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| Android Tutorial – Part 5 |

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# Introduction

This is the part four of the android tutorial series. It is a continuation from last week. In order to follow this successfully, it is required to have,

* A basic understanding given about android in last session.
* The environment set up.
* The project created during last tutorial, opened in Android Studio.
* AVD or an Actual device ready for app deployment.

To catch up, in the last session (Android Tutorial Part 3),

* Different storage techniques in Android
* SQLite database
* Important classes and their methods of Android’s SQLite package
* Table structure to save a message
* Model class structure to save a message
* SQLiteOpenHelper class, and its implementation
* DB Operation helper class
* Android ListView
* Custom Adapter

<https://github.com/nadee158/android_tutorial_part_4.git>

With that knowledge in hand, in this session below areas will be covered,

# Sensors in Android

Many Android-powered devices include built-in sensors that measure motion, orientation, and environmental conditions such as ambient light or temperature.

The android platform supports three broad categories of sensors.

* Motion Sensors
  + Are used to infer complex user gestures and motions
    - E.g. :- such tilt, shake, or rotation
* Environmental sensors
  + Are used to monitor changes in the environment near a device,
    - E.g.:- changes to temperature or humidity
* Position sensors
  + Are used to monitor three-dimensional device movement or positioning

These sensors can provide data to apps with high precision and accuracy.

For example, a game might track readings from a device's accelerometer sensor to infer complex user gestures and motions, such as tilt, shake, or rotation.

In this practical you learn about the Android sensor framework, which is used to find the available sensors on a device and retrieve data from those sensors.

The device camera, fingerprint sensor, microphone, and GPS (location) sensor all have their own APIs and are not considered part of the Android sensor framework.

Source code for this tutorial part can be found in Git Repository given below: - <https://github.com/nadee158/android_tutorial_part_5.git>

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