

# Introduction to App Development for Android

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# Requirements

- Some knowledge about programming, preferably in Java
- A PC or Notebook with installed
  - Android Studio
  - Android SDK
- An Android-Smartphone
  - The Smartphone can also be emulated in the PC or Notebook
  - But a real Smartphone for sure is more fun

# Agenda

- Introduction
  - Same basics
  - The development environment Android Studio
  - Practice with an own first App
- Concepts for Sensors
  - Usage of components of a smartphone
  - Access to smartphone sensors
  - Practice
- Critical data
  - Positioning
  - Logging of data

# Where to get help

- Documentation of the Android Studio
- HowTos and examples in the internet
- Youtube tutorials
- Books

# Preparation for App Development

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# You need

- A PC or notebook with some memory and a normal hardware
  - Nothing special
- An android smartphone
  - A USB cable to connect the Smartphone to the computer
- Android Studio
  - download unter <https://developer.android.com/studio>
  - Simply follow the installation instructions
  - At the end, an android sdk will automatically be installed

# Connect the smartphone with Android Studio

- Open settings of the smartphone
  - Search for the menu item *developer options*
  - Enable *USB-Debugging*
  - Enable the option *stay awake*

Description for portuguese settings can be found here:

<https://developer.android.com/studio/debug/dev-options?hl=pt-br>