

MiddleWare for the IoT

TP N°2

BERRADA El Ghali
BERTA Pauline
CONCEICAO NUNES Joao

mangOH Yellow Card

This TP allows us to discover the mangOH Yellow Card, which builds low power IoT applications. It deploys 15 pins I/O, one SD card and two audio connectors.

Some wireless modules included, from 2G to 4G, GPS, ... with several antennas for GPS, Wifi, Bluetooth, ...

mangOH is pre-integrated with the open source Legato Linux platform for application level development.

This card has many sensors and options:

- Accelerometer
- Gyroscope
- Pressure
- Humidity
- Light sensors
- Temperature
- Air index quality
- Magnetometer
- Acoustic mic
- LEDs
- Buzzer
- Touch button



During the session, we had the opportunity to test some card capacities with the cloud and connectivity provided for Octave.

The first step was to send a message from our smartphone to the mangOH card with the help of Octave.

Then we discovered this tool and some options to code a small program. The goal was to determine if there were too many CO₂ molecules in the air of the room and play with the LEDs on the card.

To realize this we use the sensors which measure the air index quality.

This session was different from the other TPs because it was a discovery of materials and we did not realize something by ourselves.