

### **Sprint 4 Delivery**

#### **MINF UDL 20-21**

## Ubiquitous and embedded systems

#### Team 1

#### Content:

- a. Backlog tasks;
  - i. Dedication to each task;
- b. Sprint definition;
- c. Percentage of Sprint Completion;
- d. Sprint Review

Effort obtained through poker strategy of scrum time, being a medium between all members' opinions (range between 1-9).

## a. Backlog tasks:

- i. Data log and Screen representation 3 effort points Yoon
- ii. Ultrasonic <-> Led bar representation 5 effort points Danillo, Ron
- iii. Final Assembly 8 effort points (Group task)
- iv. Presentation 2 effort points Ron

### b. Sprint definition

Sprint 4: "The goal of this sprint is to develop the final layer of components of the project using the obtained knowledge, which consists of the LED Bar representation and the LCD Screen graphical representation."

- Related User Stories:
  - 1. Operator requires graphical representation of the temperature and humidity, obtained within the last 24h, in the controller.
    - a. Acceptance criteria:
      - i. The Temperature and Humidity must be shown in the LCD Screen
      - ii. The graphic shown must draw a line of the temperature/humidity in relation of the time, for a period of 24 hours
    - b. Related tasks:
      - i. Data log and Screen representation
  - 2. Operator requires information of the current tank container level in real time and it must be shown in a led bar present in the controller.
    - a. Acceptance criteria:
      - i. The LED Bar should represent the level compound
      - ii. The variables must be received inside the i2c system to distribute to each respective graphical representation
    - b. Related tasks:
      - i. Ultrasonic <-> Led bar representation

# c. Percentage of Sprint completion

- i. Data log and Screen representation 100%
- ii. Ultrasonic <-> Led bar representation 100%
- iii. Final Assembly 100%

# d. Sprint review / Sprint goal

"The goal of this sprint was to finally implement the last layer of the project which is the graphical representation to the final users. Design an easy to read screen with information is also in the priorities, for the LED segment bar we are considering it to reflect the actual state of measurements made by the distance sensor."