

# Informações sobre o APP

Giovani Barbosa dos Santos Filho

Núcleo de Informática - Instituto Federal Goiano, Campus Urutaí

## 1 Observações

Tentei deixar os códigos .Java e .Xml o mais compreensíveis possível.

## 2 Print das Interfaces



Figura 1: Interface do Cronômetro

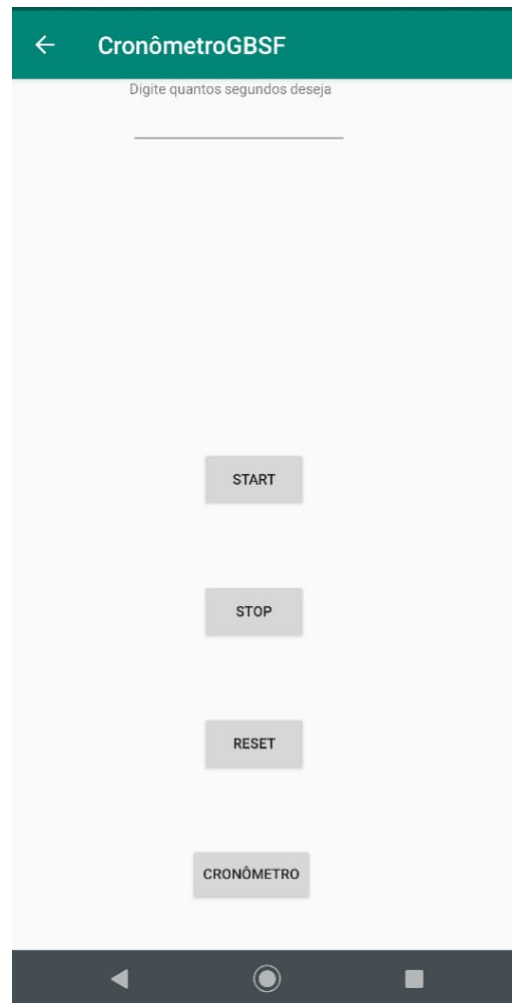


Figura 2: Interface do Temporizador

### 3 Códigos das classes .Java

- MainActivity:

```
package com.example.relgiogbsf;

import android.os.Handler;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.MenuItem;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;

public class MainActivity extends AppCompatActivity {
    private int segundos = 0;
```

```
private boolean execucao;
private boolean estavaEmexecucao;

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

    Button botao1= (Button)findViewById(R.id.bBotao1);
    Button botao2= (Button)findViewById(R.id.bBotao2);
    Button botao3= (Button)findViewById(R.id.bBotao3);
    Button botao4= (Button)findViewById(R.id.bTemporizador);

    botao1.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            estavaEmexecucao=true;
            onStart();
        }
    });

    botao2.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            onStop();
        }
    });

    botao3.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            segundos=0;
            onStop();
        }
    });

    botao4.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            setContentView(R.layout.activity_main2);
        }
    });
```

```
if (savedInstanceState != null) {
    segundos = savedInstanceState.getInt("segundos");
    execucao = savedInstanceState.getBoolean("execucao");
}

runTimer();
getSupportActionBar().setDisplayHomeAsUpEnabled(true);
}

@Override
protected void onStart() {
    super.onStart();
    if (estavaEmexecucao) {
        execucao = true;
    }
}

@Override
protected void onResume() {
    super.onResume();
    if (estavaEmexecucao) {
        execucao = true;
    }
}

@Override
protected void onStop() {
    super.onStop();
    estavaEmexecucao = execucao;
    execucao = false;
}

private void runTimer() {
    final TextView timeView = (TextView)findViewById(R.id.tTempo);
    final Handler handler = new Handler();
    handler.post(new Runnable() {
        @Override
        public void run() {
            int hours = segundos/3600;
            int minutes = (segundos%3600)/60;
            int secs = segundos%60;
            String time = String.format("%d:%02d: %02d", hours, minutes, secs);
            timeView.setText(time);
        }
    });
}
```

```
if (execucao) {
    segundos++;
}
handler.postDelayed(this, 1000);
}
});
}

public void onSaveInstanceState(Bundle savedInstanceState) {
    super.onSaveInstanceState(savedInstanceState);
    savedInstanceState.putInt("segundos", segundos);
    savedInstanceState.putBoolean("execução", execucao);
}

@Override
public boolean onOptionsItemSelected(MenuItem item)
{
    int id = item.getItemId();
    if(id == android.R.id.home) {
        finish();
        return true;
    }
    return super.onOptionsItemSelected(item);
}
}
```

- Main2Activity:

```
package com.example.relgiogbsf;

import android.content.Intent;
import android.os.Handler;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.MenuItem;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;

public class Main2Activity extends AppCompatActivity {

    private int segundos = 0;
    private boolean execucao;
    private boolean estavaEmexecucao;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main2);

        final EditText edit1= (EditText)findViewById(R.id.et1);
        edit1.getText().toString();
        final int num = Integer.parseInt(String.valueOf(edit1));

        Button botao6 = (Button) findViewById(R.id.bBotao6);
        Button botao7 = (Button) findViewById(R.id.bBotao7);
        Button botao8 = (Button) findViewById(R.id.bBotao8);
        Button botao5 = (Button) findViewById(R.id.bBotao5);

        botao6.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                segundos = num;
                estavaEmexecucao=true;
                onStart();
            }
        });

        botao7.setOnClickListener(new View.OnClickListener() {
```

```
@Override
public void onClick(View v) {
    onStop();
}
});

botao8.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        segundos = num;
    }
});

botao5.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        setContentView(R.layout.activity_main);
    }
});

if (savedInstanceState != null) {
    segundos = savedInstanceState.getInt("segundos");
    execucao = savedInstanceState.getBoolean("execucao");
}

runTimer();
getSupportActionBar().setDisplayHomeAsUpEnabled(true);
}

@Override
protected void onStart () {
    super.onStart();
    if (estavaEmexecucao) {
        execucao = true;
    }
}

@Override
protected void onResume () {
    super.onResume();
    if (estavaEmexecucao) {
        execucao = true;
    }
}
```

```
}

@Override
protected void onStop () {
    super.onStop();
    estavaEmexecucao = execucao;
    execucao = false;
}

private void runTimer () {
    final TextView timeView2 = (TextView) findViewById(R.id.tTempo2);
    final Handler handler2 = new Handler();
    handler2.post(new Runnable() {
        @Override
        public void run() {
            int hours = segundos / 3600;
            int minutes = (segundos % 3600) / 60;
            int secs = segundos % 60;
            String time2 = String.format("%d:%02d:%02d", hours, minutes, secs);
            timeView2.setText(time2);
            if (execucao) {
                segundos--;
            }
            handler2.postDelayed(this, 1000);
        }
    });
}

public void onSaveInstanceState(Bundle savedInstanceState) {
    super.onSaveInstanceState(savedInstanceState);
    savedInstanceState.putInt("segundos", segundos);
    savedInstanceState.putBoolean("execução", execucao);
}

@Override public boolean onOptionsItemSelected(MenuItem item) {
    int id = item.getItemId();
    if(id == android.R.id.home) {
        finish();
        return true;
    }
    return super.onOptionsItemSelected(item);
}
```



```
public void chamaTela(View view) {  
    Intent intente = new Intent(getApplicationContext(), MainActivity.class);  
    startActivity(intente);  
}  
}
```

## 4 Códigos das classes .Xml

- activity\_main:

```
<?xmlversion="1.0"encoding="utf-8"?>
<android.support.constraint.ConstraintLayoutxmlns:android="http://schemas.android.com/apk/res/android"
xmlns:app="http://schemas.android.com/apk/res-auto"
xmlns:tools="http://schemas.android.com/tools"
android:layout_width="match_parent"
android:layout_height="match_parent"
tools:context=".MainActivity">
```

```
<LinearLayout
android:layout_width="395dp"
android:layout_height="715dp"
android:orientation="vertical"
tools:layout_editor_absoluteX="8dp"
tools:layout_editor_absoluteY="8dp">
```

```
<TextView
android:id="@+id/tTempo"
android:layout_width="400dp"
android:layout_height="115dp"
android:layout_marginLeft="200px"
android:layout_marginTop="50px"
android:layout_marginBottom="300px"
android:textSize="100sp"/>
```

```
<Button
android:id="@+id/bBotao1"
android:layout_width="wrap_content"
android:layout_height="50dp"
android:layout_marginLeft="400px"
android:layout_marginBottom="150px"
android:text="Start"
android:textAlignment="center"/>
```

```
<Button
android:id="@+id/bBotao2"
```

```
android:layout_width="wrap_content"
android:layout_height="50dp"
android:layout_marginLeft="400px"
android:layout_marginBottom="150px"
android:text="Stop"
android : textAlignment = "center" / >
```

```
< Button
android:id="@+id/bBotao3"
android:layout_width="wrap_content"
android:layout_height="50dp"
android:layout_marginLeft="400px"
android:layout_marginBottom="150px"
android:text="Reset"
android : textAlignment = "center" / >
```

```
< Button
android:id="@+id/bTemporizador"
android:layout_width="wrap_content"
android:layout_height="50dp"
android:layout_marginLeft="365px"
android : text = "Temporizador" / >
```

```
< /LinearLayout >
```

```
< /android.support.constraint.ConstraintLayout >
```

- activity\_main2:

```
<?xmlversion = "1.0"encoding = "utf - 8"? >
< android.support.constraint.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:app="http://schemas.android.com/apk/res-auto"xmlns:tools="http://schemas.android.com/tools"
android:layout_width="match_parent"
android:layout_height="match_parent"
tools : context = ".Main2Activity">
```

```
< LinearLayout
android:layout_width="395dp"
android:layout_height="715dp"
android:orientation="vertical"
tools:layout_editor_absoluteX="8dp"
tools : layout_editor_absoluteY = "8dp">
```

```
< TextView
android:id="@+id/tv3"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginLeft="250px"
android:text="Digite quantos segundos deseja" / >
```

```
< EditText
android:id="@+id/et1"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginLeft="250px"
android:ems="10"
android : inputType = "textPersonName" / >
```

```
< TextView
android:id="@+id/tTempo2"
android:layout_width="match_parent"
android:layout_height="150dp"
android:layout_marginTop="100px"
android:layout_marginBottom="150px" / >
```

```
< Button
android:id="@+id/bBotao6"
android:layout_width="wrap_content"
android:layout_height="50dp"
android:layout_marginLeft="400px"
android:layout_marginBottom="150px"
android:text="Start"
android:textAlignment="center" / >
```

```
< Button
android:id="@+id/bBotao7"
android:layout_width="wrap_content"
android:layout_height="50dp"
android:layout_marginLeft="400px"
android:layout_marginBottom="150px"
android:text="Stop"
android:textAlignment="center" / >
```

```
< Button
android:id="@+id/bBotao8"
android:layout_width="wrap_content"
android:layout_height="50dp"
android:layout_marginLeft="400px"
android:layout_marginBottom="150px"
android:text="Reset"
android:textAlignment="center" / >
```

```
< Button
android:id="@+id/bBotao5"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginLeft="375px"
android:onClick="chamaTela"
android:text="Cronômetro" />
```

```
< /LinearLayout >
```

```
< /android.support.constraint.ConstraintLayout>
```