

Processing and Android



Technische Universiteit
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Where innovation starts

What will we do in Lectures 1-3

- Use Processing ‘language’ /IDE for:
 - Creating simple apps / app prototypes
 - Get access to the phone’s sensors
 - Learn to access the internet (web API’s, communication)

Why / Why not

- Pro:
 - Similarity to regular Processing
 - Quick way to prototype simple apps
- Con:
 - Dissimilarity to regular Processing
 - Gui: No easy app ‘look and feel’
 - ‘Limited’ access to phone functionality

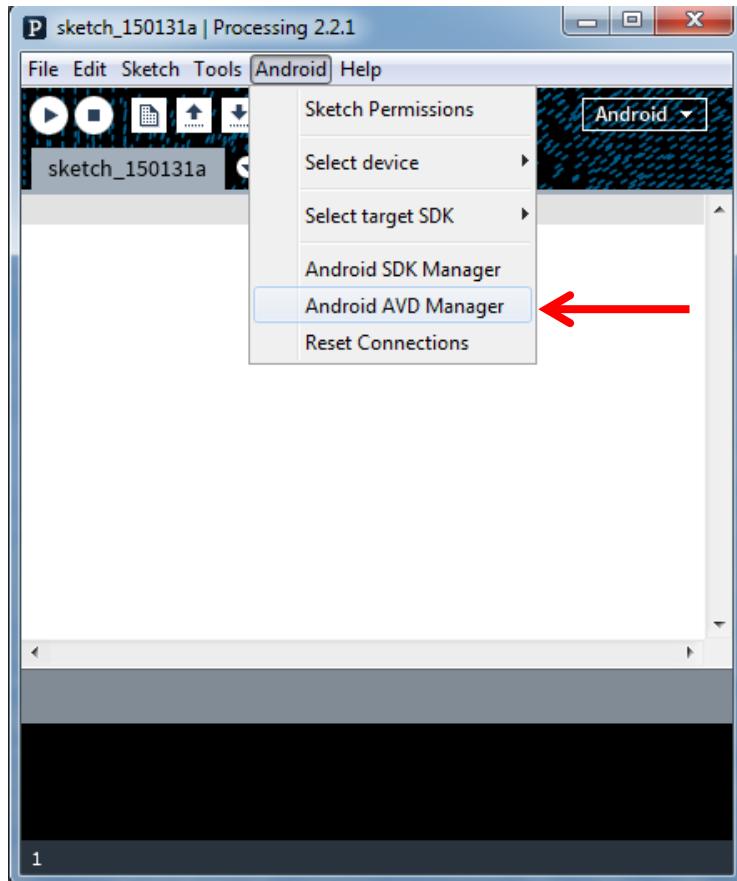
Processing for Android installation

- Best to start clean...
- Install processing 3.2.3 & android mode
<http://android.processing.org/install.html>
- Follow the instructions at:
http://android.processing.org/tutorials/getting_started/

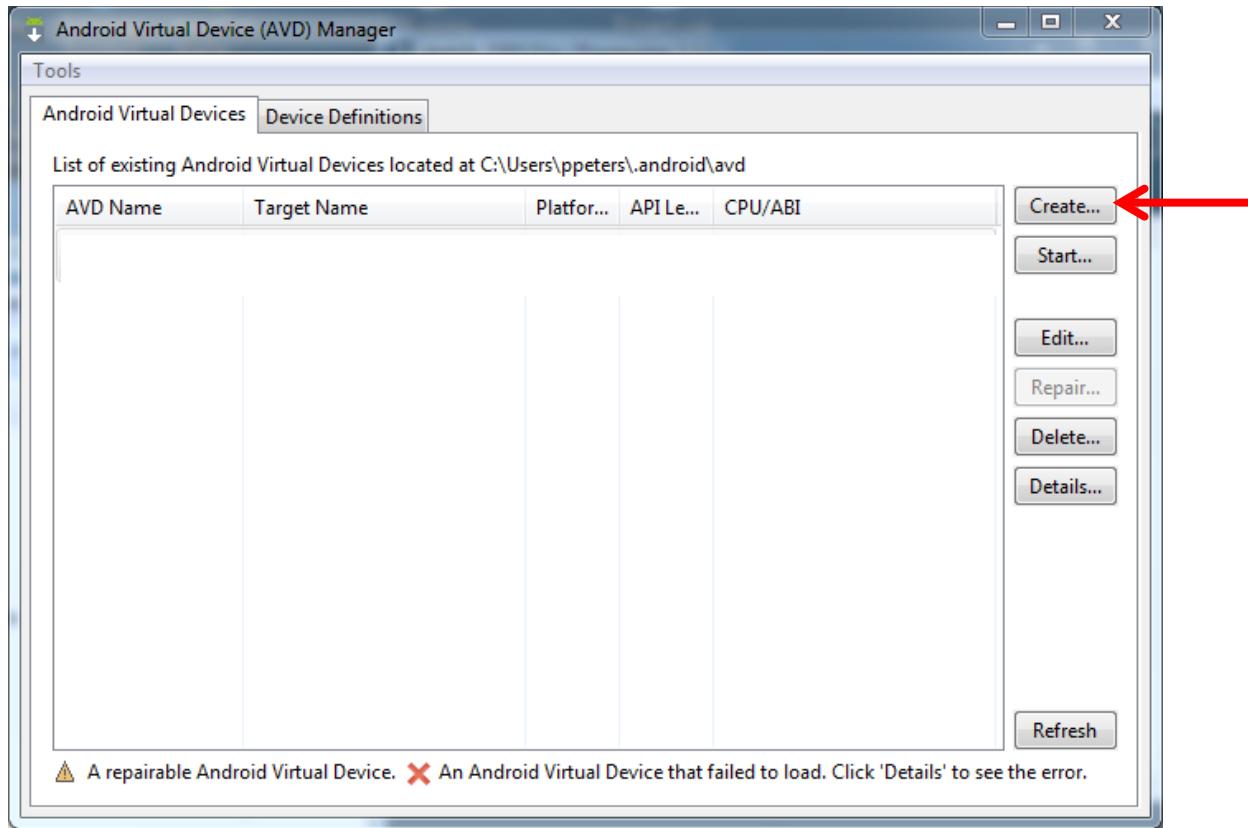
Additional installation

- Android SDK manager:
 - Install Intel x86 Atom(_64) image (on x86 machines...)
 - Install Intel x86 Emulator accelerator installer
- Install HAXM
 - [HAXM installation instructions](#)
- Android AVD manager
 - Add virtual device (follow next slides)

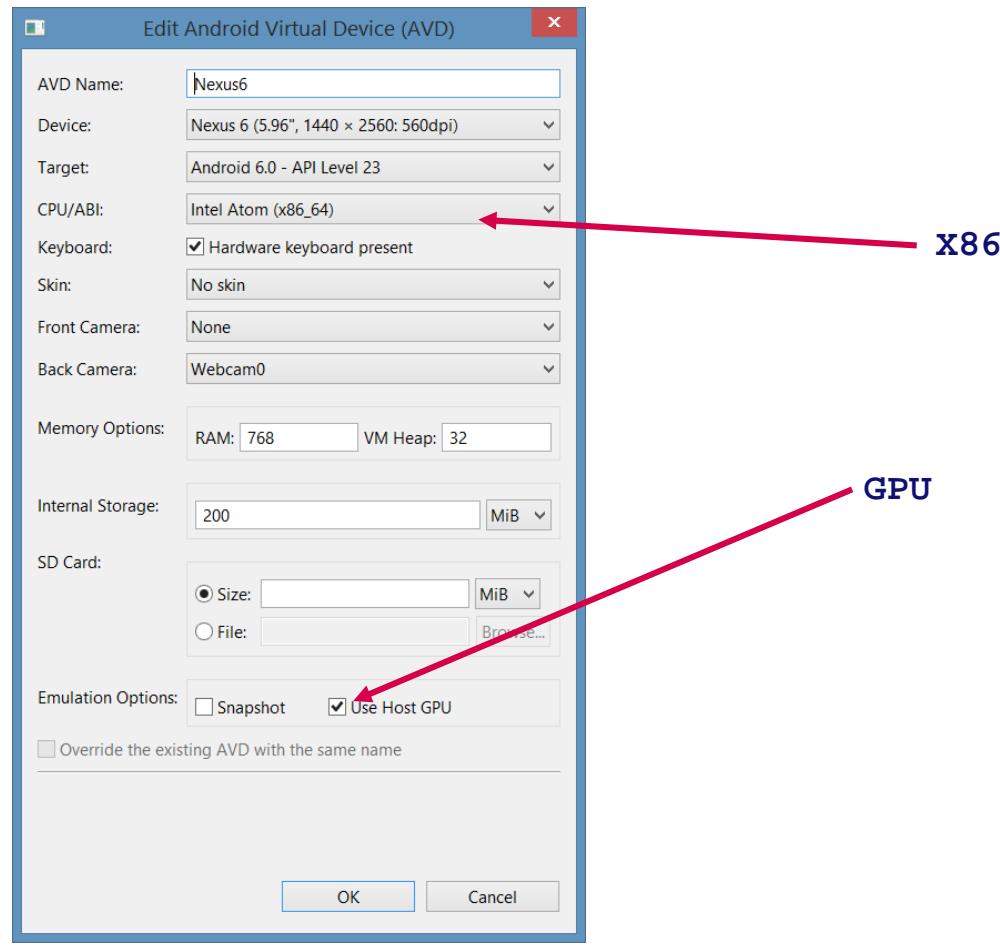
- Go to Android AVD manager



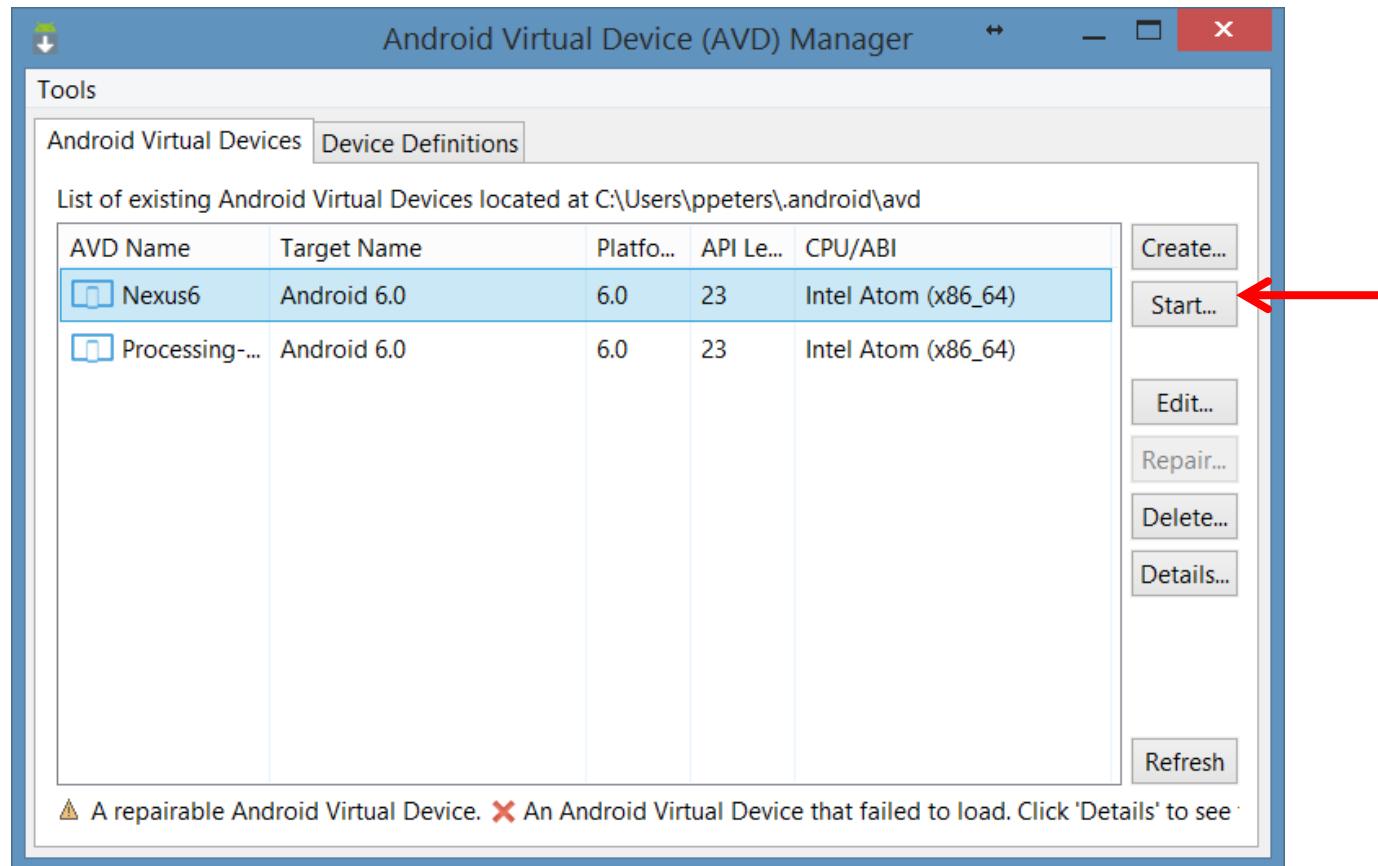
- Create a virtual device



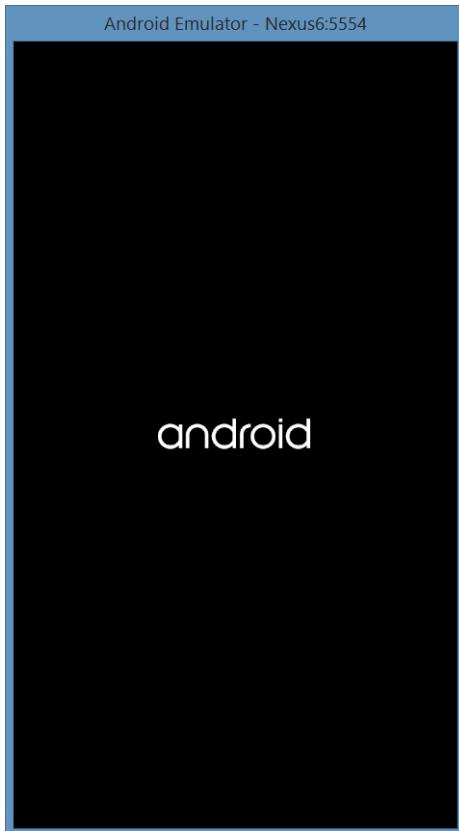
- Select appropriate device



- Select device and start (takes some time...)



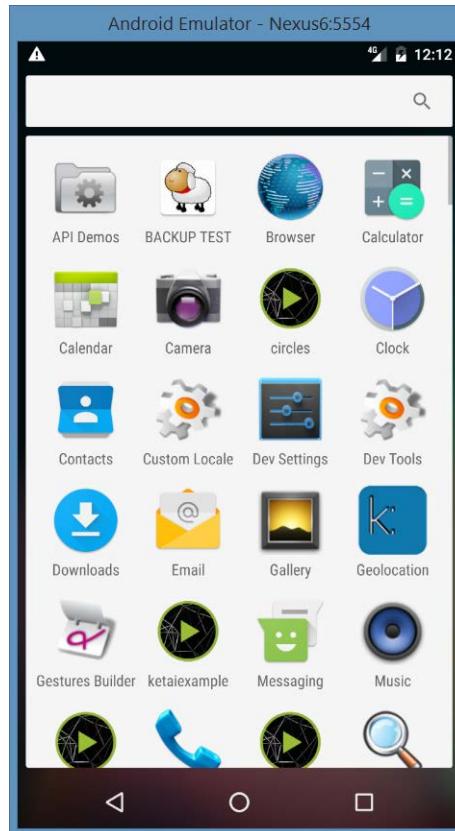
Android emulator



Starting up

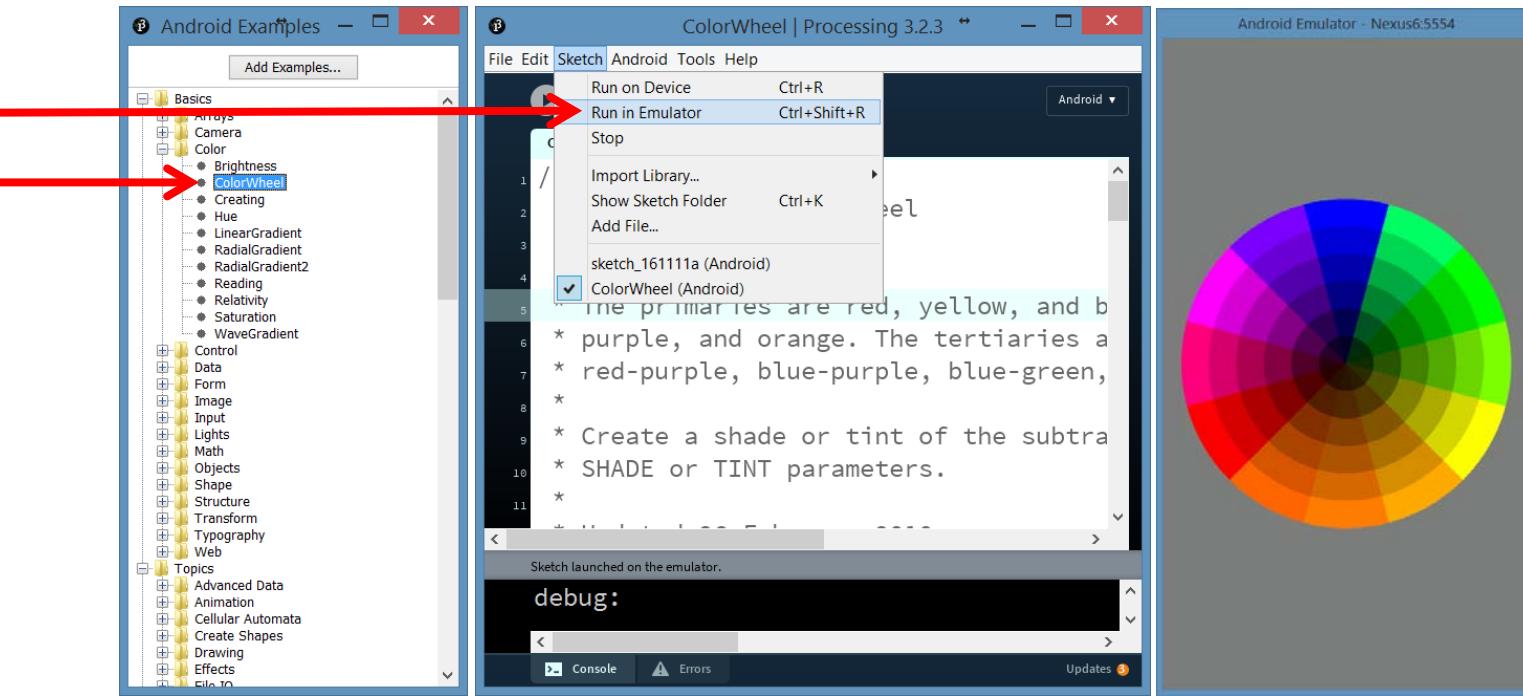


Started



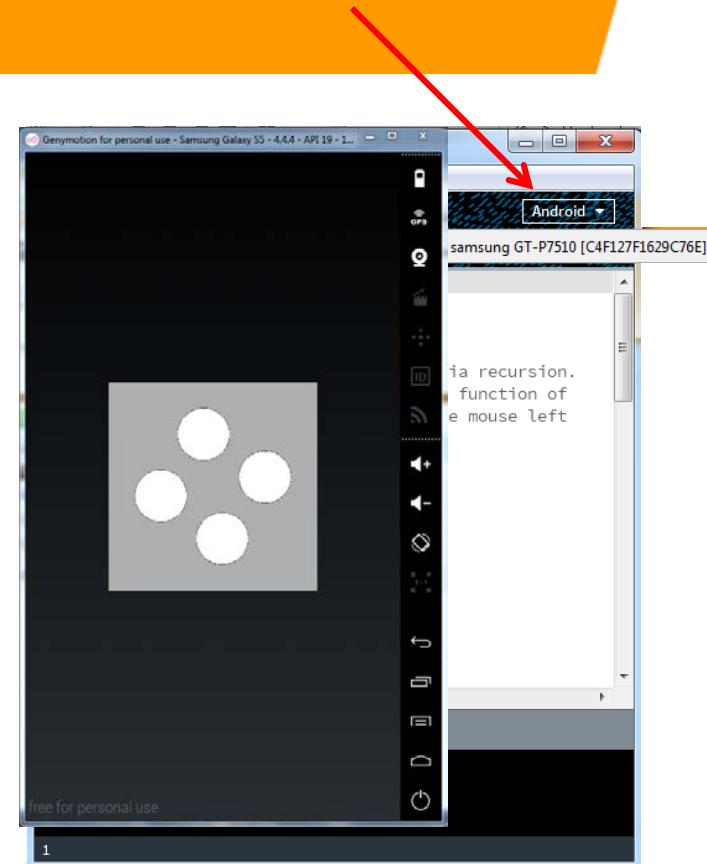
Applications

- Close AVD manager
- Select an example sketch and run in emulator



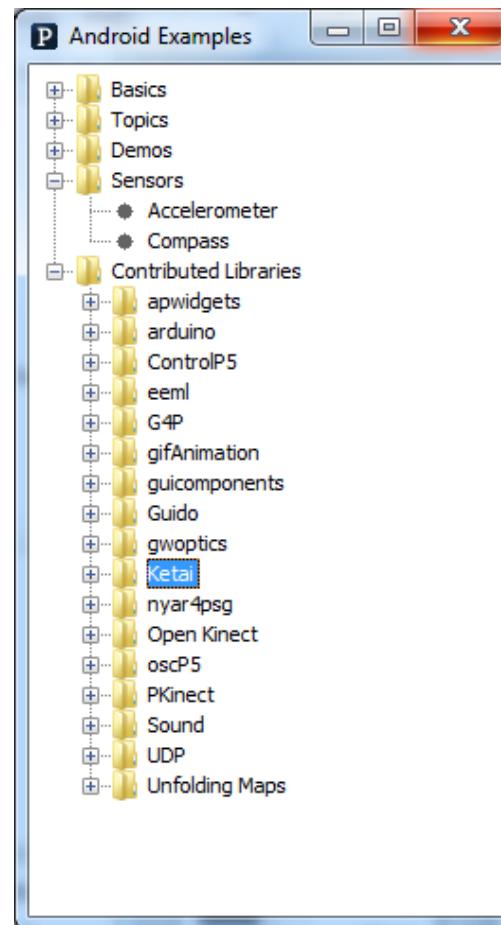
Basics

- Start processing in Android mode
- Start emulator / Connect device
- Load sketch
- Run sketch on device
- (Circles , Tree, RGB)

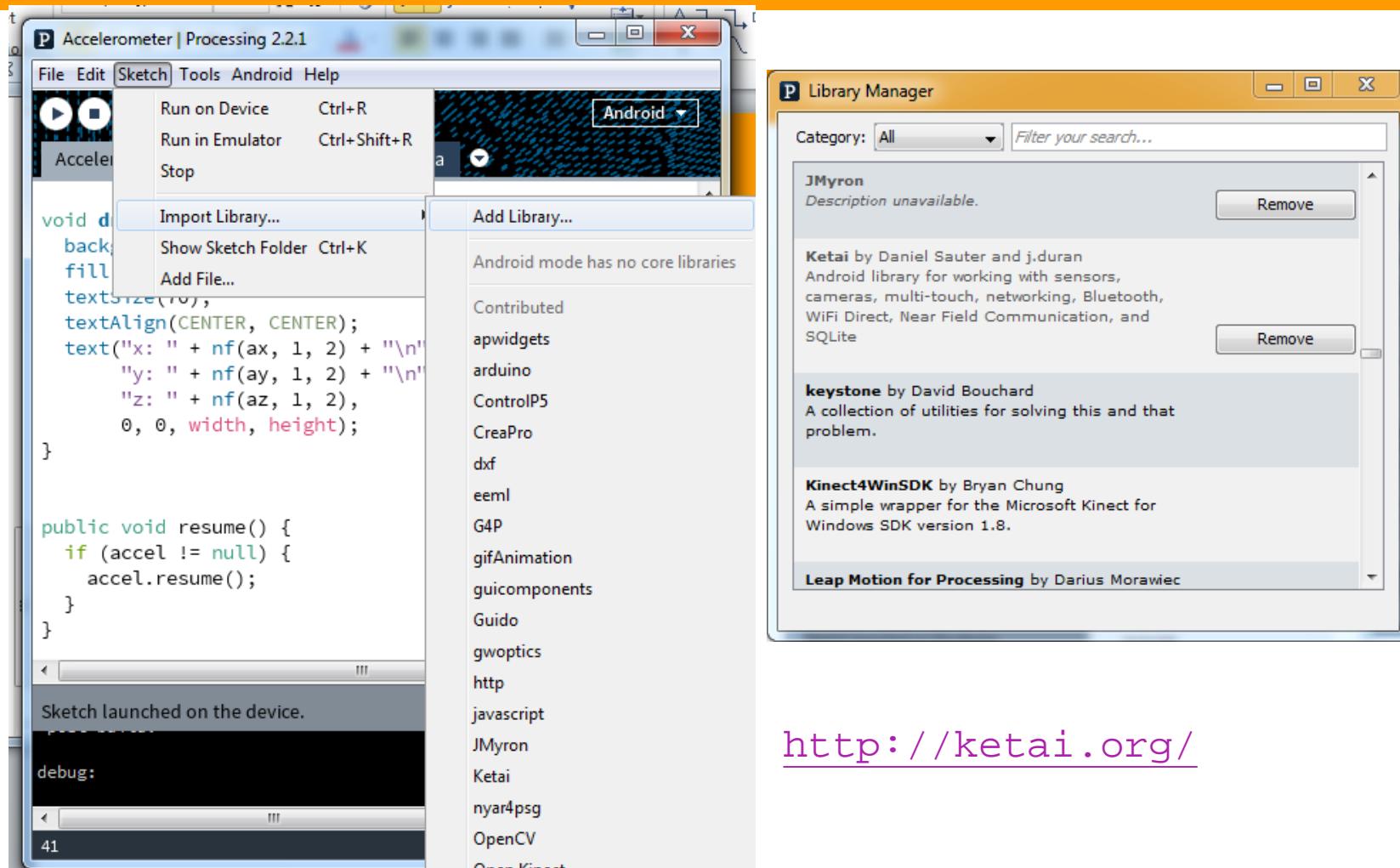


Sensors

- A real device is useful...
(has real sensors)
- Accessible:
 - Accelerometer
 - Compass



Libraries / Ketai



<http://ketai.org/>

GUI

- No... well... sort of...maybe...
 - Either ‘manually’ (see RGB cube example) or....
- Libraries:
 - <https://code.google.com/p/apwidgets/>
 - <http://www.sojamo.de/libraries/controlP5/>
 - <https://code.google.com/p/ketai/>



- Useful:
 - <http://android.processing.org/tutorials/index.html>
- Nice:
 - [Processing tutorial 7 Jaboston.com](#)
 - [Processing tutorial 6 Jaboston.com](#)

USB driver ADB

C:\Users\<user>\AppData\Local\Android\sdk\extras\google\usb_driver\android_winusb.inf

