# Android JArduino GUI

Android Bluetooth Arduino Controller

# Why an Android Controller?

- More and more sensors and data around us
- Convenient to access and manage these from your mobile phone
  - E.G. Use your mobile as a remote control of your Smart Home
- Arduino is a powerful relay
- Android is a powerful gateway between sensors and the Internet

# How does it work?

Mobile/tablet

Sensor



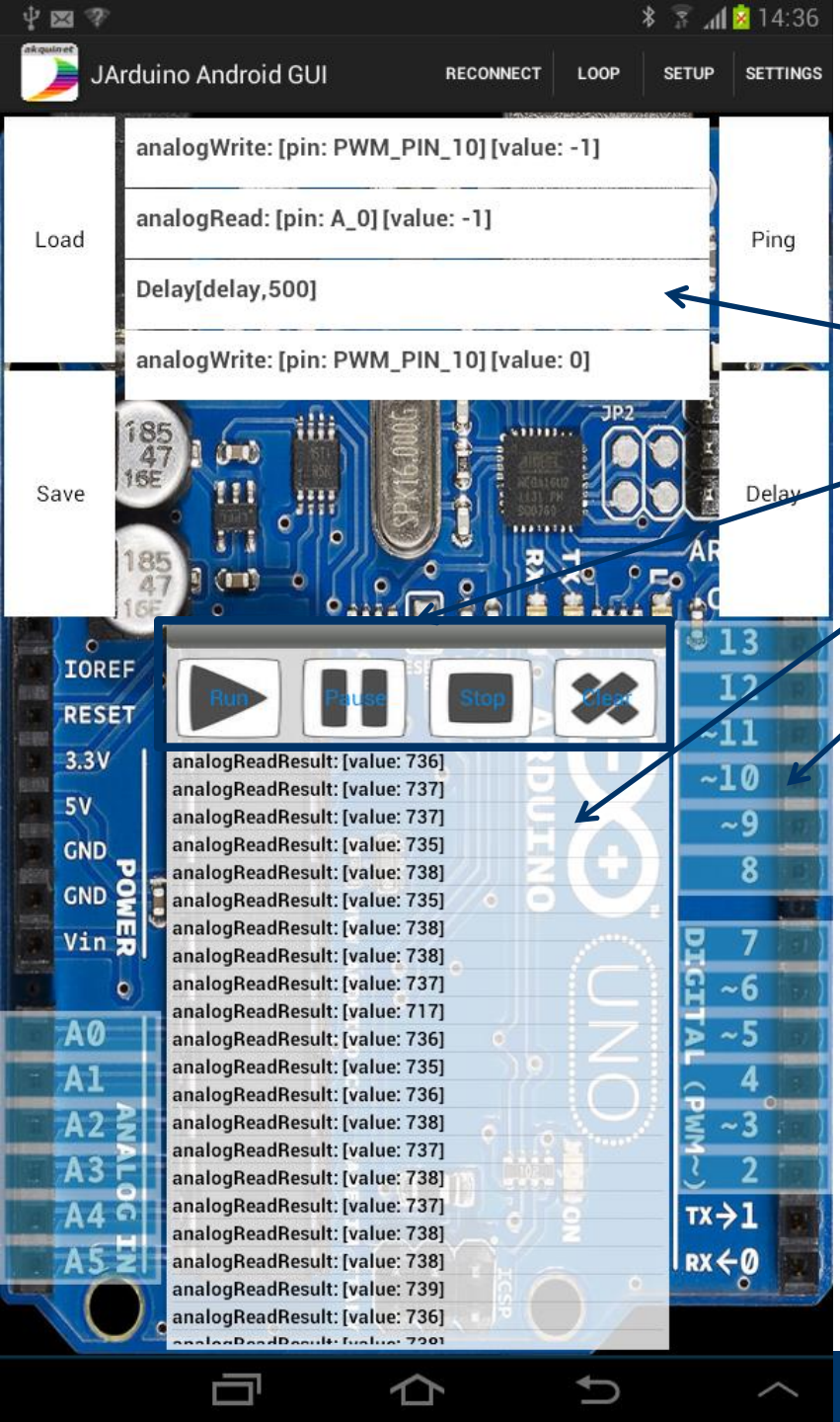
Bluetooth™ Bluetooth™

« Serial » data channel

# JArduino Library

- Arduino
  - Is an open-source electronics platform based on flexible, easy-to-use hardware and software
    - Allows using easily several electronics (sensors, LED, etc.)
    - Single-board microcontroller
  - Large user community
    - see Wiki Playground: http://playground.arduino.cc/
- JArduino
  - Jarduino is a Java based Library to interact easily with an Arduino platform

# Android JArduino GUI




Order Logger

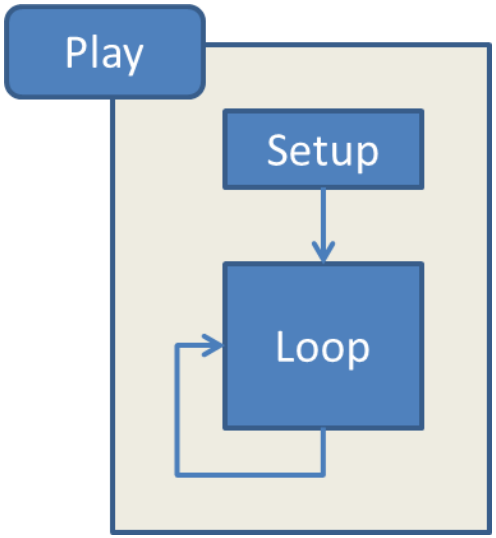
Order Runner

Received Message Logger

Order Button

# Control Messages for the Sensor

- Runs the setup messages once
- Loop on the « loop » messages infinitely
- Pause pauses the message flow
- Stop the message flow
- Clear deletes all stored messages



# Demonstration

- Setup list:
  - PinMode OUTPUT on pin 11
  - PinMode OUTPUT on pin 10
  - PinMode INPUT on pin A0
  - Analog Write 255 on pin 11 (green)
  - Delay 500 ms (wait)
  - Analog Write 0 on pin 11 (turned off)
- Loop list:
  - Analog Write 255 on pin 10 (red)
  - Analog Read on pin A0 (read the light sensor)
  - Delay 500 ms (wait)
  - Analog Write 0 on pin 10 (turned off)

# End of Android-JArduino Demo