


Scratch & Arduino

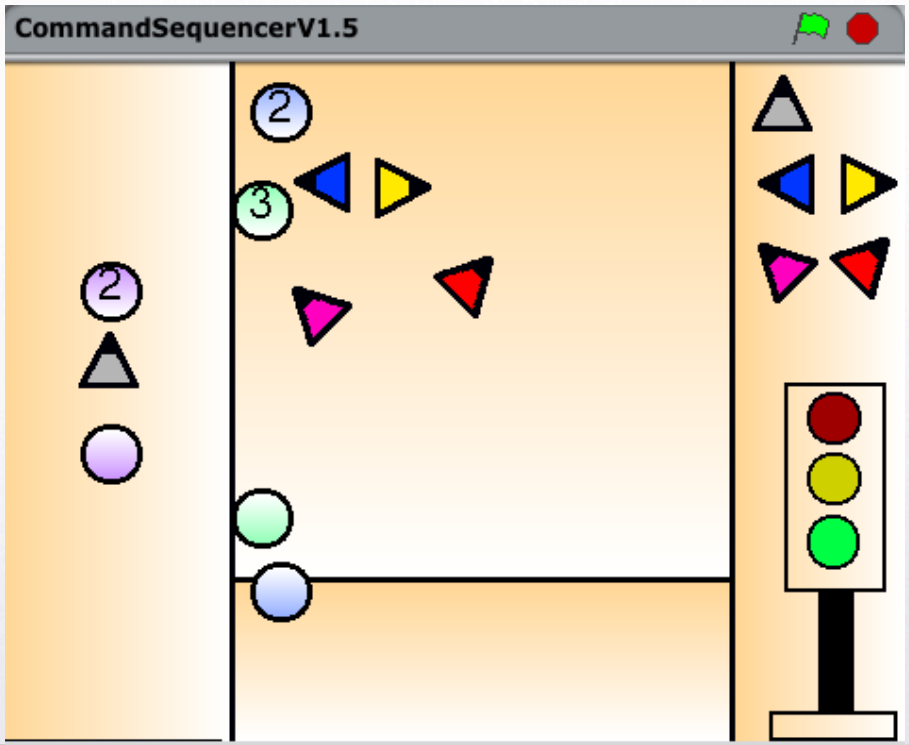
Robotertage -> AsuroScratcher -> BYOB ->
Firmata -> Arduino ->


Robotertage

- Projekttag im Kindergarten (Vorschule) und Schule (erste Klasse)
- ohne Lese- und Schreibkenntnisse
- Programmieren
- nicht nur

AsuroScratcher

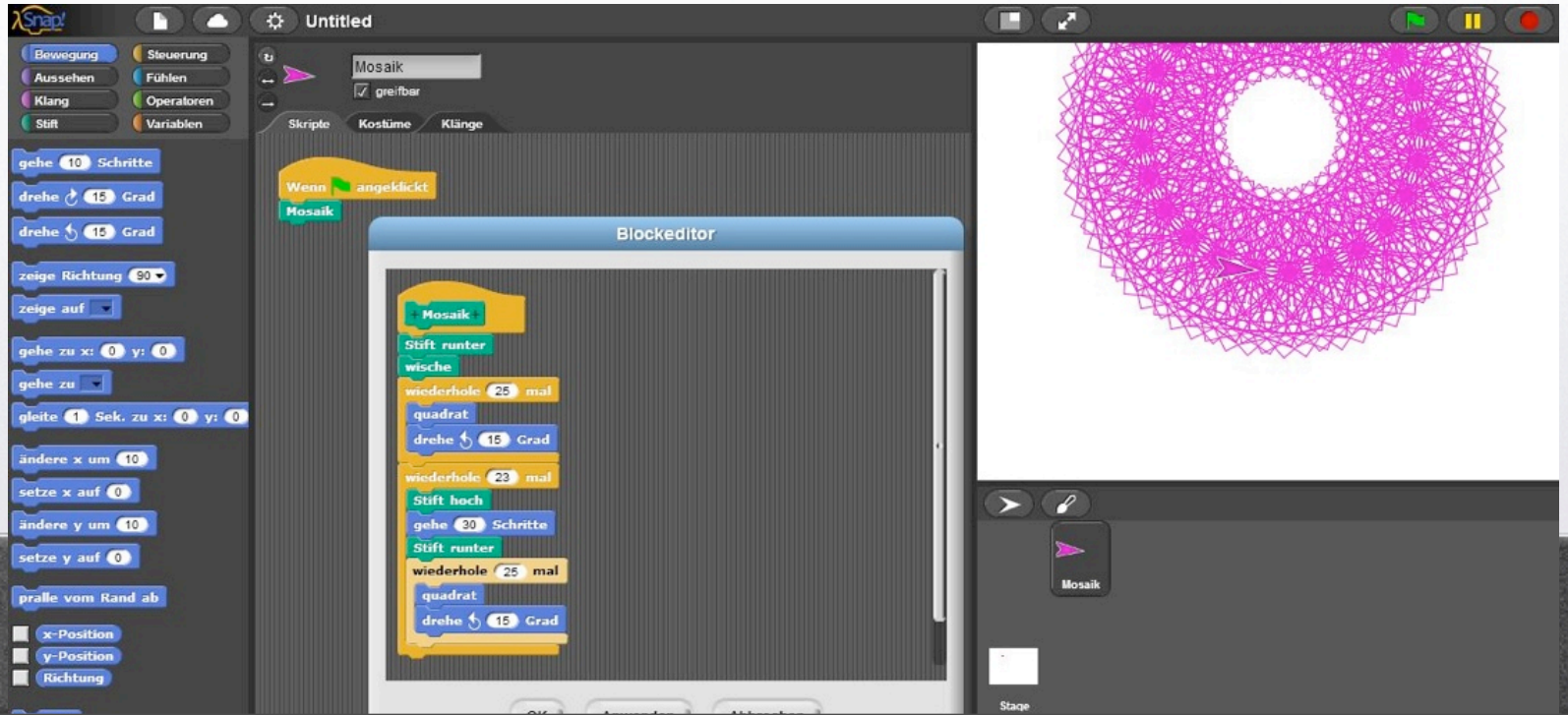
- Scratch Remote Network Connections
- Turtle-“Kommandos“
- per IR an Asuro
- Was nervt?
  - viele Komponenten
  - fehleranfaellig




Anja & Oliver

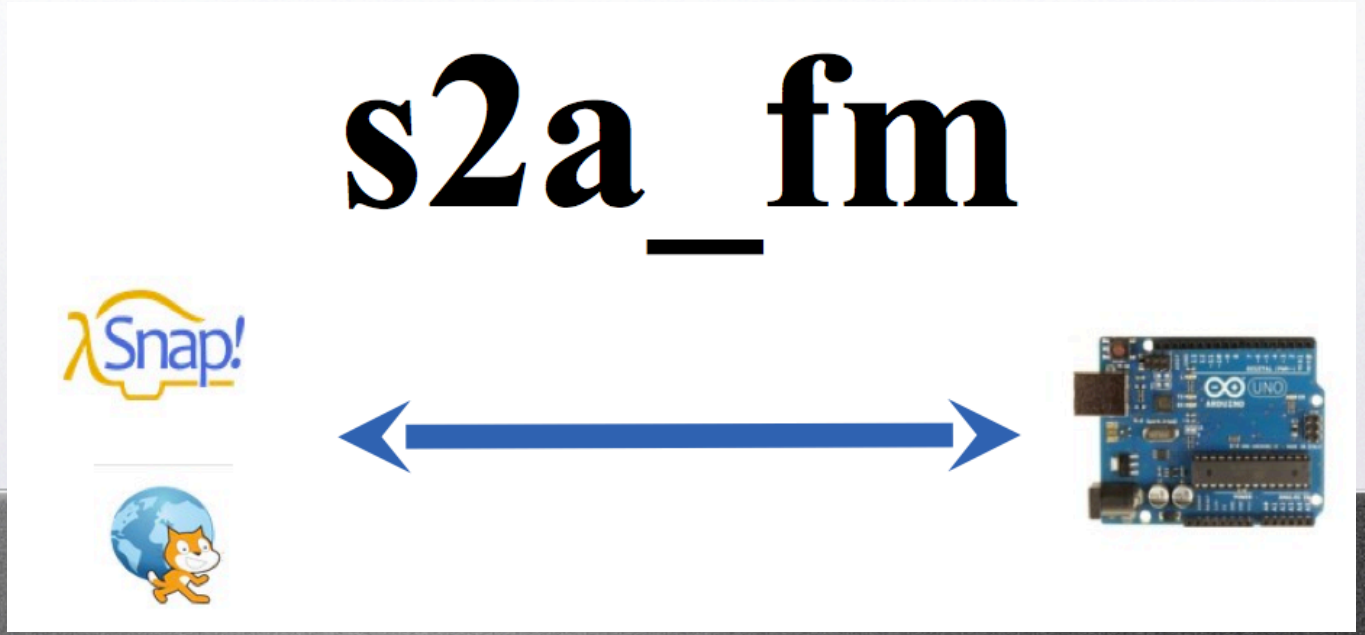
BuildYourOwnBlocks

- BYOB/Snap! sind Erweiterungen von Scratch, die es erlauben eigene Bloecke anzulegen

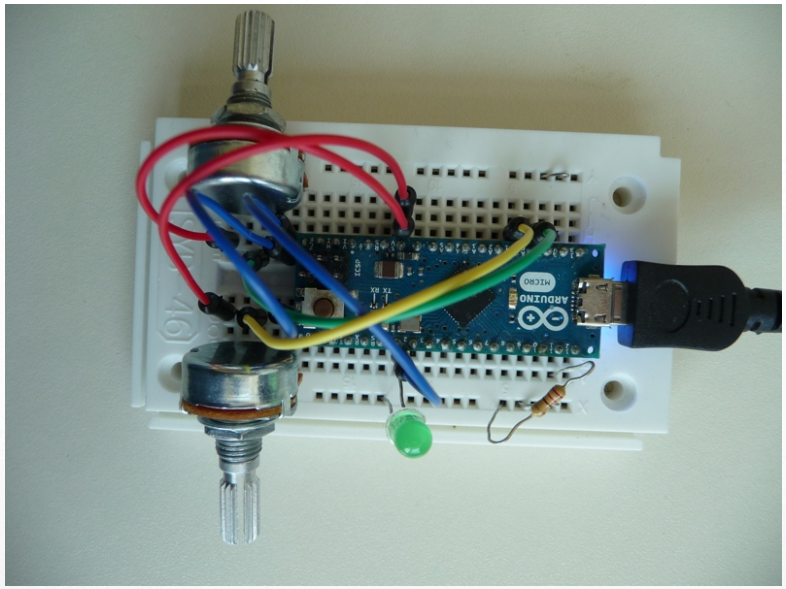


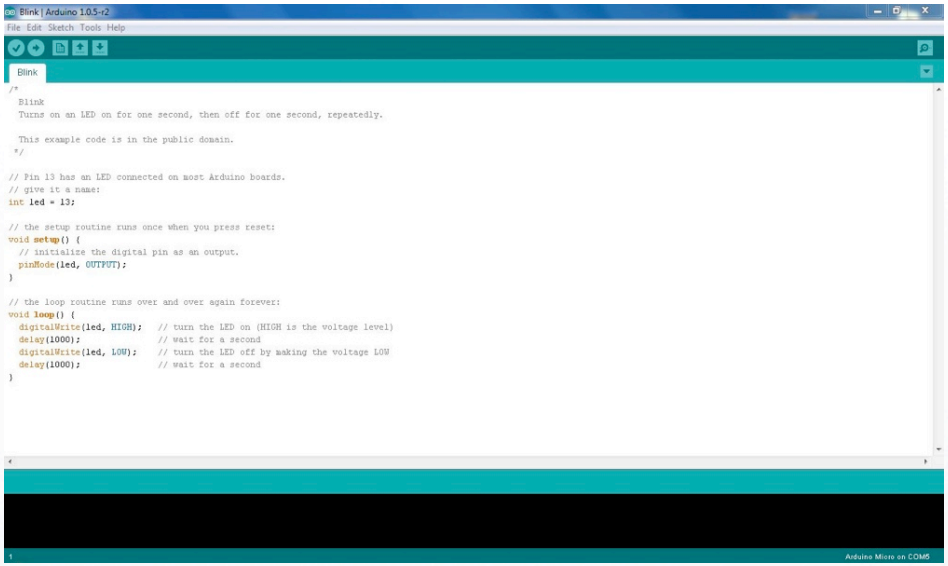
Firmata

- Protokoll zur Kommunikations zw. PC und Mikrocontroller
- Fuer Arduino verfuegbar
- https://github.com/MrYsLab/s2a_fm/ (Python)



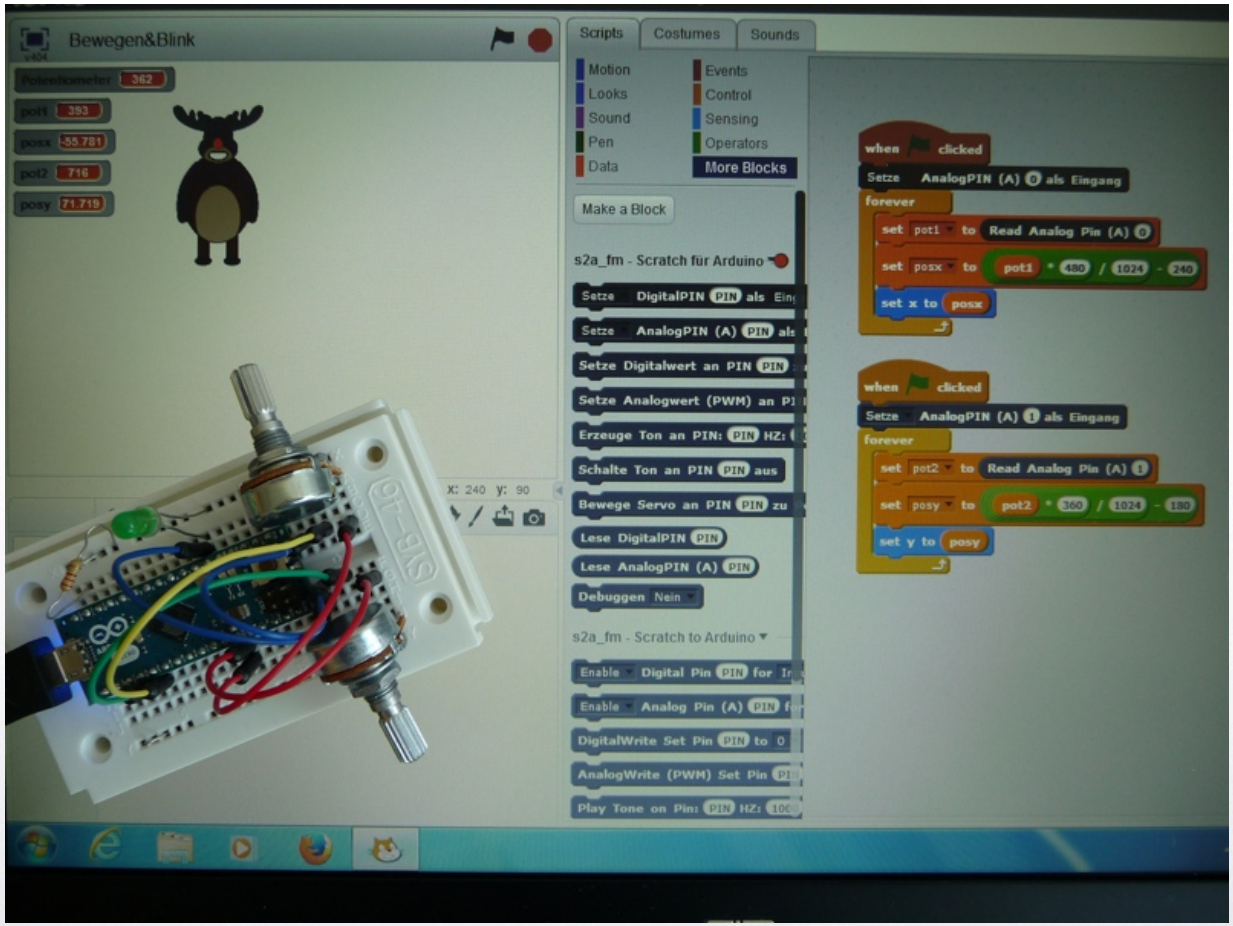
Arduino





- Mikrocontroller-Plattform
- Programmierumgebung (C)

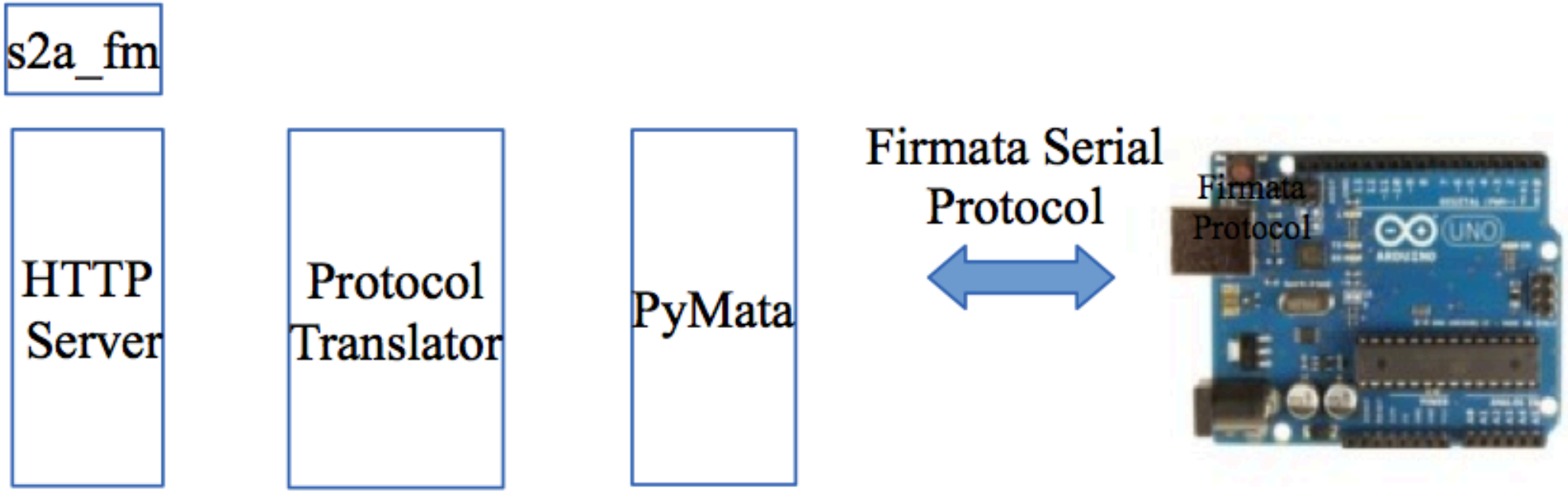
Scratch & Arduino




Demos

- Demo1: Turtle-Grafik mit "eigenen Bloecken" in SNAP! (Anja)
- Demo2: eigene Bloecke mit Parameteruebergabe in BYOB (Oliver)
- Demo3: Arduino Ports lesen und schreiben in Scratch 2.0 mit s2a_fm (Anja)
- Demo5: Spiel in Scratch - klassisch per Maussteuerung (Oliver)
- Demo6: Spiel in Scratch mit Steuerung per Potis am Arduino (Oliver)

s2a_fm



„A Scratch Hardware Extension for Arduino“