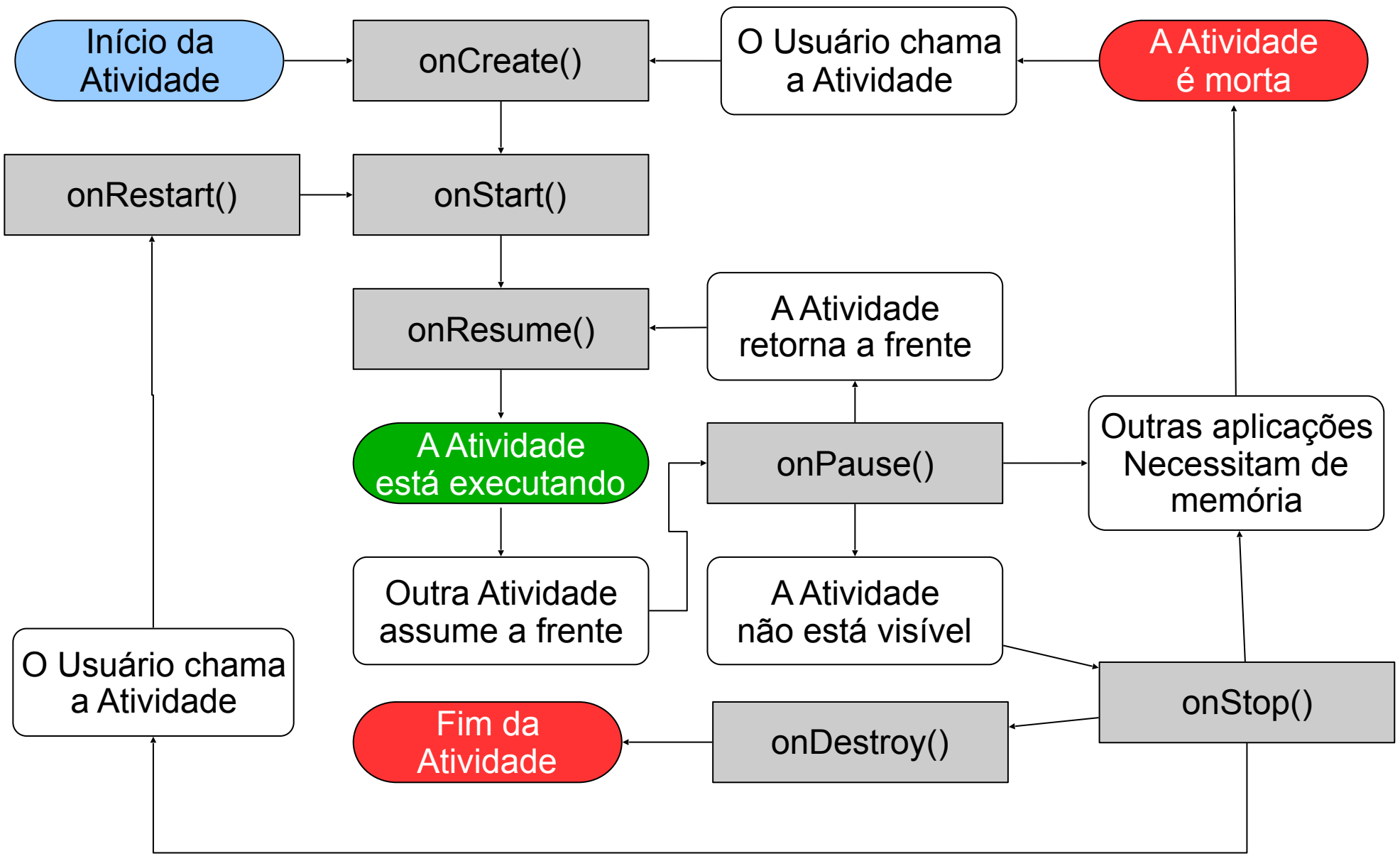
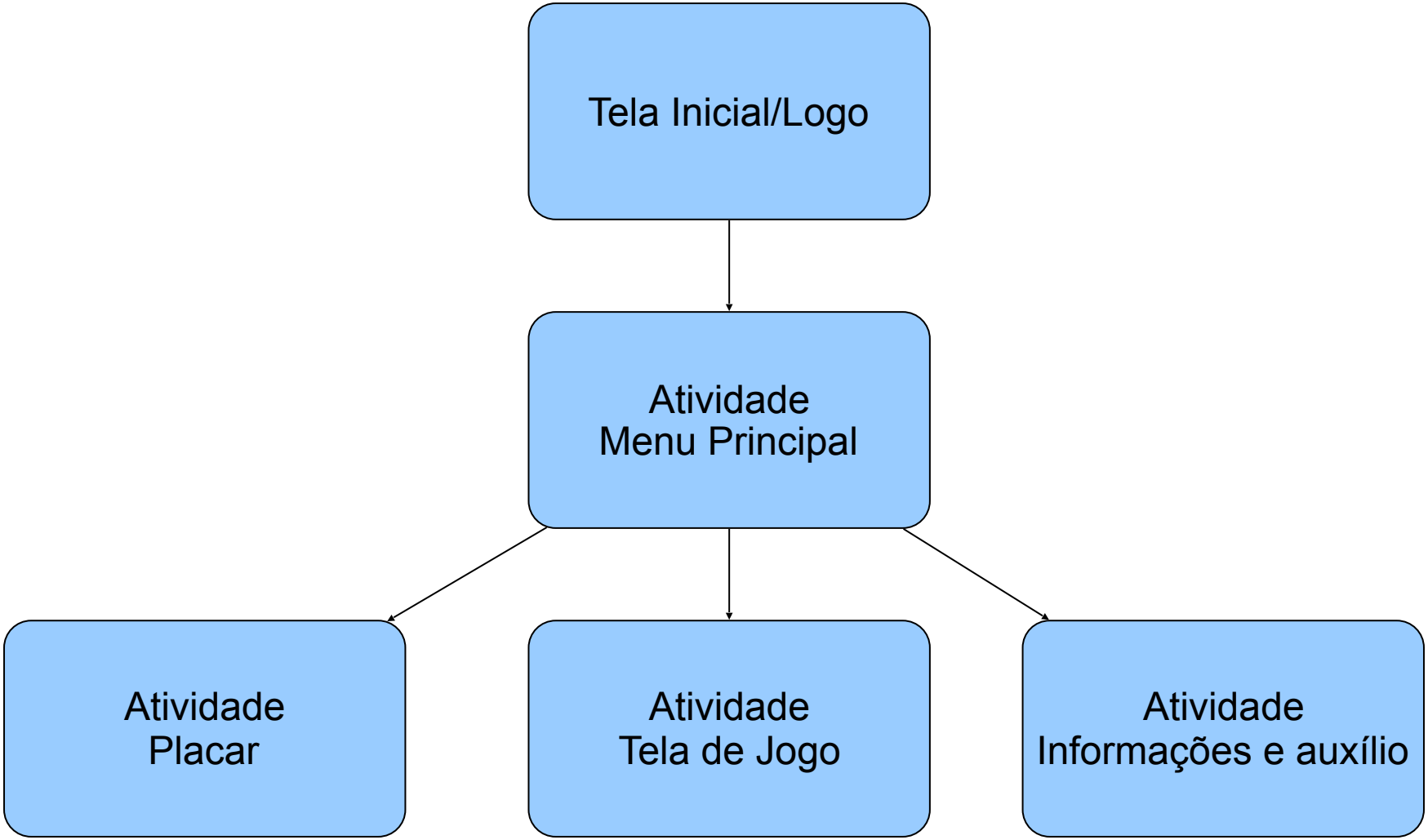
Activity, View e UI

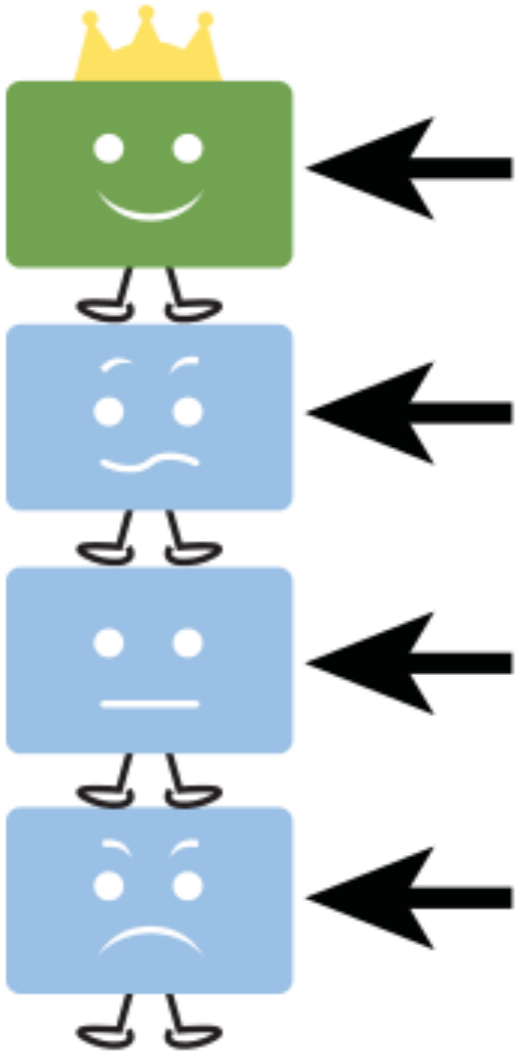
O Ciclo de vida da Activity



O Ciclo de vida da Activity



O Ciclo de vida da Activity



Atividade interagindo com o usuário. No topo da pilha.

Uma segunda Atividade na pilha. Se utilizado o BACK ou a atividade superior for destruída, esta irá ao topo

Atividade no ponto intermediário da pilha. Só será utilizada se as atividade superiores forem destruídas.

Atividade na parte inferior da pilha. Se as Atividades acima necessitarem de recursos, esta será destruída.

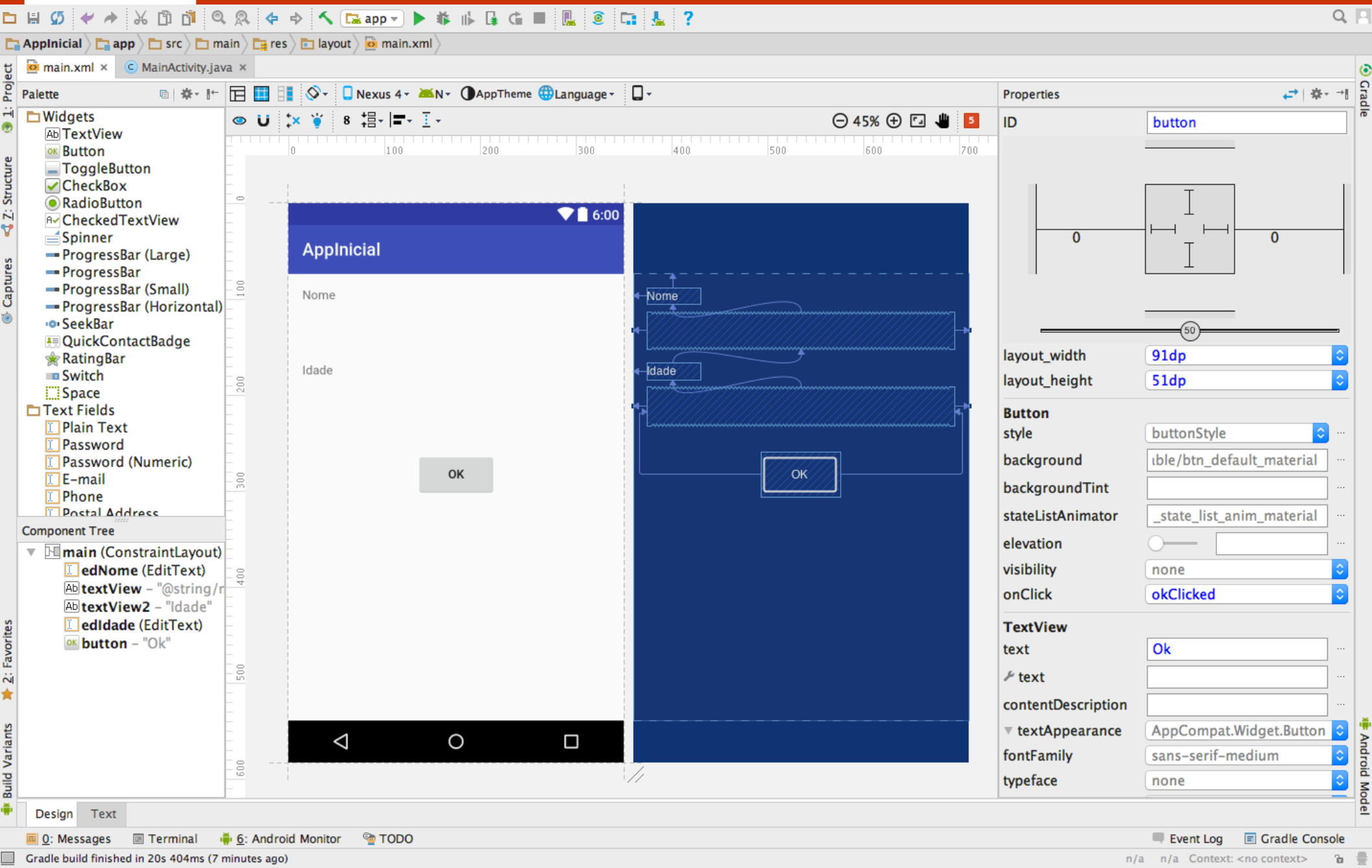
Activity

```xml
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="br.senai.sp.cfp132.appinicial">

    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="AppInicial"
        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>
    </application>

</manifest>
```

```java
public class MainActivity extends AppCompatActivity {

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

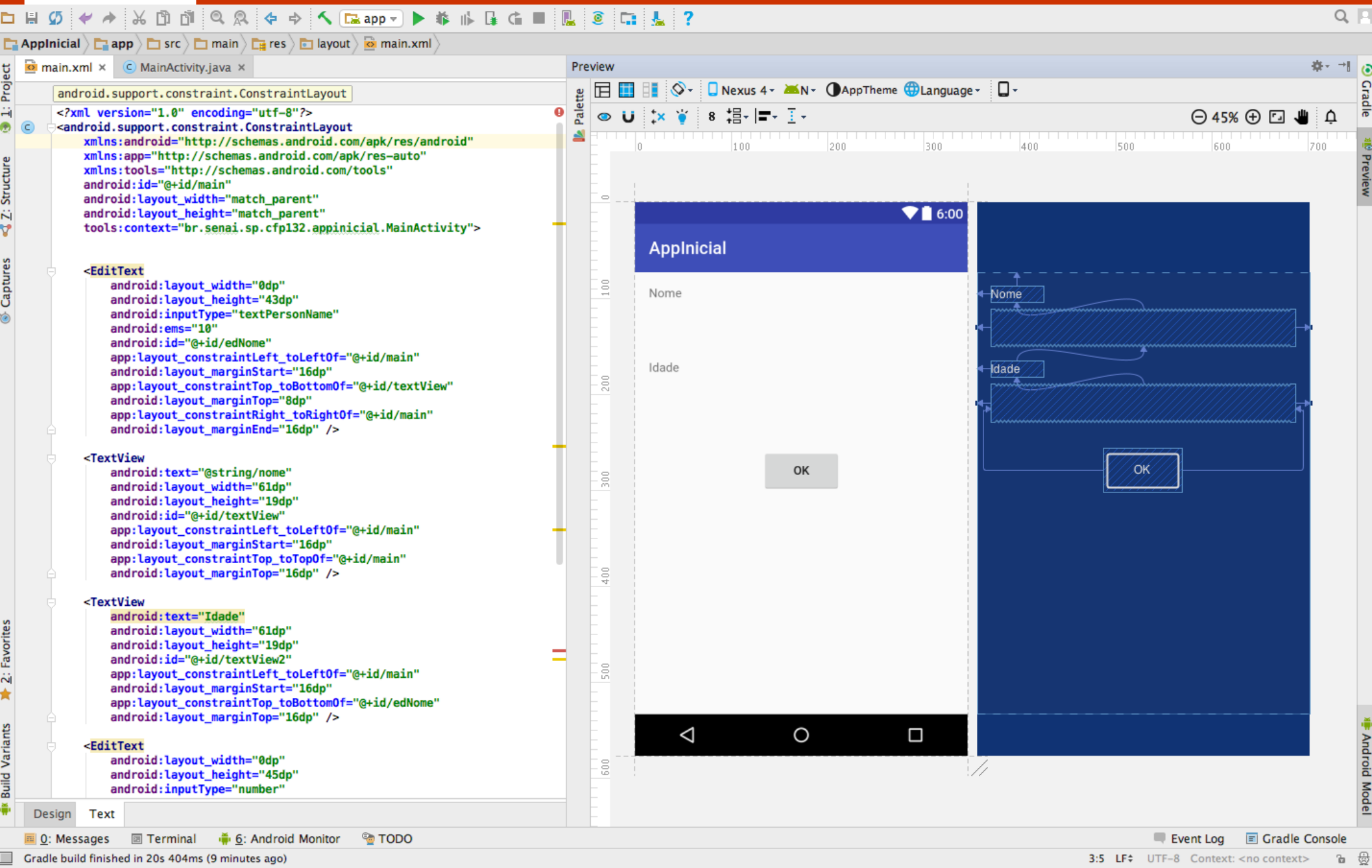
SENAI
SÃO PAULO

main.xml



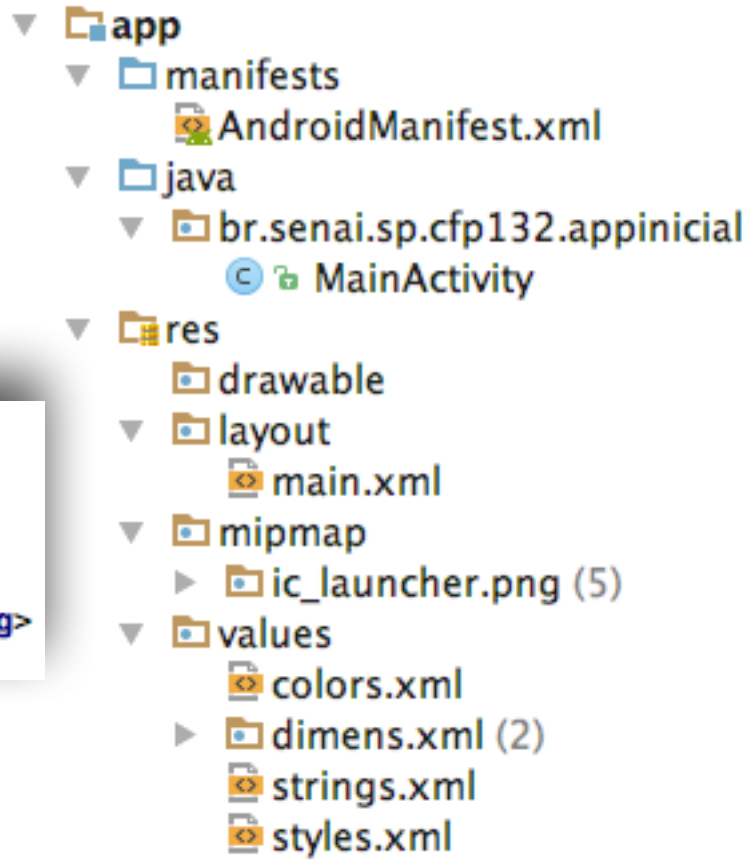
SENAI SÃO PAULO

main.xml



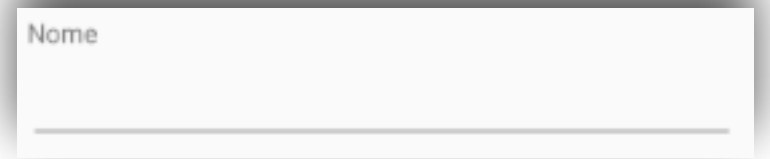
Recursos

```xml
<resources>
    <string name="app_name">AppInicial</string>
    <string name="nome">Nome</string>
    <string name="idade">Idade</string>
    <string name="ok">Ok</string>
    <string name="msg">Bem Vindo, %1$s\nsua idade é: %2$d</string>
</resources>
```



Os Componentes da UI

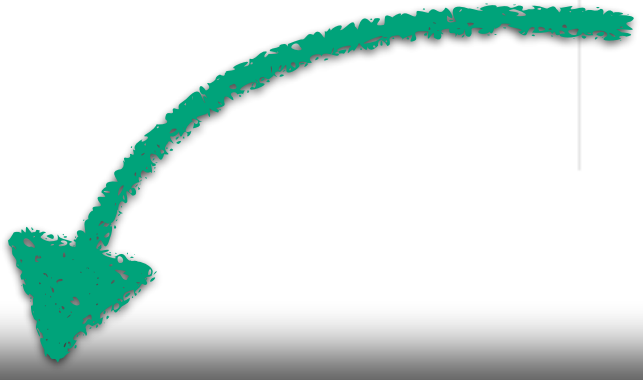
```
<EditText
    android:layout_width="0dp"
    android:layout_height="43dp"
    android:inputType="textPersonName"
    android:ems="10"
    android:id="@+id/edNome"
    tools:ignore="LabelFor"
    app:layout_constraintLeft_toLeftOf="@+id/main"
    android:layout_marginStart="16dp"
    app:layout_constraintTop_toBottomOf="@+id/textView"
    android:layout_marginTop="8dp"
    app:layout_constraintRight_toRightOf="@+id/main"
    android:layout_marginEnd="16dp" />

<TextView
    android:text="@string/nome"
    android:layout_width="61dp"
    android:layout_height="19dp"
    android:id="@+id/textView"
    app:layout_constraintLeft_toLeftOf="@+id/main"
    android:layout_marginStart="16dp"
    app:layout_constraintTop_toTopOf="@+id/main"
    android:layout_marginTop="16dp" />
```



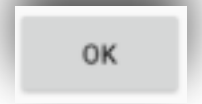

```
public class MainActivity extends AppCompatActivity {
    private EditText edNome;
    private EditText edIdade;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.main);
        edNome = (EditText)findViewById(R.id.edNome);
        edIdade = (EditText)findViewById(R.id.edIdade);
    }

    public void okClicked(View view) {
        String nome = edNome.getText().toString();

        //..

        edNome.setText("");
        edIdade.setText("");
        edNome.requestFocus();
    }
}
```

Os Componentes da UI

```
<Button
    android:text="@string/ok"
    android:layout_width="91dp"
    android:layout_height="51dp"
    tools:layout_editor_absoluteY="204dp"
    android:id="@+id/button"
    android:onClick="okClicked"
    tools:ignore="MissingConstraints"
    app:layout_constraintLeft_toLeftOf="@+id/edIdade"
    app:layout_constraintRight_toRightOf="@+id/edIdade" />
```



```
public void okClicked(View view) {
    String nome = edNome.getText().toString();
    int idade = Integer.parseInt(edIdade.getText().toString());

    String msg = getResources().getString(R.string.msg, nome, idade);
    Toast.makeText(getBaseContext(), msg, Toast.LENGTH_LONG).show();

    edNome.setText("");
    edIdade.setText("");
    edNome.requestFocus();
}
```



Mensagem

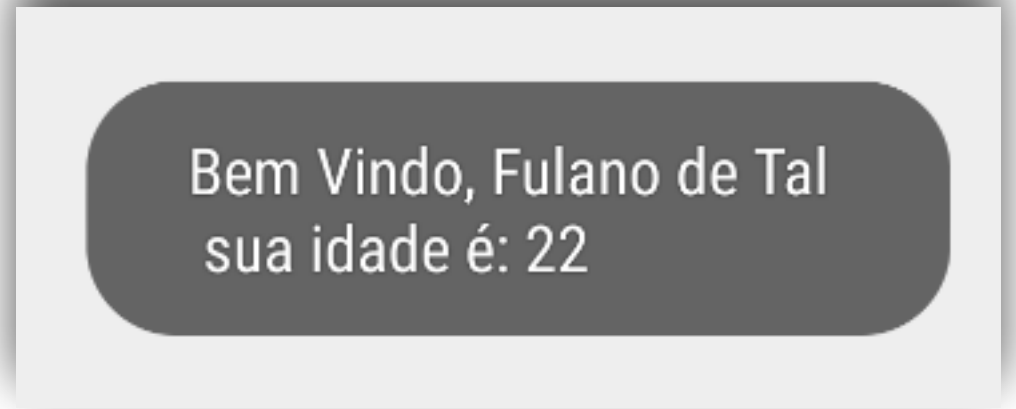
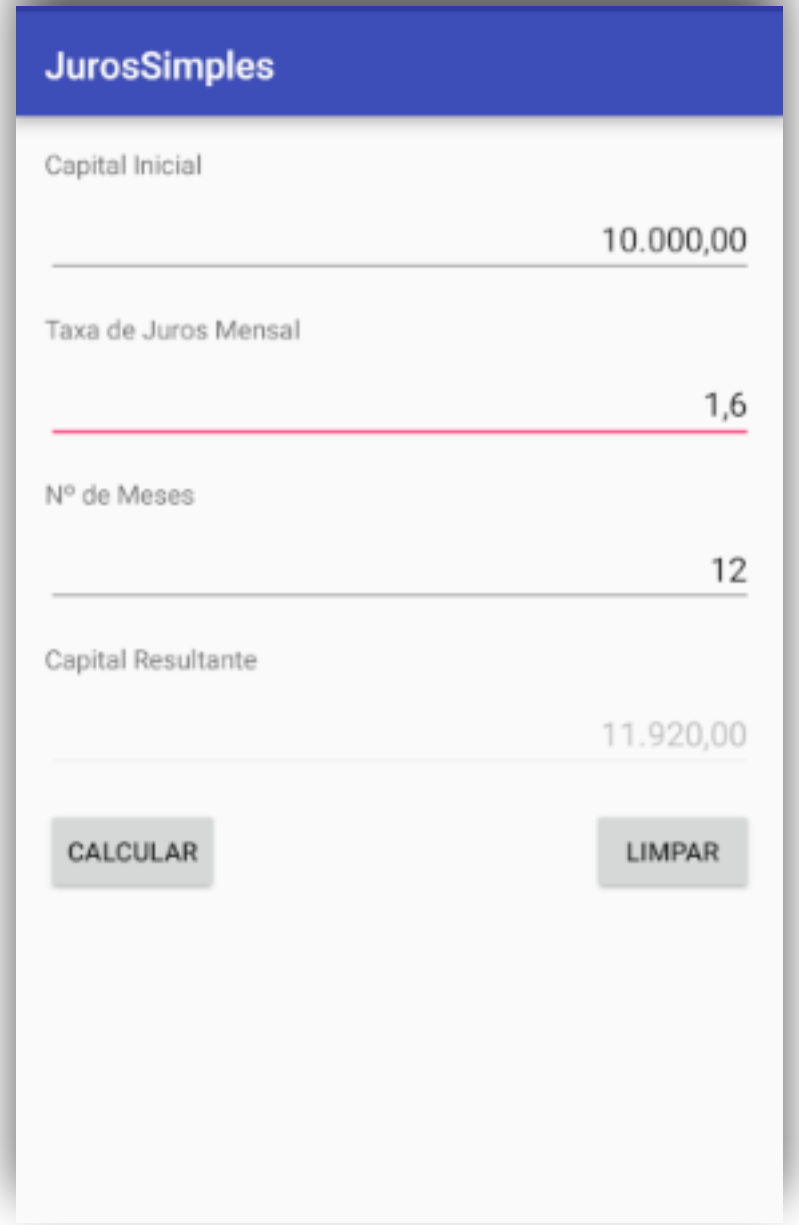
Resource.xml

```
<string name="msg">Bem Vindo, %1$s\nsua idade é%2$d</string>
```

MainActivity.java

```
String msg = getResources().getString(R.string.msg, nome, idade);

Toast.makeText(getBaseContext(),msg, Toast.LENGTH_LONG).show();
```

Toast apresentado



Juros Simples