



# EVIBOT

## THE EARTH VEGETATION IRRIGATOR ROBOT

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# INTRODUCTION

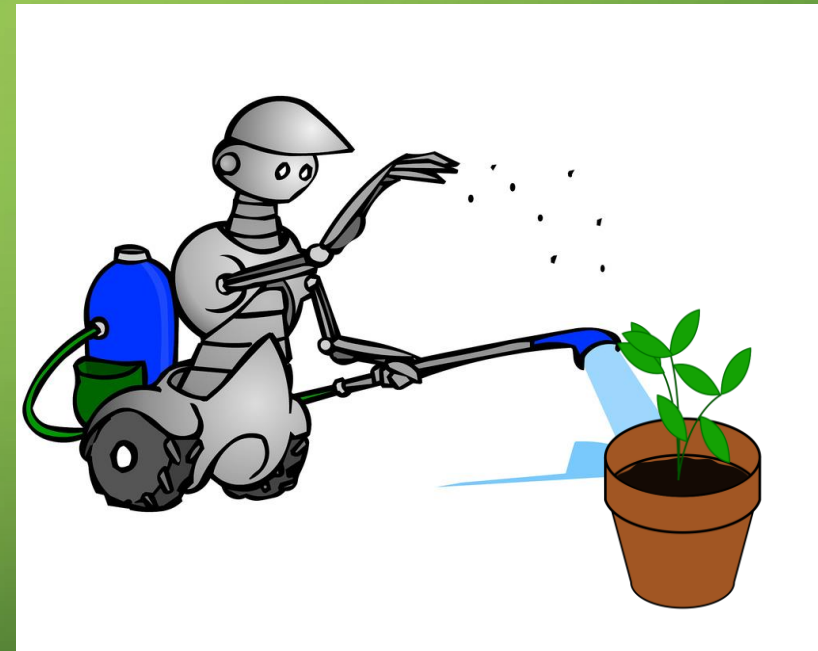
- Problem: Plants need water, but what if there's no one to water them?
- Solution: EVIbot

## Objective

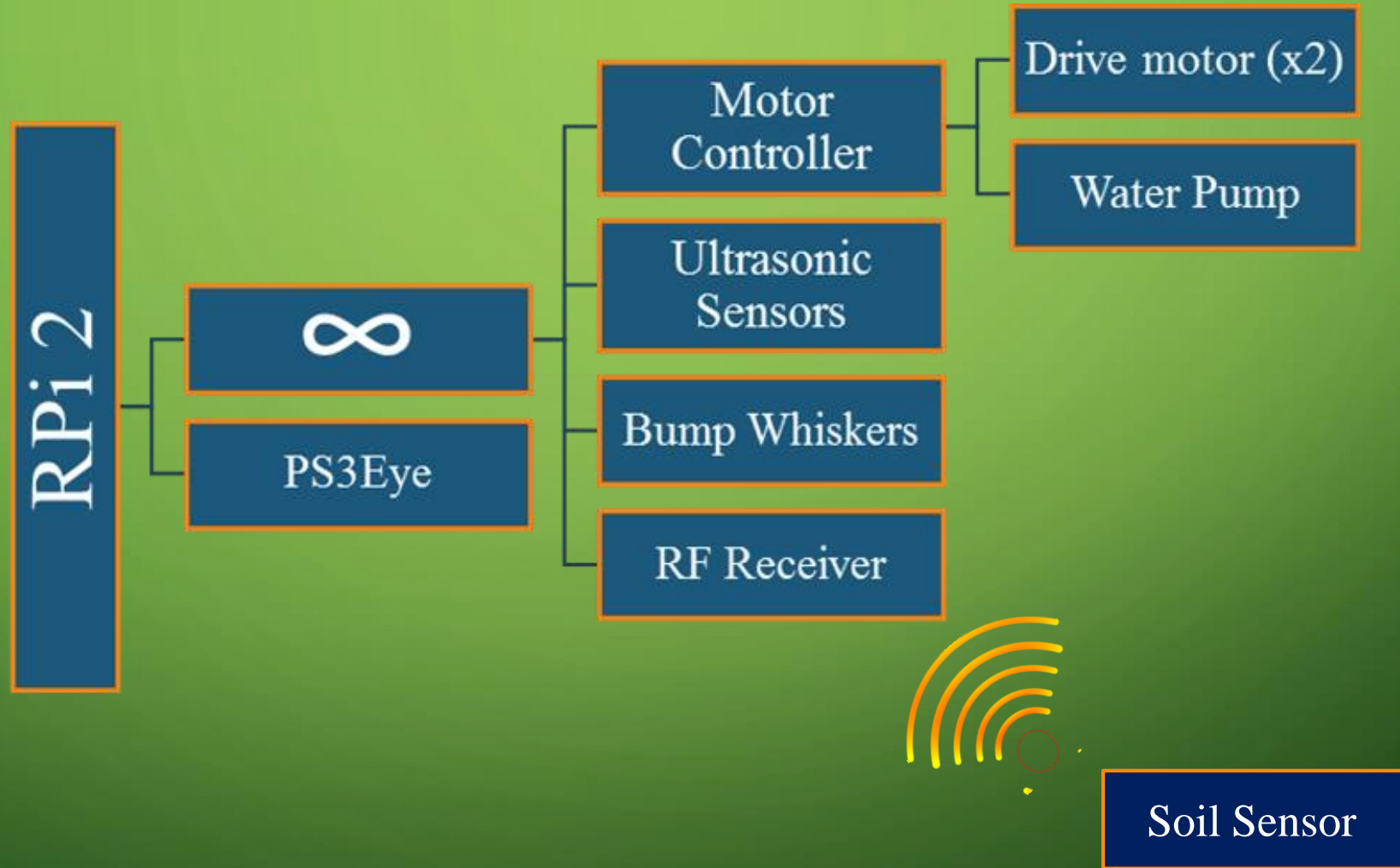
Automate plant watering process

## Tasks

1. Identify plant (marked pot)
2. Drive up to the pot
3. Determine if the plant needs water
  - a. Water plant
4. Move to next plant or stop task

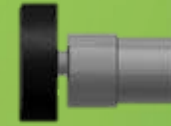


# INTEGRATED SYSTEM



# MECHANICAL HARDWARE

- 3-Wheel mobile platform
- 2-tiered platform
  - Electronics housed in the middle
- 2 DC motors for drive wheels
- 1 Water pump
- Plastic container and hose

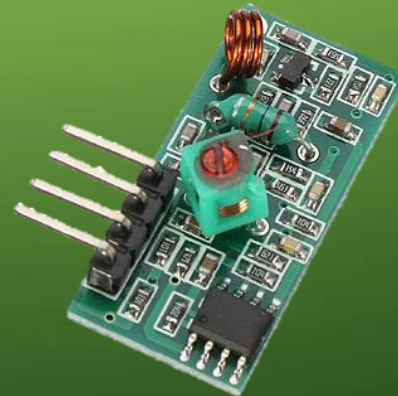
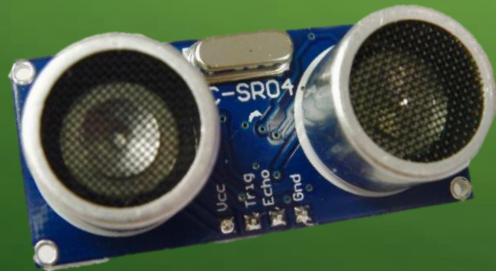


3-wheel platform



# SENSORS

- RF receiver
- 2 Ultrasonic sensors
- 2 Bump switches w/ whiskers
- Soil moisture sensor (external)





QUESTIONS?