



# GPS - Kotlin

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# Permissão de acesso

```
<uses-permission android:name="android.permission.ACCESS_COARSE_LOCATION" />  
<uses-permission android:name="android.permission.ACCESS_FINE_LOCATION" />
```

# Layout

```
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    tools:layout_editor_absoluteX="245dp"
    tools:layout_editor_absoluteY="165dp">

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

# importações

```
import android.Manifest.permission.ACCESS_COARSE_LOCATION
import android.Manifest.permission.ACCESS_FINE_LOCATION
import android.content.pm.PackageManager
import android.location.Location
import android.location.LocationListener
import android.location.LocationManager
import android.os.Bundle
import android.widget.TextView
import androidx.appcompat.app.AppCompatActivity
import androidx.core.app.ActivityCompat
```

# Atributos

```
lateinit var locationManager : LocationManager
```

Método onCreate  
Permita o uso de gps.

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

# Ouvidor de posicionamento do pgs.

```
fun permissoesUsuario(){  
    val codigoidentificacao = 200;  
    ActivityCompat.requestPermissions(  
        this,  
        arrayOf<String>(ACCESS_FINE_LOCATION,ACCESS_COARSE_LOCATION),  
        codigoidentificacao  
    )  
}
```

# Evento: onRequestPermissionsResult

## Executado automaticamente quando ocorre usuário permite ou não.

```
override fun onRequestPermissionsResult(codigoidentificacao: Int, permissions: Array<out String>, grantResults: IntArray) {  
    super.onRequestPermissionsResult(codigoidentificacao, permissions, grantResults)
```

```
    if(codigoidentificacao==200){
```

```
        if (ActivityCompat.checkSelfPermission(this, ACCESS_FINE_LOCATION ) == PackageManager.PERMISSION_GRANTED){
```

```
            if(ActivityCompat.checkSelfPermission(this,ACCESS_COARSE_LOCATION) == PackageManager.PERMISSION_GRANTED){
```

```
                locationManager = (getSystemService(LOCATION_SERVICE) as LocationManager?)!!
```

```
                locationManager?.requestLocationUpdates(
```

```
                    LocationManager.NETWORK_PROVIDER, 0, 0f, locationListener
```

```
                )
```

```
            }
```

```
        }
```

```
    }
```

```
}
```

Vincula o objeto locationManager com o serviço de gps do android. E inicia o ouvitor de eventos de troca do gps



# Evento: onLocationChanged

Disparado automaticamente quando GPS muda localização

```
private val listener: LocationListener = object : LocationListener {  
    override fun onLocationChanged(location: Location) {  
        println("localizacao mudou")  
        val latitude = location.latitude  
        val longitude = location.longitude  
        val lblLocalizacao: TextView = findViewById(R.id.lblLocalizacao)  
        lblLocalizacao.text = ("" + latitude + ":" + longitude)  
    }  
}
```