Final Assembly (Sprint 4)

MINF UDL 20-21

Ubiquitous and embedded systems

Team 1

1. **Considerations**
   a. **Power considerations:**
      i. In this case, the data producers 1 and 2 are connected to the Shield of power supply.
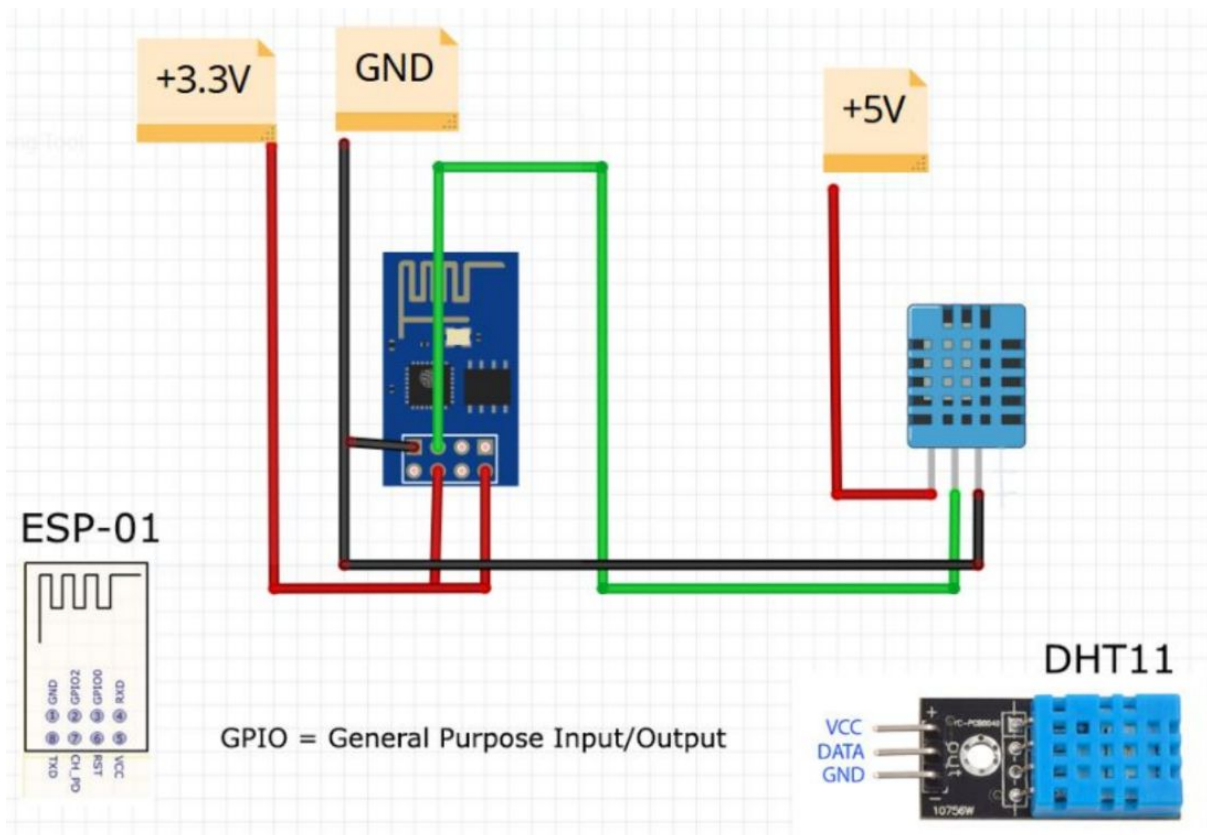   ii. All other components are powered by the Raspberry, as seen in the wiring connection (Point 3).
2. **Preparation**
   a. ChibiOS code
      i. Please refer to /code/ChibiOS_i2c_Raspberry/ for the full code
   b. Arduino (Data Receiver) code
      i. Please refer to /code/Receiver_Arduino/ for full code
   c. Data producers code
      i. Please refer to /code/DataProducer1_ESP_Sender1&2 for full code
3. **Wiring connection**
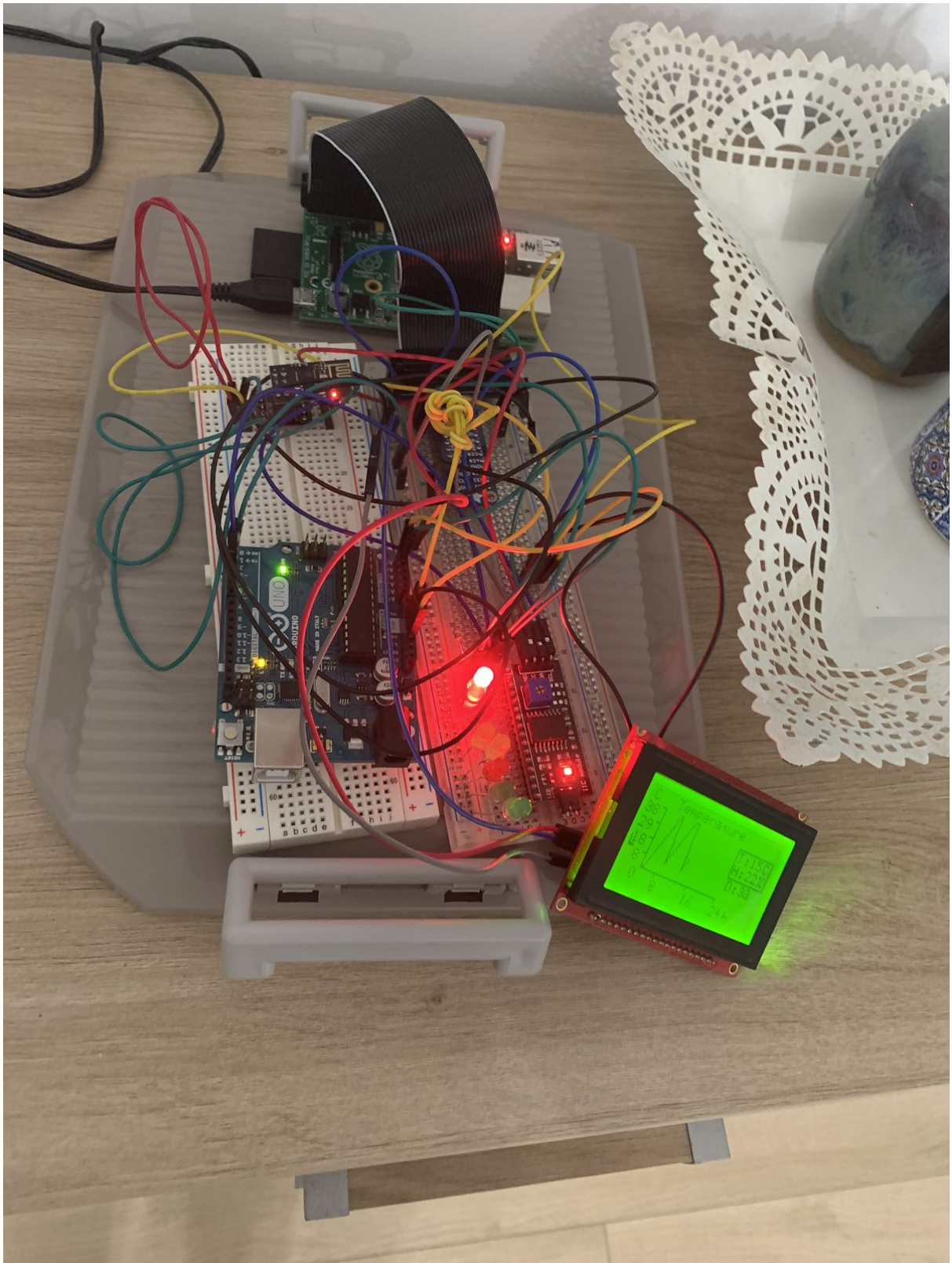a. **Data receivers schema:**
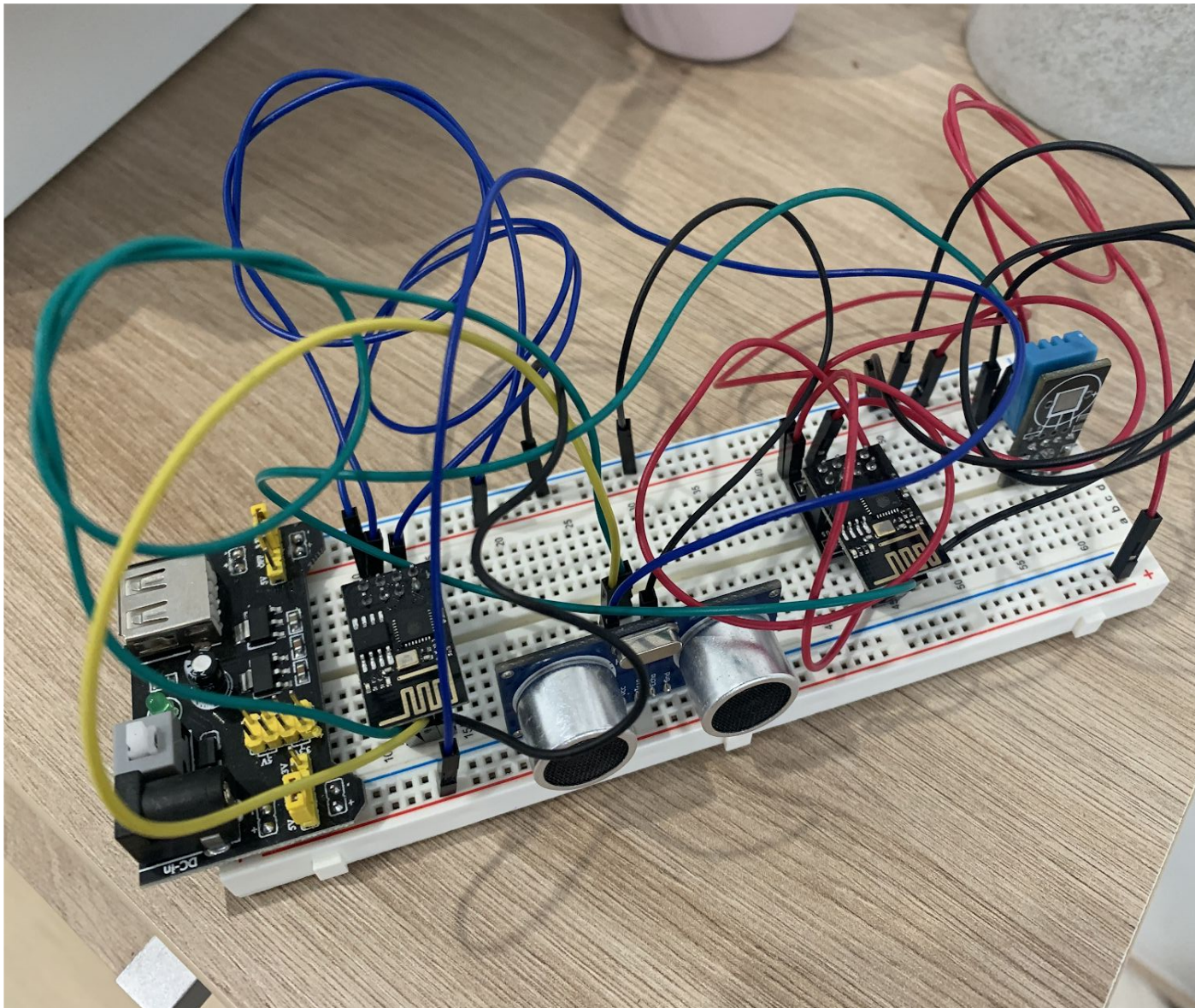
This ESP8266 are receiving data from the data producers

Slave (Arduino - Data Receiver)
Address 0x04

I2C Connection

Master (Raspberry Pi)

PCF8574
Address 0x27

LCM1602 IIC

b. Data Producer 1 schema:

+3.3V

+5V   GND

c. Data Producer 2 schema:

GPIO = General Purpose Input/Output

4. Final results:

Data receivers(using 2 breadboards)

Data producers 1 & 2 (using 1 breadboard)