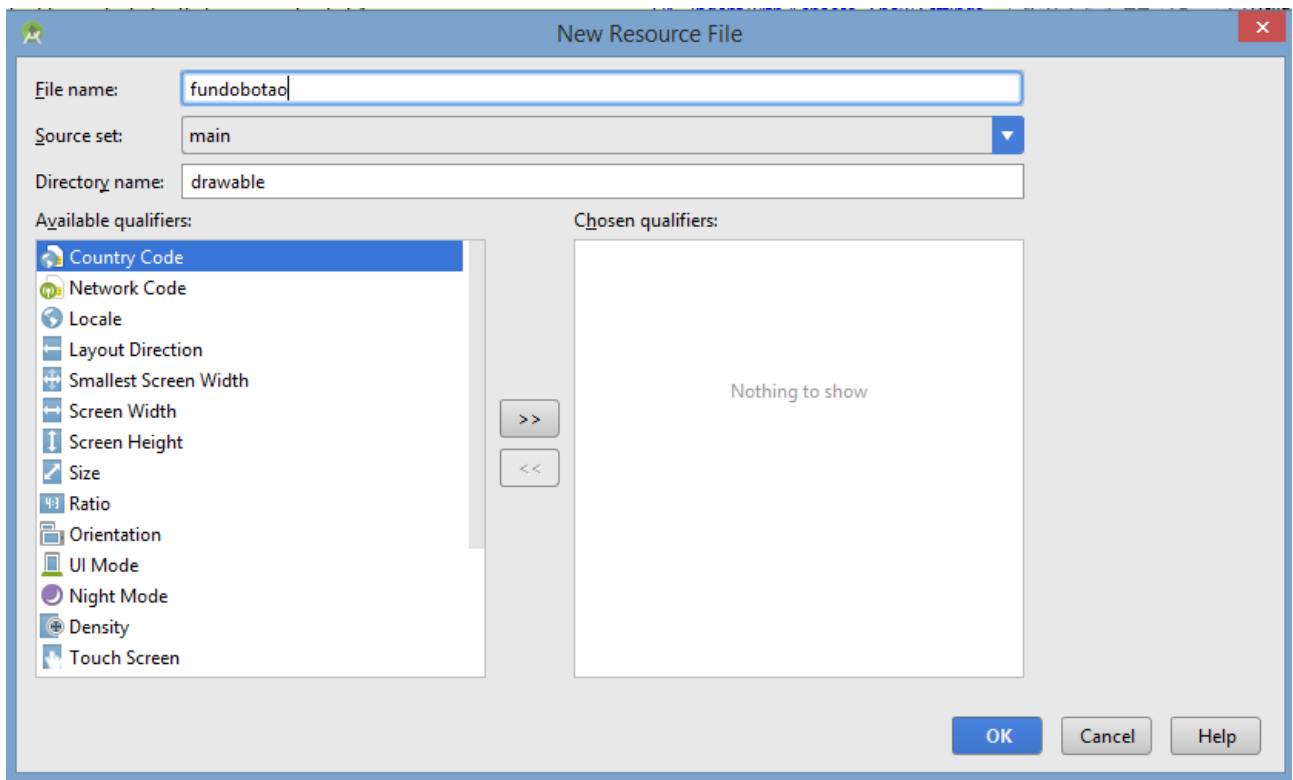
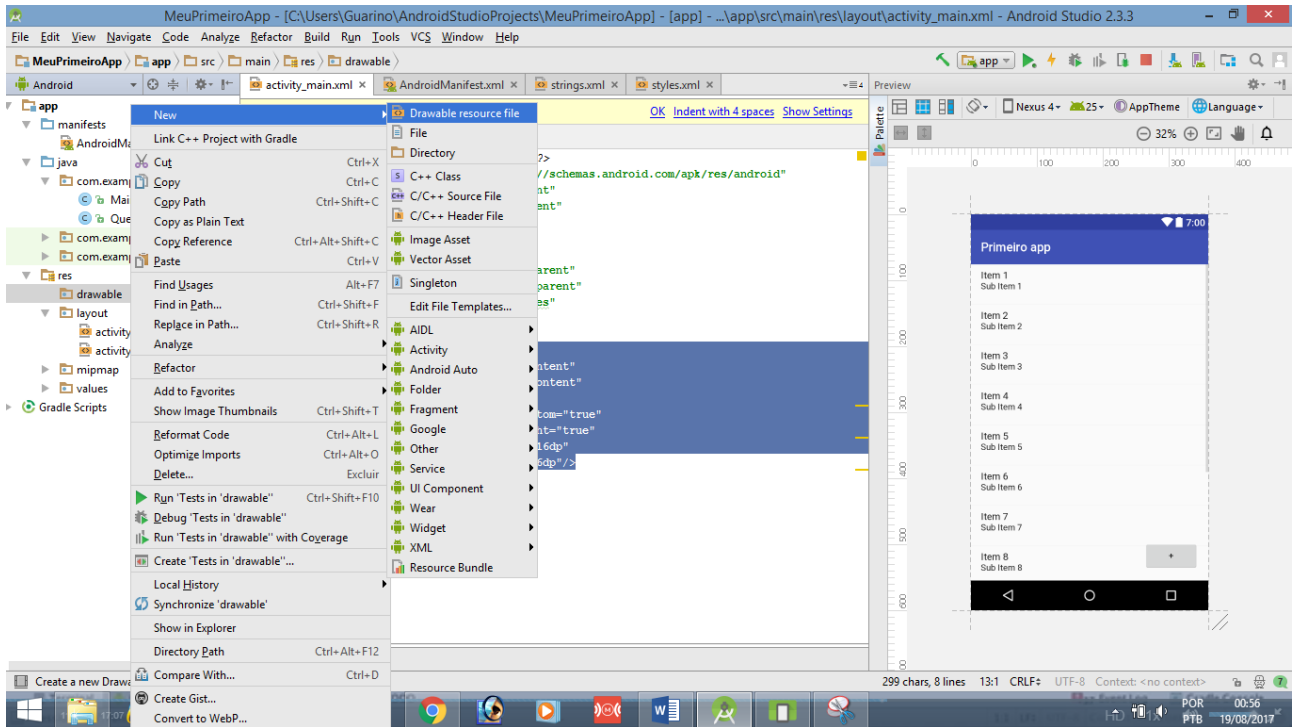
</RelativeLayout>
```

Posicionar o button na parte de baixo

```
<Button
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:text="+
  android:layout_alignParentBottom="true"
  android:layout_alignParentRight="true"
  android:layout_marginBottom="16dp"
  android:layout_marginRight="16dp"/>
```

Criar o fundo oval

Criar drawable



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

```
    <solid
        android:color="#ff0000" ></solid>
```

```
</shape>
```

Voltar na activity_main.xml para alterar o fundo, sombra e ID

```

<Button
    android:layout_width="56dp"
    android:layout_height="56dp"
    android:text="+"
    android:textSize="32dp"
    android:textColor="#ffffff"
    android:elevation="6dp"
    android:stateListAnimator="@null"
    android:layout_alignParentBottom="true"
    android:layout_alignParentRight="true"
    android:layout_marginBottom="16dp"
    android:layout_marginRight="16dp"
    android:background="@drawable/fundobotao"
    android:id="@+id/main_questao_cadastrar"
/>

```

Executar no AVD

Chamar outra Activity. Na MainActivity, altere o onCreate para permitir o onClick do botão.

@Override

```

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

```

```

    String[] questoes = {"Primeira questão", "Segunda questão", "Terceira questão", "Quarta questão",
"Primeira questão", "Segunda questão", "Terceira questão", "Quarta questão", "Primeira questão",
"Segunda questão", "Terceira questão", "Quarta questão"};

```

```

    ListView listView = (ListView) findViewById(R.id.lista_questoes);
    ArrayAdapter<String> adapter = new ArrayAdapter<String>(this, android.R.layout.simple_list_item_1,
questoes);
    listView.setAdapter(adapter);

```

```

    Button button = (Button) findViewById(R.id.main_questao_cadastrar);

```

```

    button.setOnClickListener(new View.OnClickListener() {

```

```

        @Override

```

```

        public void onClick(View view) {

```

```

            Intent intent = new Intent(MainActivity.this, QuestaoCadastrarActivity.class);

```

```

            startActivity(intent);

```

```

        }

```

```

    });

```

```

}

```

Executar no AVD

Na QuestaoCadastrarActivity, altere o onClick do Botão para finalizar a Activity.

@Override

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

```
    Button button = (Button) findViewById(R.id.questao_cadastrar_salvar);
```

```
    button.setOnClickListener(new View.OnClickListener() {
```

```
        @Override
```

```
        public void onClick(View view) {
```

```
            Toast.makeText(QuestaoCadastrarActivity.this, "Salvo com sucesso",
```

```
            Toast.LENGTH_LONG).show();
```

```
            //pode dar o Intent mas não é o melhor caso
```

```
            finish();
```

```
        }
```

```
    });
```

```
}
```

Executar no AVD