

LabsLand



Laboratorios Robot, Arduino y Visir

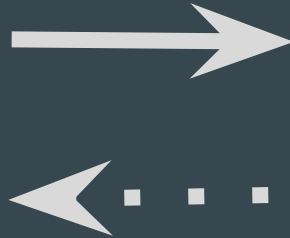
david.collazo@barandiaran.biz

STEAM Euskadi

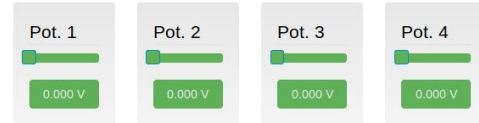


Laboratorios remotos + taller

- **Combinar** ambos recursos
- Intentar aprovechar las **ventajas** de cada uno
- En nuestro caso:



Laboratorio Arduino



Serial

Export Import Discard Verify / compile Upload into device

Logic
Loops
Math
Text
Variables
Functions
Input/Output
Time
Comms

Setup serial : speed to 9600 bps

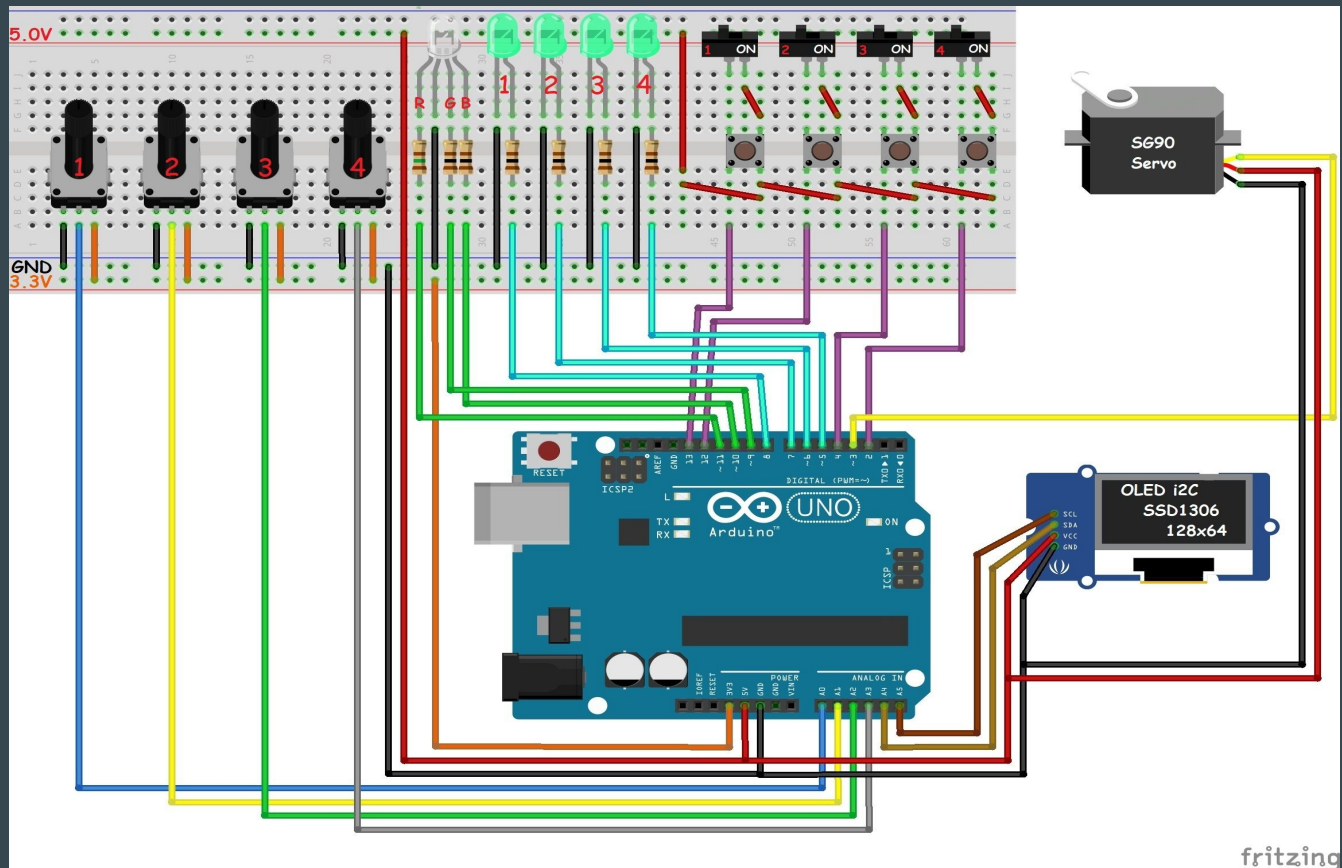
Arduino run first:

Arduino loop forever:

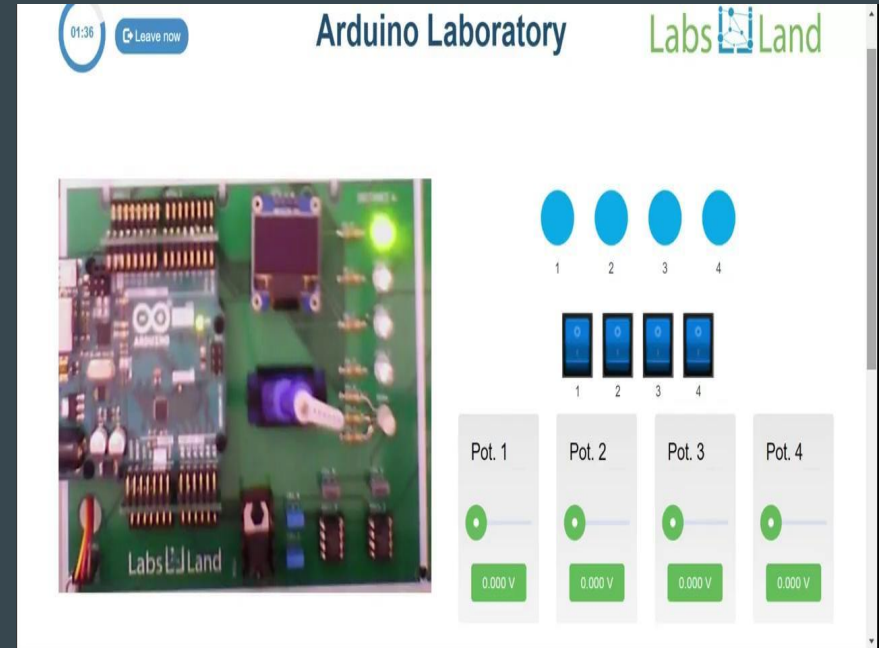
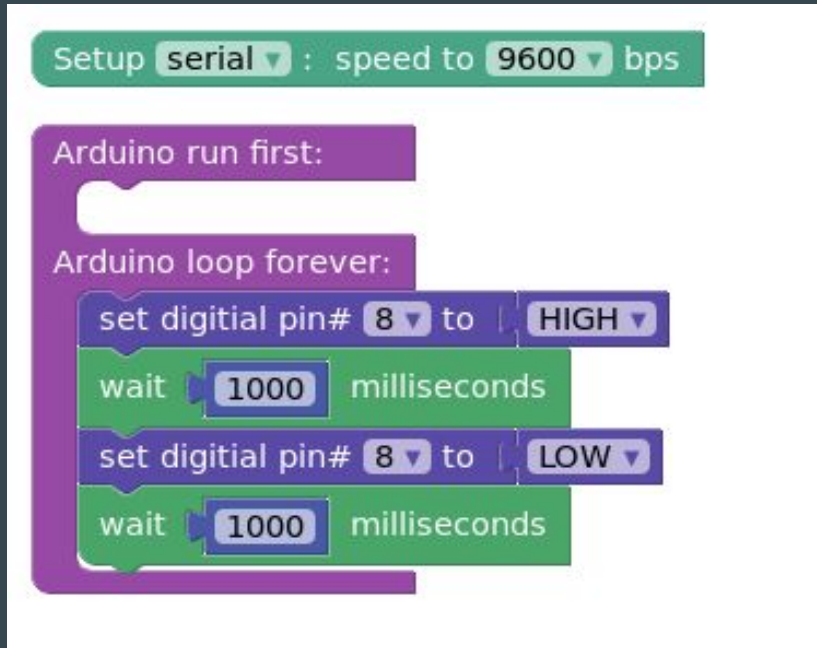
set digital pin# 8 to HIGH
wait 1000 milliseconds
set digital pin# 8 to LOW
wait 1000 milliseconds

```
1 void setup() {  
2   Serial.begin(9600);  
3   pinMode(8, OUTPUT);  
4 }  
5  
6 void loop() {  
7   digitalWrite(8, HIGH);  
8   delay(1000);  
9   digitalWrite(8, LOW);  
10  delay(1000);  
11 }  
12 }
```

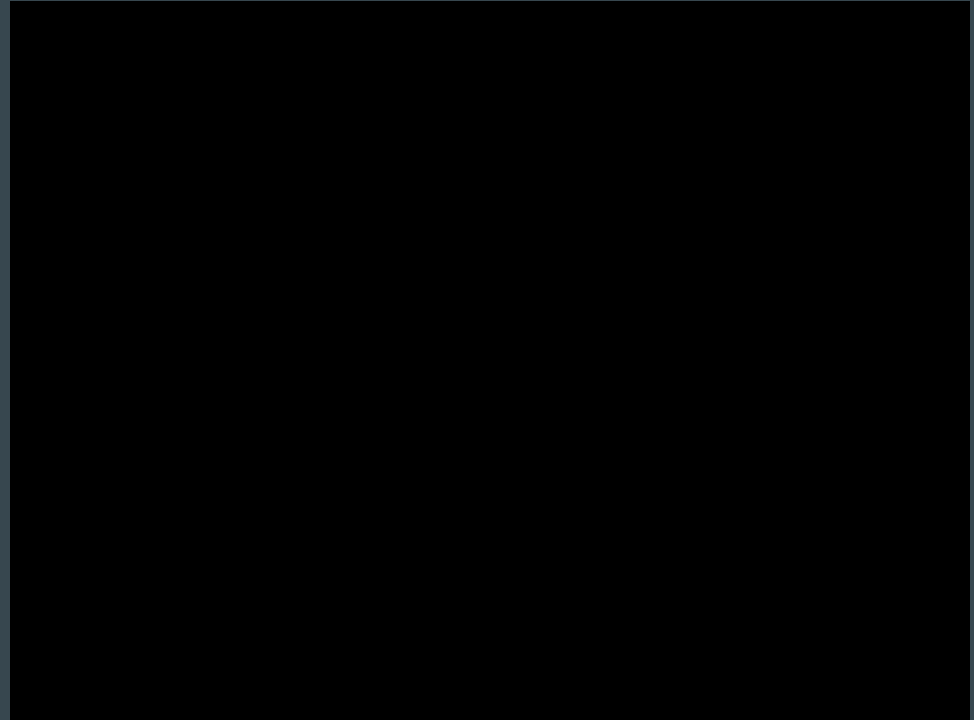
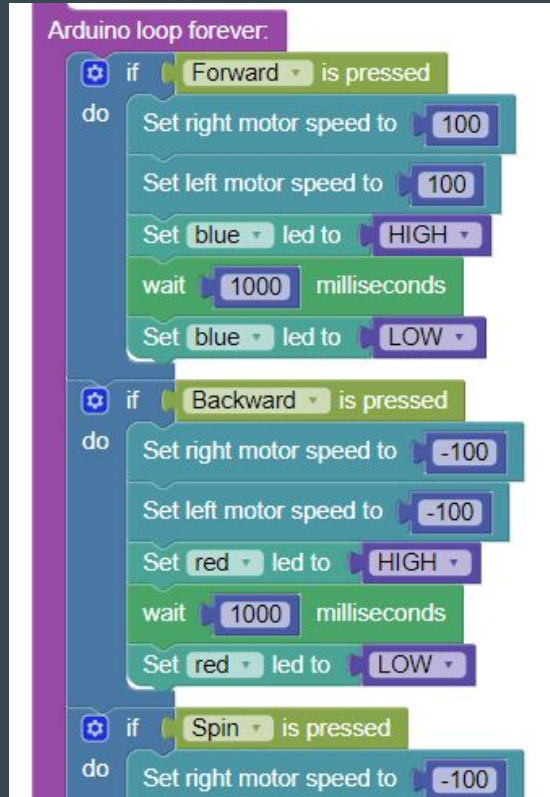
Diagrama eléctrico



Ejemplo de programación (Arduino)



Laboratorio Robot - Ejemplo



Laboratorio Visir (electrónica)

- Realizar medidas:
 - a. R, I, V
- Ley de Ohm
- Emplear dispositivos:
 - a. Osciloscopio
 - b. Generador de funciones

