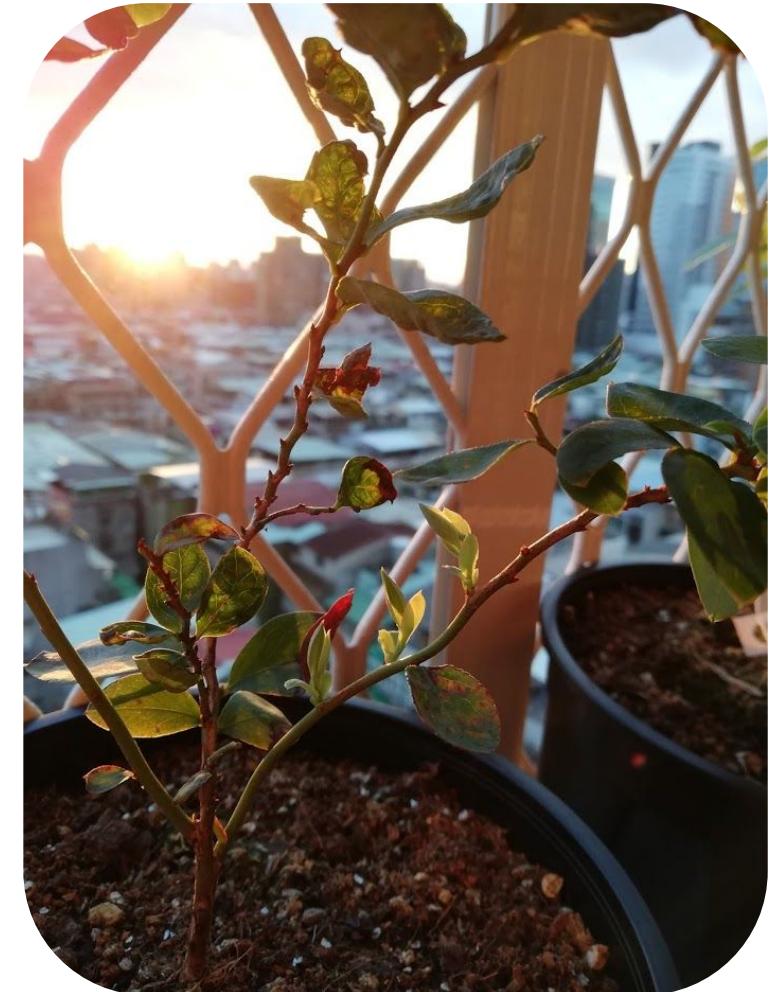


Small Greenhouse

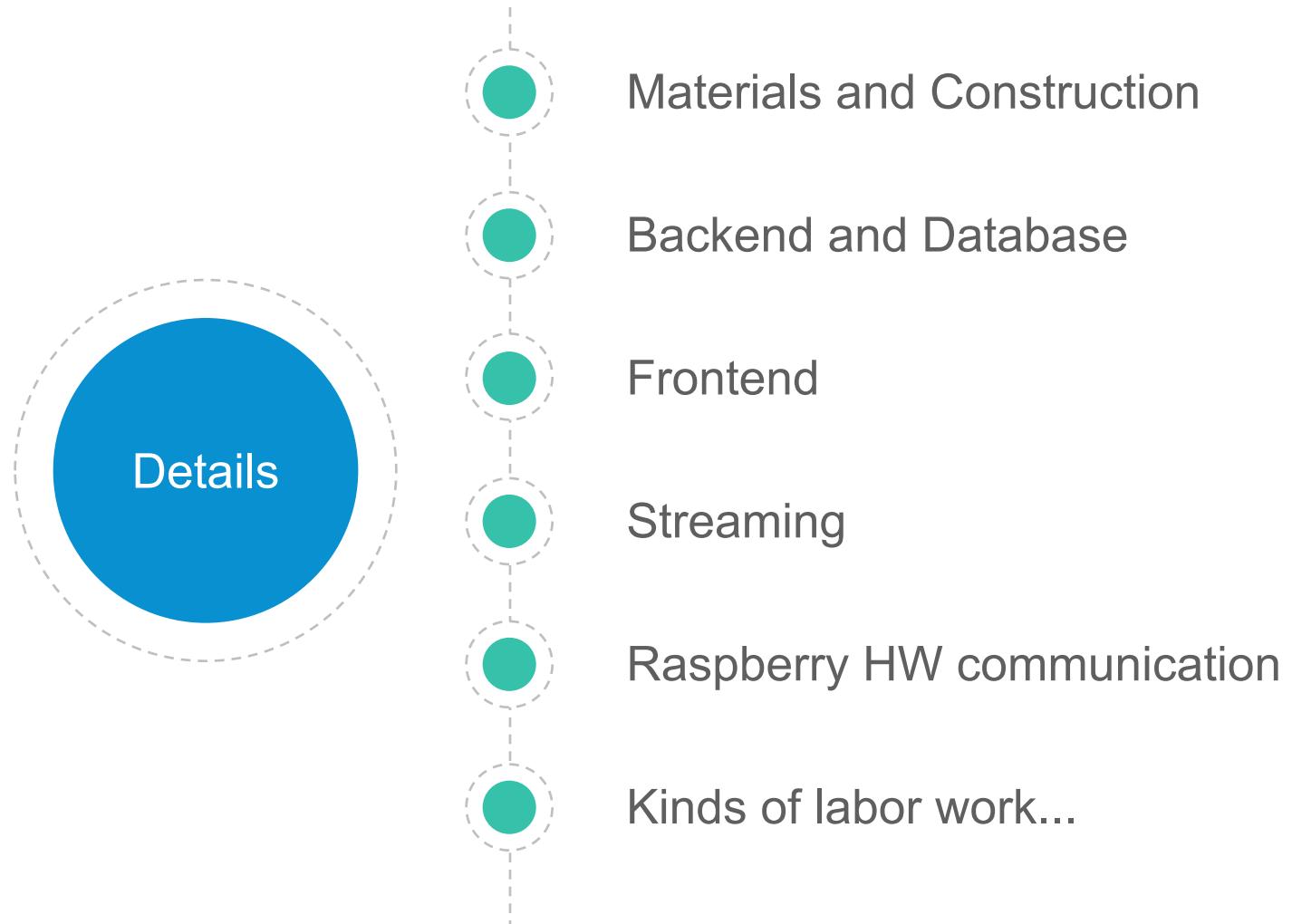
Richard

Why

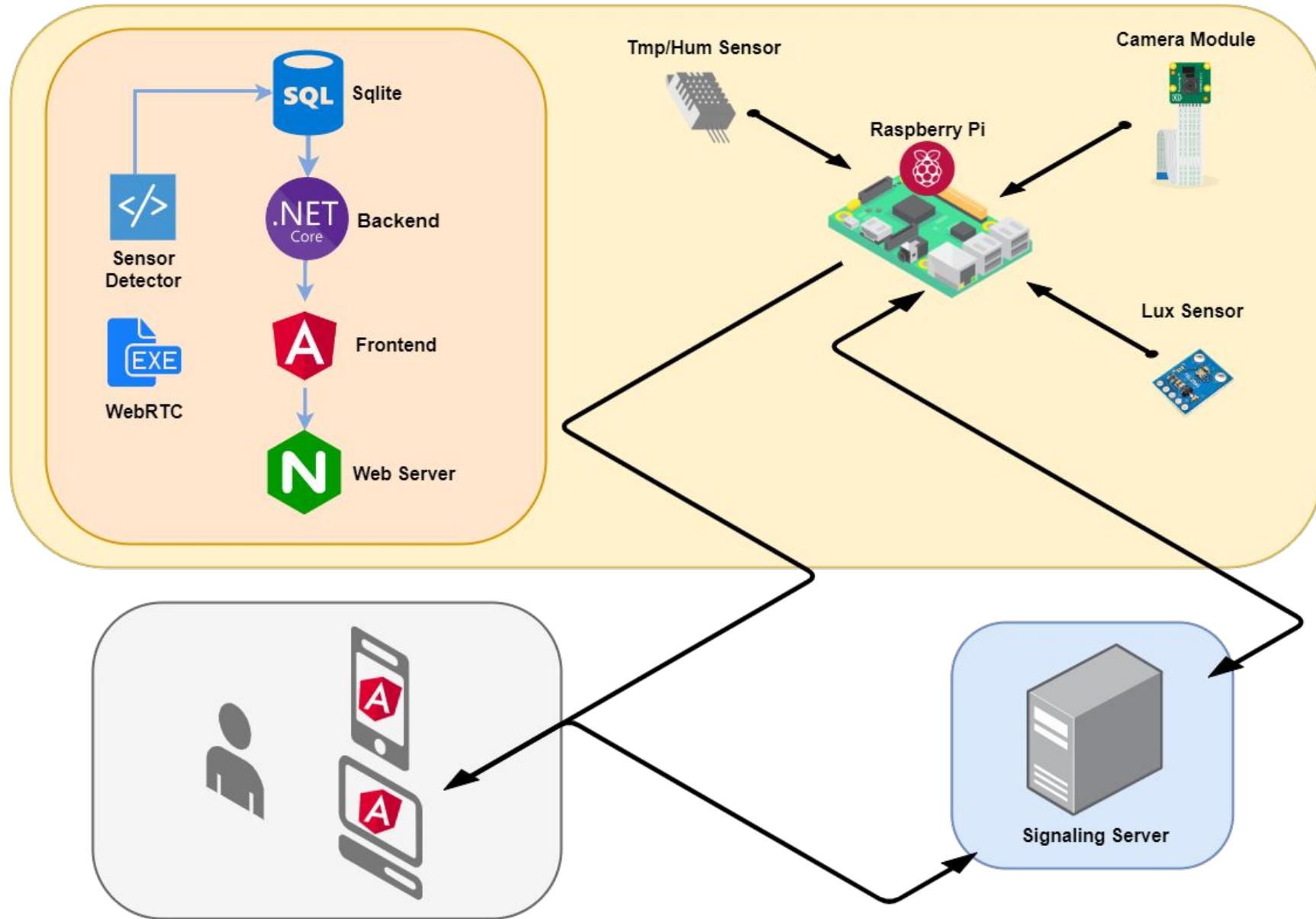
- ⌚ Love to Grow Plants
- ⌚ Combine Tech & Life
- ⌚ Experiment to Test New Tech



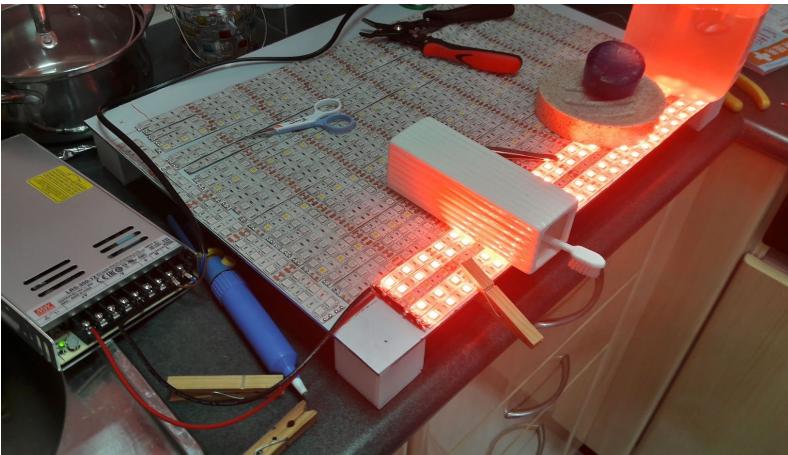
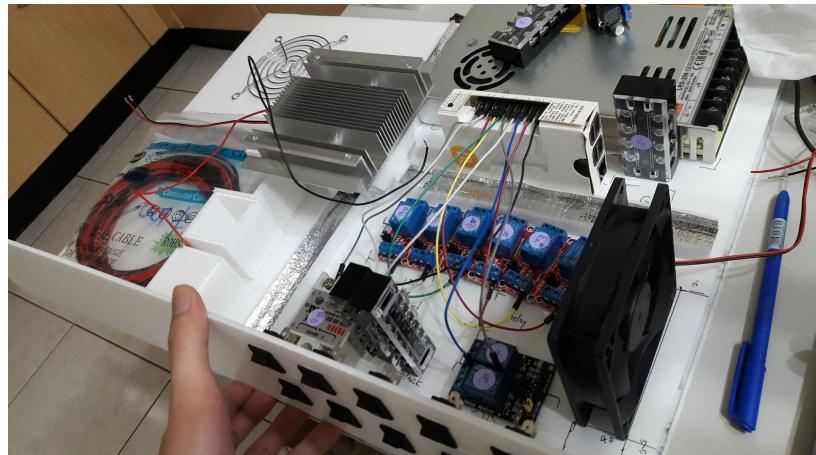
What I done



System Diagram



Construction process



```
*Python 3.4.2 Shell*          API_PUT_Realtime.py - /home/pi/API_PUT_Realtime.py (3.4.2)
File Edit Shell Debug Options Windows Help
Gain = 0
Integration time = 0
Broadband = 204
Infrared = 32
Lux = 2473.4
2019-03-01 01:20:58
Temp=26.0°C
Humidity=63.3%
Enabled = True
Gain = 0
Integration time = 0
Broadband = 615
Infrared = 92
Lux = 7512.5
2019-03-01 01:21:17
Temp=26.0°C
Humidity=62.2%
Enabled = True
Gain = 0
Integration time = 0
Broadband = 653
Infrared = 98
Lux = 7512.5
2019-03-01 01:21:37
Temp=26.1°C
Humidity=61.9%
Enabled = True
Gain = 0
Integration time = 0
Broadband = 722
Infrared = 109
Lux = 8836.0
|
```

```
3425 @Huam
1212 @Richard: [root@Huam ~]# rm -rf ./log
K安全，程式透過API而不直接連接std
j602 @Huam
如果加Token在request header
1029 @Richard
/usr/bin/python3.4 ./api.py > log.txt &
加入例外
1124 @Richard
人顯示測試TSL25611光度計數值光度計數值,之後再加入api
1212 @Richard
#!/usr/bin/python3
requests
Adafruit_DHT as dht # sensor
datetime as dt
time as t
sys
board
digitalio
busio
adafruit_tsl2561 #光度計
are
weather:
    __init__(self):
        self.obstime = None
        self.Sunrise = None
        self.Sunset = None
        self.Temperature = None
        self.TID = None
        self.RH = None
        self.WS = None
        self.WD = None
        self.WGust = None
|
```

The screenshot shows two terminal windows. The left window displays sensor data (temperature, humidity, broadband, infrared, lux) at three different times. The right window shows a Python script named 'API_PUT_Realtime.py' running in a terminal, which interacts with a MongoDB database and an Adafruit TSL2561 sensor to send data via an API.



Finished Product

Richard Farm Home Live Climate 統計 Map 列印 系統管理 Sign ▾

Welcome to My balcony!!

地點：我的陽台 ▾

位置：我的陽台

即時溫度：22.1 °C

即時濕度：71 %

即時照度：10.5 lux

Realtime Temperature

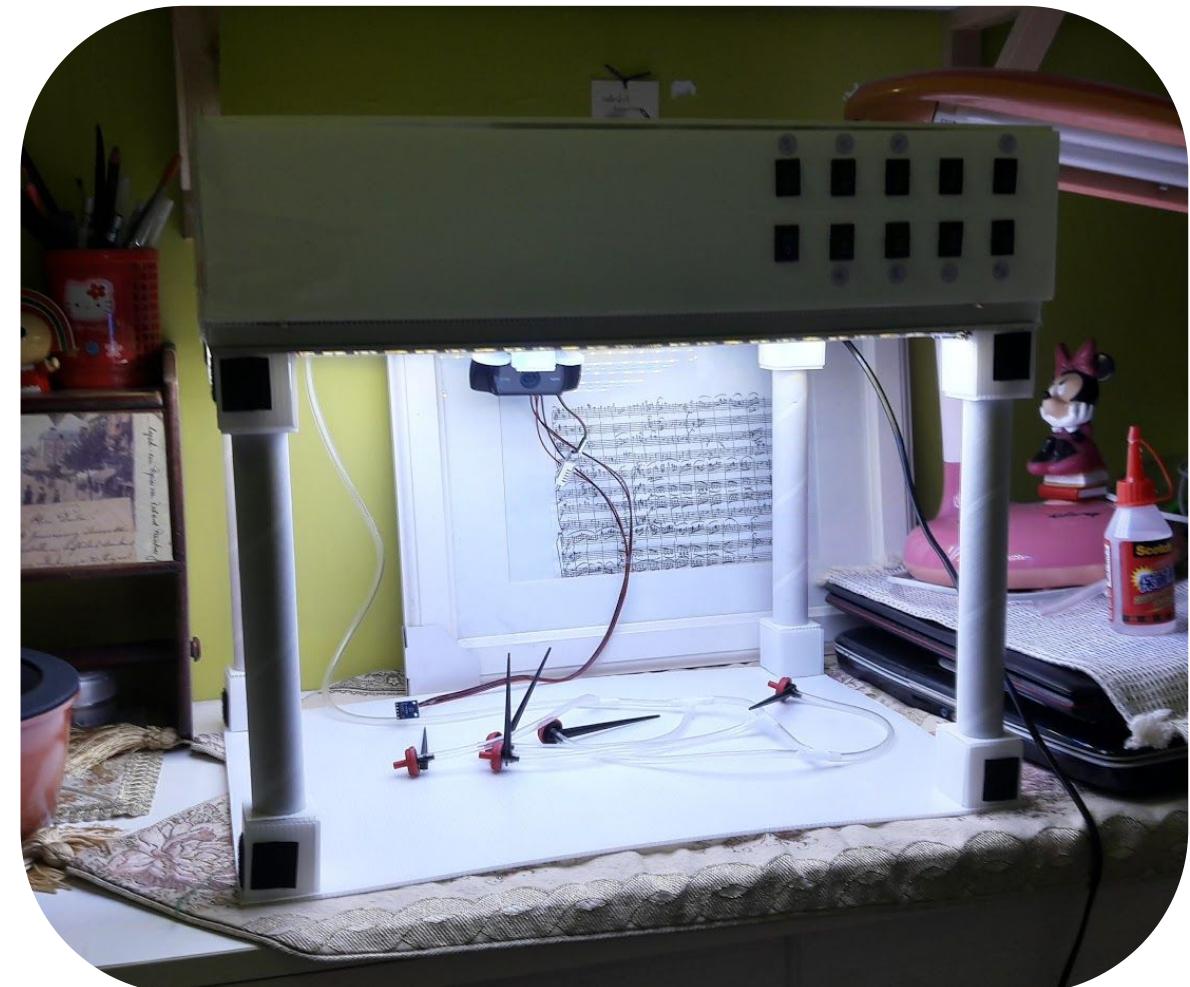


Realtime Humidity



Realtime Lux

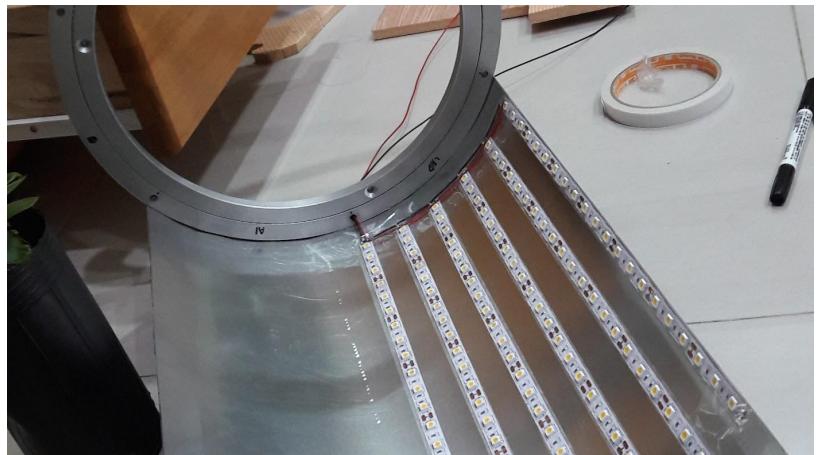
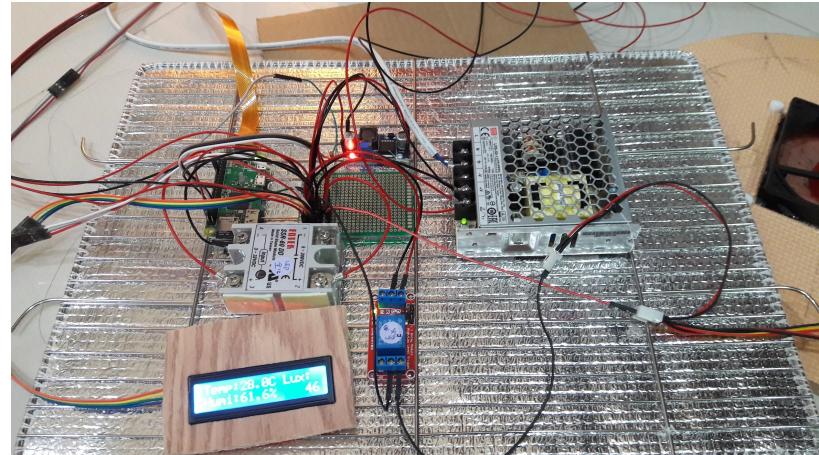
Lux



Frontend

Small greenhouse

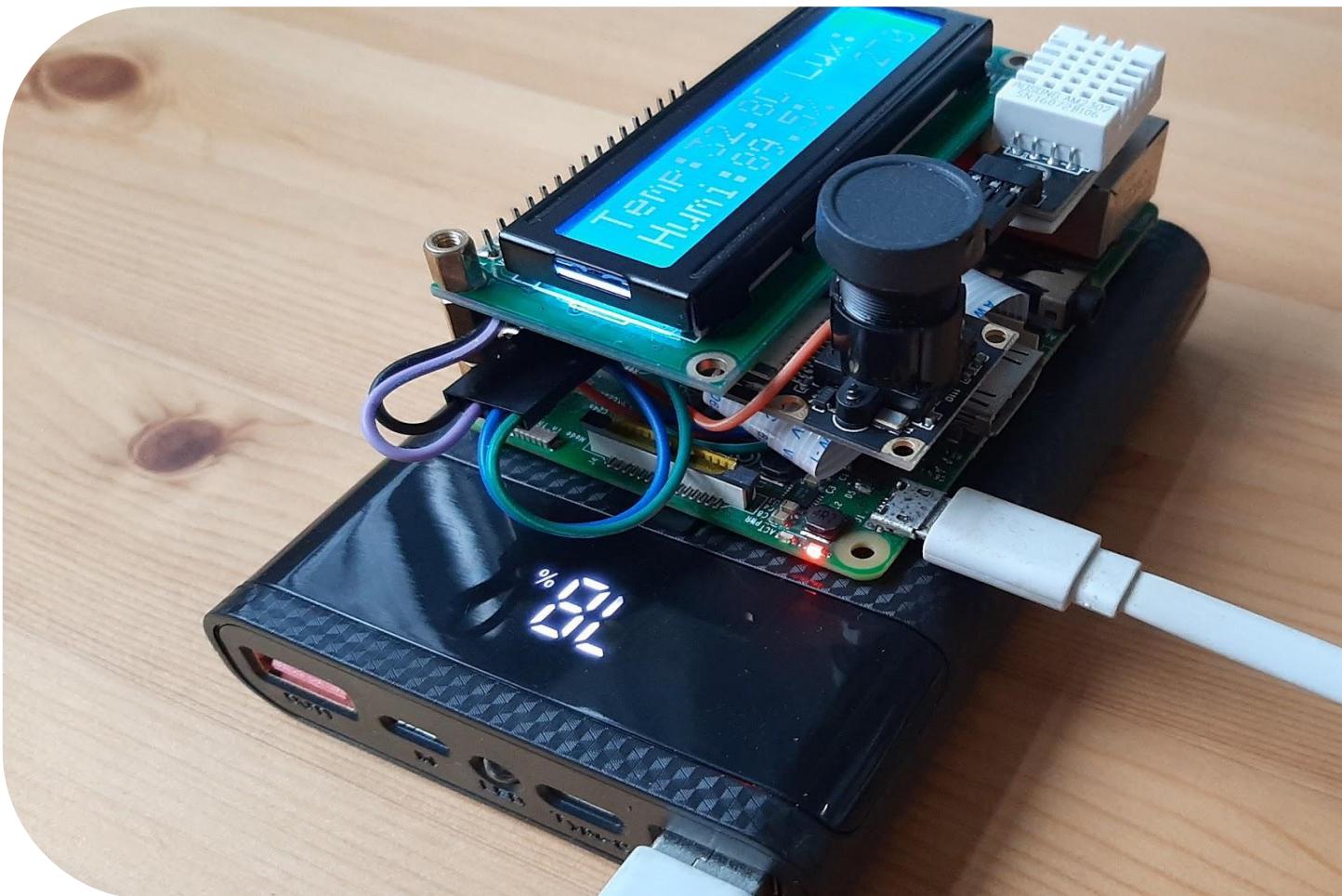
Version 2.0



Greenhouse v2.0



v3.0 not a greenhouse anymore...





To Be
Continue...