

Sprint 1

Embedded and Ubiquitous Systems
Master's Degree in Informatics Engineering
2022/2023

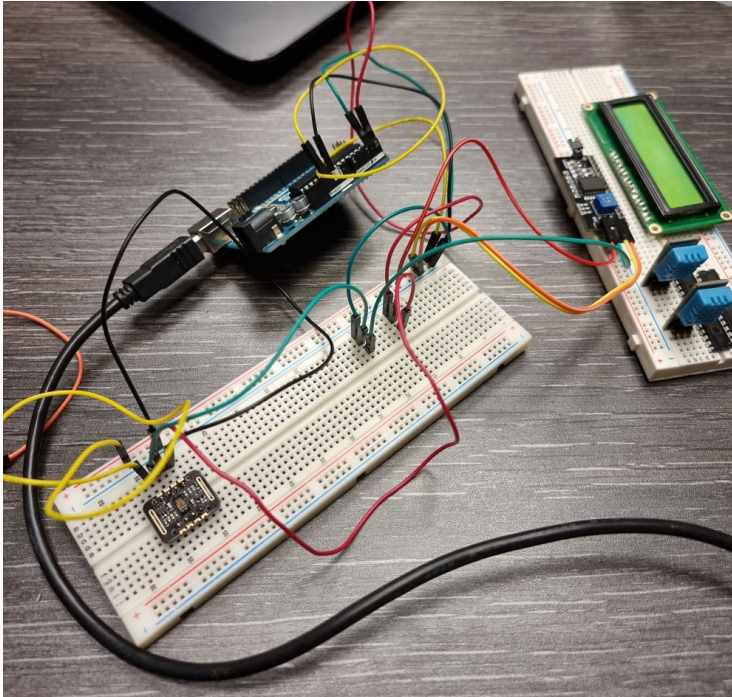




Sprint Planning 1

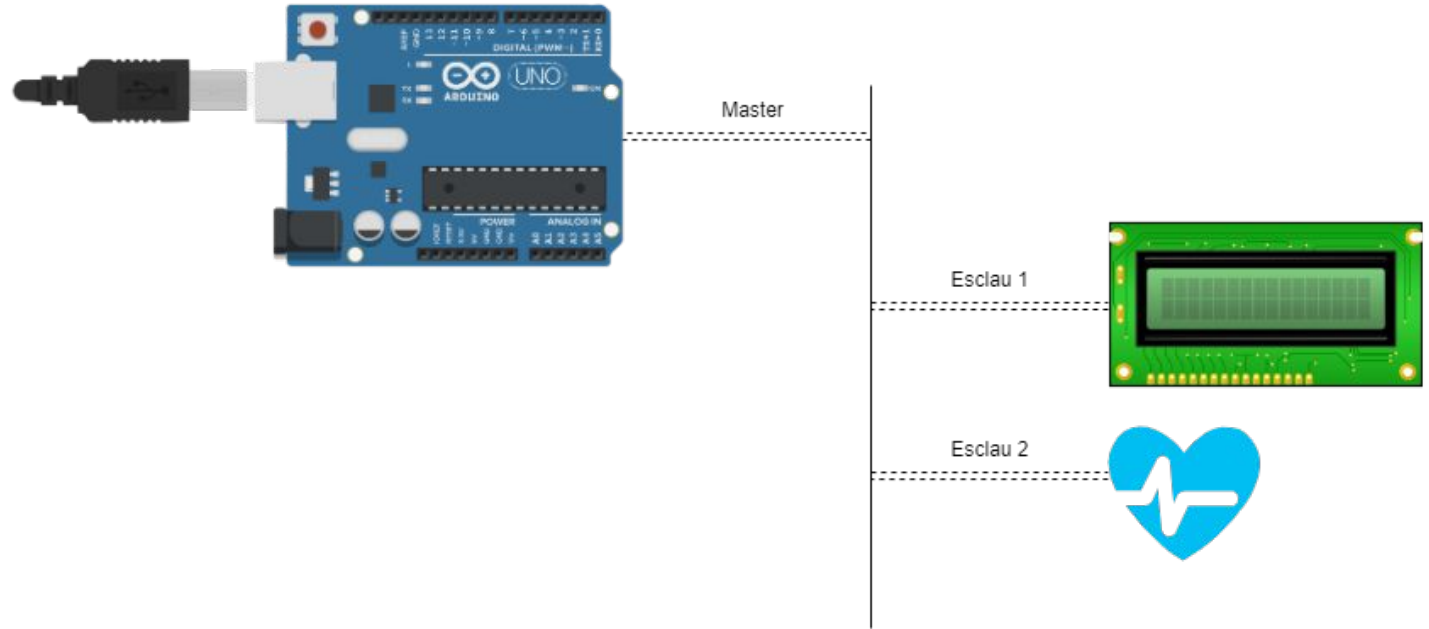
- LCD
- I2C
- ESP-01
- Servo
- Heart Rate
- Temperature

Day 1 (08/10/2022)



Temperature sensor
LCD
I2C
Heart Rate Sensor

I2C Bus



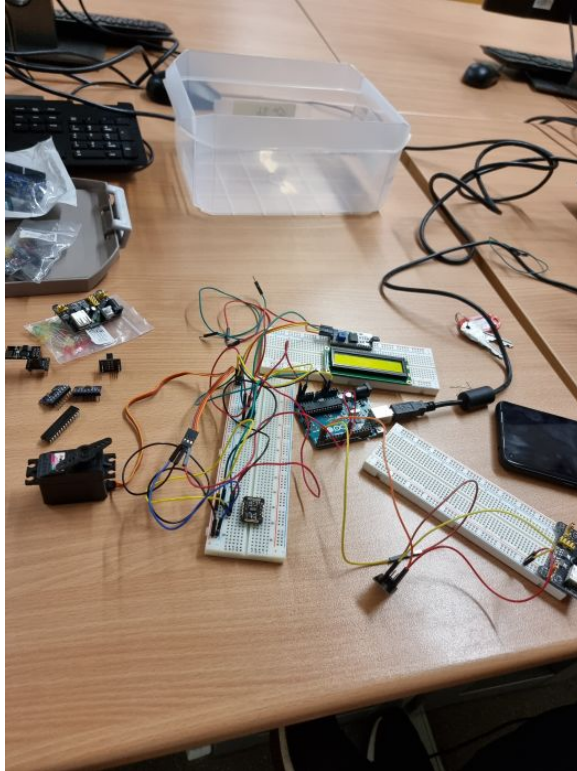


What we learned that day?

I2C bus: Always Scan before.

Heart Rate Sensor & LCD: How to use it and establish a “delay”, to refresh the LCD.

Day 2 (14/10/2022)



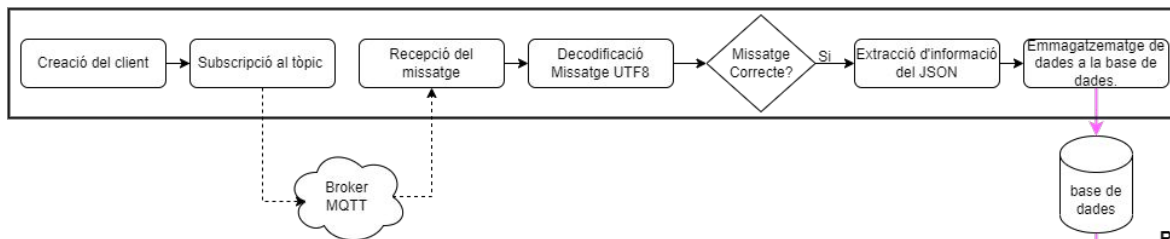
ServoMotor
LCD
I2C
ESP01



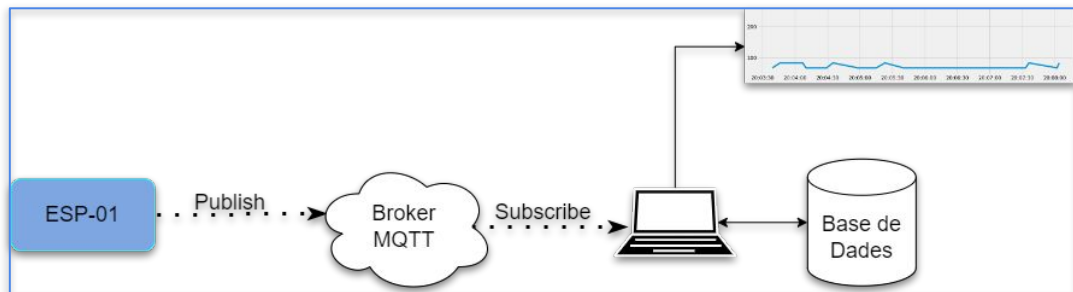
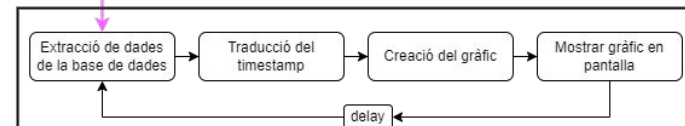
Platform MQTT

From the part of pc we create a platform to receive MQTT message.

PROGRAMA DE CAPTACIÓ DE DADES



PROGRAMA DE VISUALITZACIÓ DE DADES





Sprint Review 1

Product backlog completed

Task	Team member	Completed	Estimated time	Time logged
1.0: Read official documentation and manuals of the components	Jordi Lazo & Didac Colominas	Yes	2h	2h
1.1: Install and set up Arduino IDE search and install all necessary libraries	Jordi Lazo	Yes	1h	30 min
1.2: Configure and connect components (LCD, I2C, Arduino UNO, ESP-01, Servo, Heart rate sensor, Temperature Sensor)	Didac Colominas	Yes	2h	1h
1.3: Write the code to be able to read the data transferred by the heart rate sensor	Jordi Lazo	Yes	2h	1h
1.4: Write the code to be able to read the data transferred by the temperature sensor	Jordi Lazo	Yes	2h	1h
1.5: Write the code to be able to move the servo	Didac Colominas	Yes	1h	30min
1.6: Write the code to be able to show the data transferred by the heart rate sensor in the LCD screen	Didac Colominas	Yes	1h	2h

Time logged

Total time expected	Total time logged
11h	8h



What to do next?

- We are going to connect and configure the ESP-01.
- We are going to create a set up the server to manage all the devices in the same network.
- We will connect and configure the accelerometer.
- We will set up the RTOS with our devices.
- We will try to finish the semester project by the end of the sprint review 2.