

# IOT FINAL PROJECT

Yuval Otmazgin and Mike Greenbaum

## Problem:

We want to make it easier to clean trash cans. We want to put our device in trash can covers and that it will show in the user platform each trash can and how filled is it. By doing this, Trash cleaners can reduce their travels, by coming to trash cans only when they are almost full, and by doing so we save:

- The trash cleaners' time
- Reduce the amount of gas consumed by the trash cleaners, and the pollution created by the track.
- Reduces the chance of trash cans being full and not cleaned which yields in trash staying on the floor

## Components:

- Our modem.
- Our CMU.
- GPS sensor.
- Sonar sensor.
- User platform.

The hardware components interface serially, and the device interfaces with the app through the cellular modem over MQTT/HTTP.

The user platform will show on map every trash can with a different visual for how much that trash can is filled.

## System block diagram:

