Android

# Fragments

<https://www.youtube.com/watch?v=X4aPzz_2p7c>

* Esticar / Comprimir
* Pilha
* Expandir / Recolher
* Exibir / Esconder

# Guide

<http://developer.android.com/guide/index.html>

* App Components
* App Resources
* App Manifest
* User Interface
* Animation and Graphics
* Computation
* Media and Camera
* Location and Sensors
* Connectivity
* Text and Input
* Data Storage
* Administration
* Web Apps
* Best Practices

## User interface

* Layouts
* Input Controls
* Input Events
* Menus
* Action Bar
* Settings
* Dialogs
* Notifications
* Toasts
* Search
* Drag and Drop
* Accessibility
* Styles and Themes
* Custom Components

## Media and camera

* Camera

## Location and sensors

#### Location

Latitude, longitude and altitude.

<http://developer.android.com/training/location/index.html>

<http://developer.android.com/guide/topics/location/strategies.html>

#### Sensors

<http://developer.android.com/guide/topics/sensors/sensors_overview.html>

* Motion sensors (<http://developer.android.com/guide/topics/sensors/sensors_motion.html>)
  + Accelerometer
  + Gravity
  + Gyroscope
  + Uncalibrated Gyroscope
  + Linear Accelerometer
  + Rotation Vector
  + Significant Motion
  + Step Counter
  + Step Detector
* Environment sensors (<http://developer.android.com/guide/topics/sensors/sensors_environment.html>)
  + Ambient air temperature
  + Illuminance
  + Ambient air pressure
  + Ambient relative humidity
  + Device temperature
* Position sensors ([http://developer.android.com/guide/topics/sensors/sensors\_position.html](http://developer.android.com/guide/topics/sensors/sensors_position.html#sensors-pos-prox))
  + Game Rotation Vector
  + Geomagnetic Rotation Vector
  + Orientation
  + Geomagnetic Field
  + Uncalibrated Magnetometer
  + Proximity

Connectivity

* Bluetooth
* NFC
* Wifi
* USB
* SIP

## Others

* Cellular network
* Microphone

# Permissions

<https://support.google.com/googleplay/answer/6014972?hl=en>

<http://developer.android.com/reference/android/Manifest.permission.html>

Examples

<http://www.vogella.com/tutorials/AndroidSensor/article.html>

<http://code.tutsplus.com/tutorials/using-the-accelerometer-on-android--mobile-22125>

<http://www.tutorialspoint.com/android/android_sensors.htm>

# Google Services

<https://developer.android.com/google/index.html>