checkBin - Future plans

Technical updates for 3rd delivery

System optimisation

- Consider the possibility of using as bin identifier the DEV_EUI assigned to the board for the LoRa communication

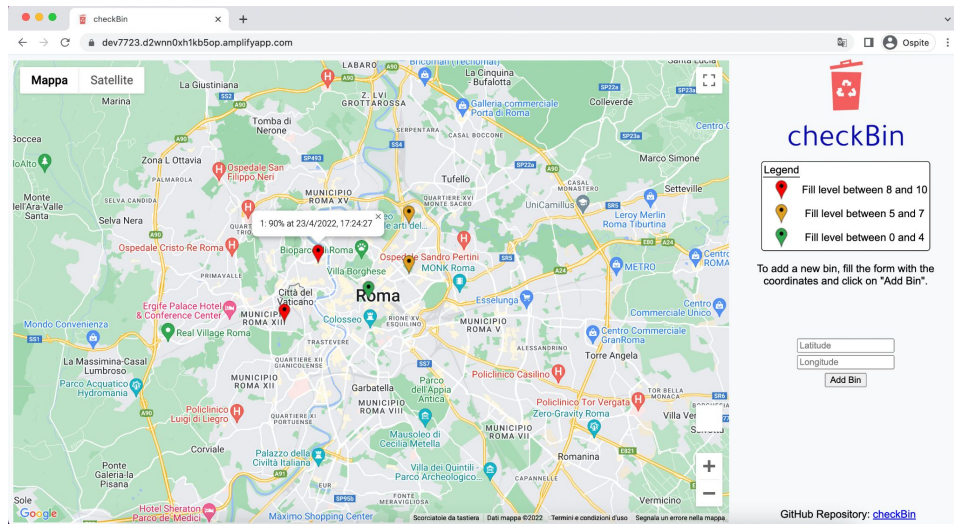- Study the power management API of RIOTos to understand if it can be useful for our purposes.

Technical updates for 3rd delivery

Changes in the prototype

- Try different charging methods.

- Show the fill level as a progress bar on the oled display.

- Add a button or an NFC reader to open the bin.

Technical updates for 3rd delivery

Changes in the web dashboard

- Websocket implementation to update the fill levels on the dashboard in real time.

- New button to delete a bin, given its identifier.

Evaluation plans for 3rd delivery: Energy

- Energy consumption during wake-up time

- Energy consumption to activate the sensors and compute the fill level

- Energy consumption to transmit data using LoRa

- Energy consumption during sleep mode

- Energy consumption of the OLED display

Evaluation plans for 3rd delivery: Network

- Total size of LoRa packets

- Total size of the payloads

- Total latency from the beginning of the measuring phase to the update of the web dashboard