

Acelerômetro - Kotlin

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Layout – Não utilize layout linear.

```
<LinearLayout
  android:layout_height="match_parent"
  android:layout_width="match_parent"
  >
  <TextView
    android:id="@+id/lblAcelerometro"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Acelerometro"
  />
</LinearLayout>
```

imports

```
import android.content.Context
```

```
import android.hardware.Sensor
```

```
import android.hardware.SensorEvent
```

```
import android.hardware.SensorEventListener
```

```
import android.hardware.SensorManager
```

```
import androidx.appcompat.app.AppCompatActivity
```

```
import android.os.Bundle
```

```
import android.widget.TextView
```

Implemente a interface SensorEvent Listener

```
class MainActivity : AppCompatActivity() , SensorEventListener {
```

Atributos

lateinit var **acelerometro**: Sensor

lateinit var **gerenciadorSensor**: SensorManager

On Create

```
override fun onCreate(savedInstanceState: Bundle?) {  
    super.onCreate(savedInstanceState)  
    setContentView(R.layout.activity_main)  
    inicializarAcelerometro()  
}
```

inicializarAcelerometro(){

```
fun inicializarAcelerometro(){  
    gerenciadorSensor = getSystemService(Context.SENSOR_SERVICE) as SensorManager  
    acelerometro = gerenciadorSensor.getDefaultSensor(Sensor.TYPE_ACCELEROMETER);  
    gerenciadorSensor.registerListener(this, this.acelerometro, SensorManager.SENSOR_DELAY_NORMAL);  
}
```

Evento: onSensorChanged

```
override fun onSensorChanged(event: SensorEvent?) {  
    val lblAcelerometro: TextView = findViewById(R.id.lblAcelerometro)  
    var x: Float = 0f  
    var y: Float = 0f  
    var z: Float = 0f  
    if (event != null) {  
        x = event.values[0]  
        y = event.values[1]  
        z = event.values[2]  
    }  
    lblAcelerometro.text = x.toString() + "\n" + y.toString() + "\n" + z.toString()  
}  
override fun onAccuracyChanged(p0: Sensor?, p1: Int) {  
}  
}
```