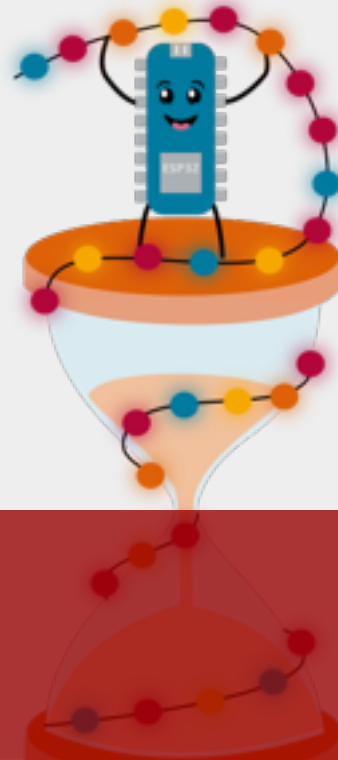


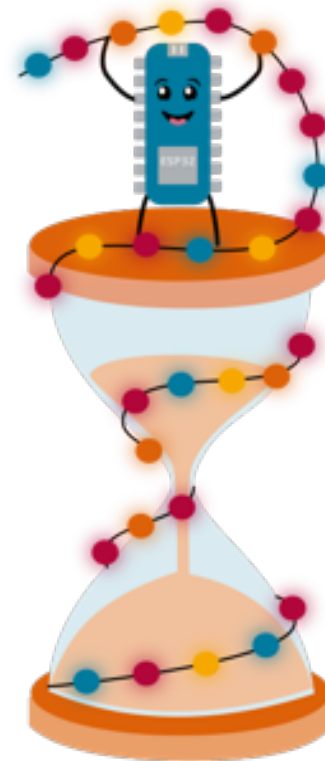


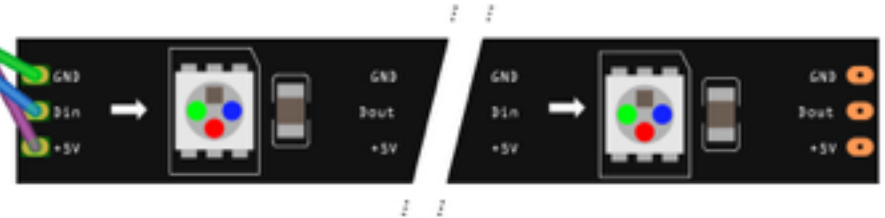
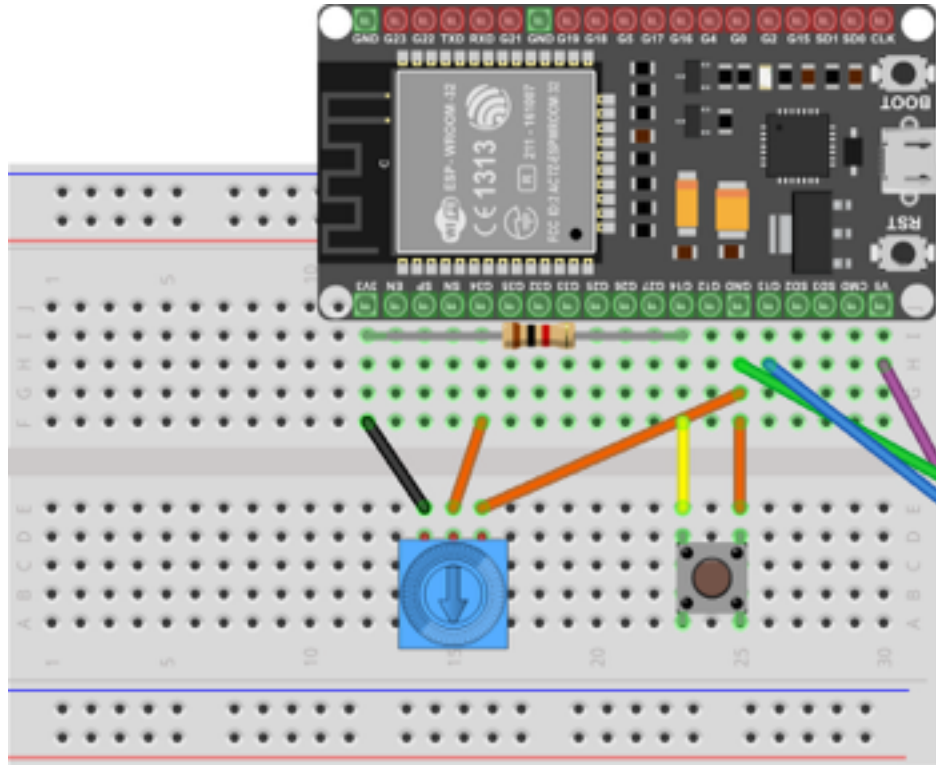
LED-Timer

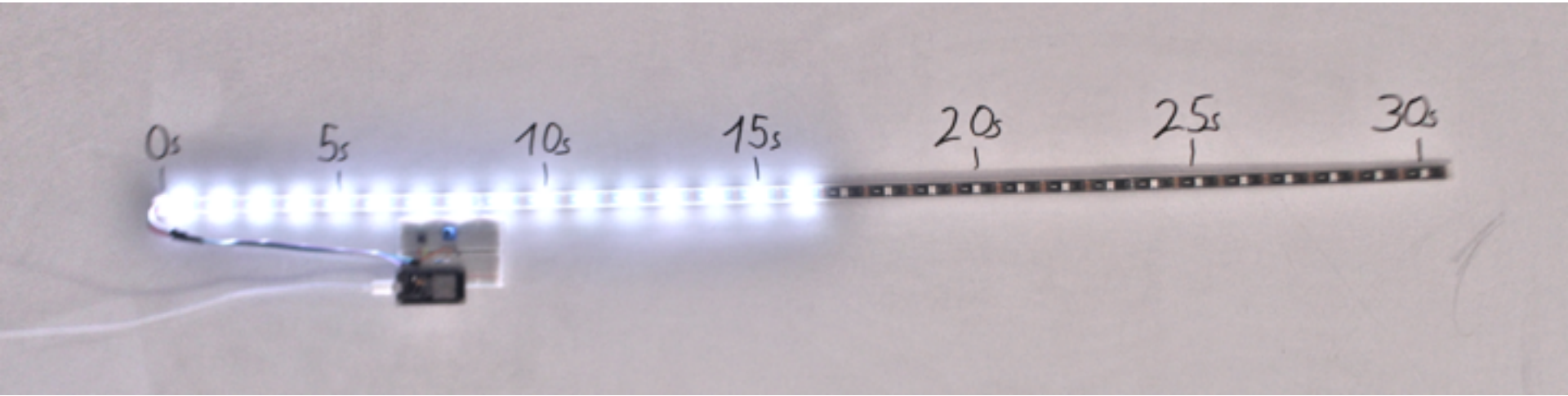
Woche 2 | Lektion 4

Material list:

- ESP32 microcontroller
- plug-in board
- WS2812B LED Strip with 30 LEDs
- potentiometers
- push button
- 1 k Ω Resistor
- 5 jumpers
- 3 Jumper cable
- pen

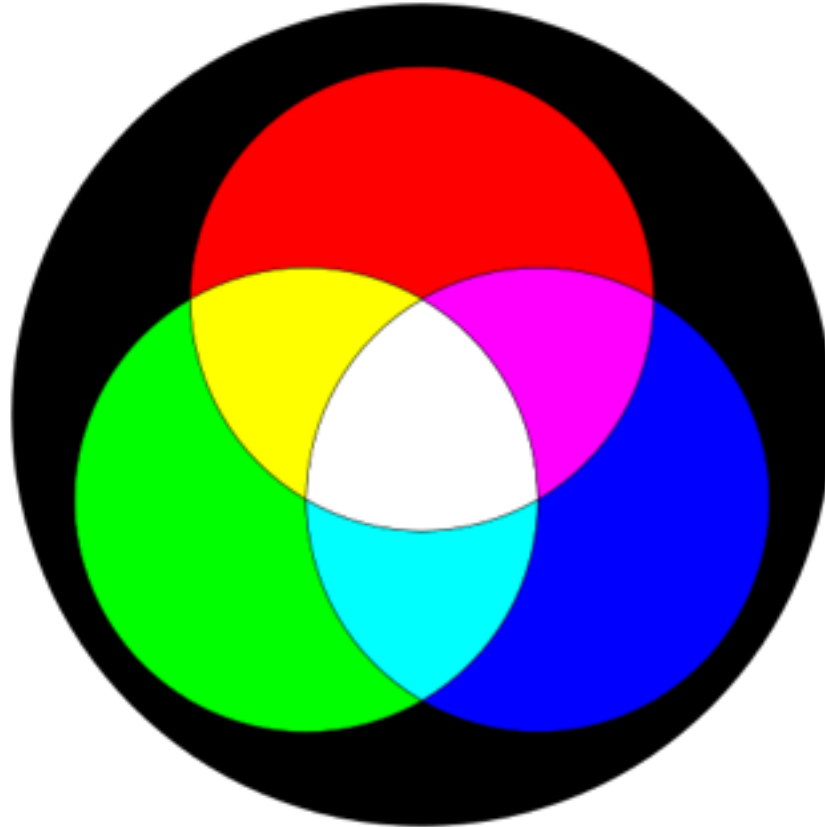






- Adafruit_NeoPixel.h





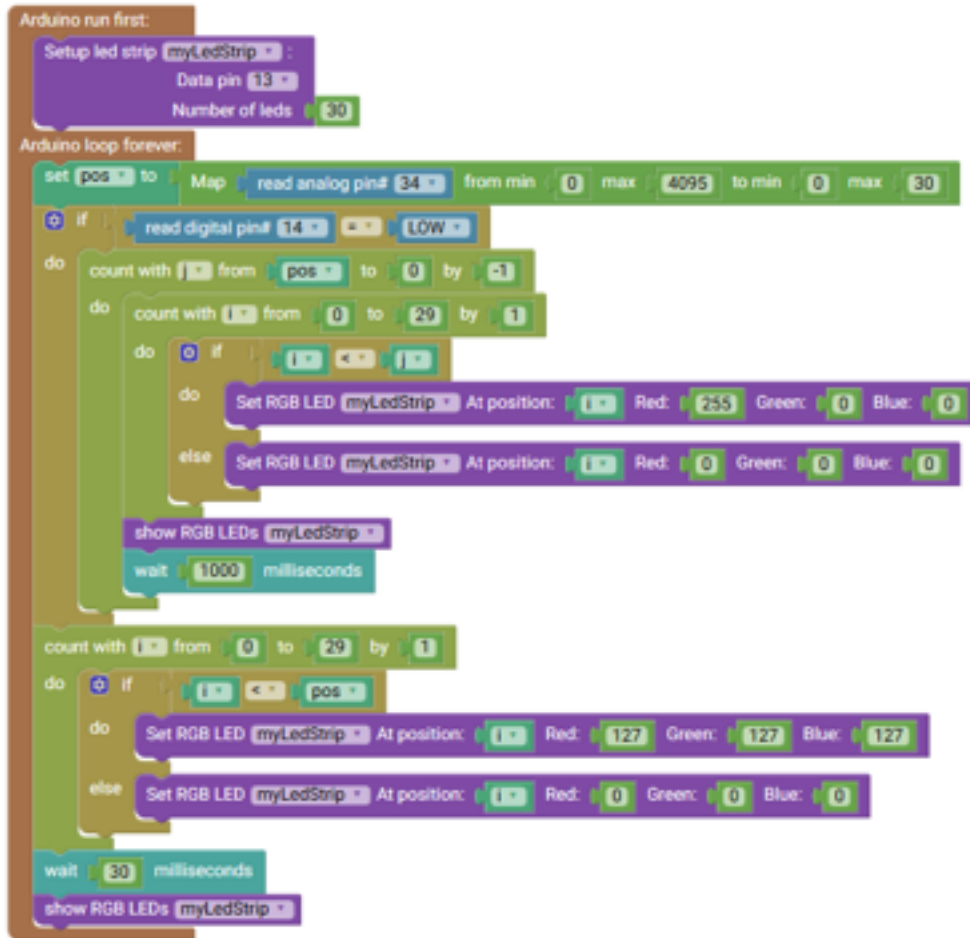
Arduino run first:

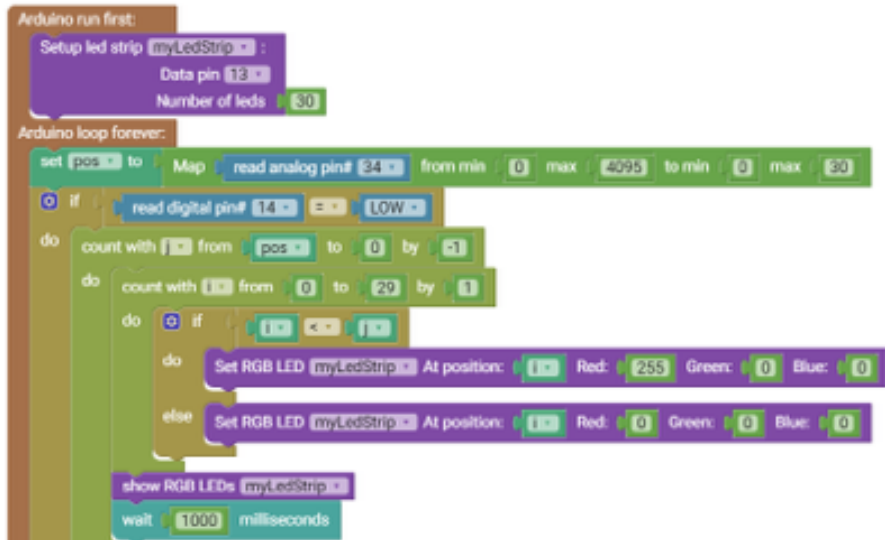
Setup led strip myLedStrip :
Data pin 13
Number of leds 30

Arduino loop forever:

```
set pos to Map read analog pin# 34 from min 0 max 4095 to min 0 max 30
count with i from 0 to 29 by 1
do
  if i < pos
  do
    Set RGB LED myLedStrip At position: i Red: 127 Green: 127 Blue: 127
  else
    Set RGB LED myLedStrip At position: i Red: 0 Green: 0 Blue: 0
wait 30 milliseconds
show RGB LEDs myLedStrip
```

Code - Count down time





- Potentiometer kann abfallen
- LED-Streifen braucht 5V
- Stromverbrauch der LEDs
 - Volle Helligkeit -> 2A
 - USB 2.0 -> 0.5A
 - USB 3.0 -> 0.9A
 - USB-Ladegerät/-Powerbank bis zu 2.4A
 - Nachgucken

