Park-It-CDA
Context Diagram
Level 2
(Driving Requirements Expanded)

Server

Send Status

PIR Motion Sensor

Detect Motion and Wake CPU

Microcontroller

Status of PSU

LoRa Module

Status from other PSUs

Ultrasonic Range Sensor

Distance to ground

Check for blockage

Send Status/ Switch Roles

Send Status/ Switch Roles

Other PSUs

Blink Red/Green to indicate stall vacancy

Lithium-ion Battery

SMD RGB LED

Lipo Battery Charger

Solar Panels

Legend

External Devices

Sensors/Modules

Required Hardware (no data handling)