

NIGHT GARBAGE COLLECTOBOT

It collects the garbage for you, and take it to the trash collector outside your house!

You can stay on the couch in the cold nights and let it do the lousy job for you!

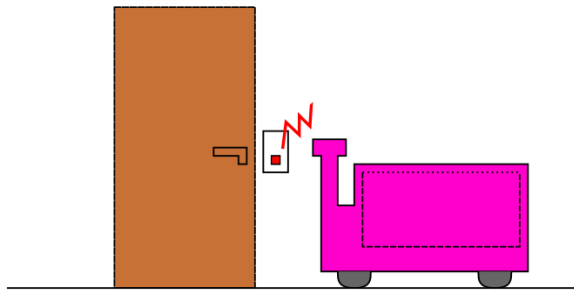
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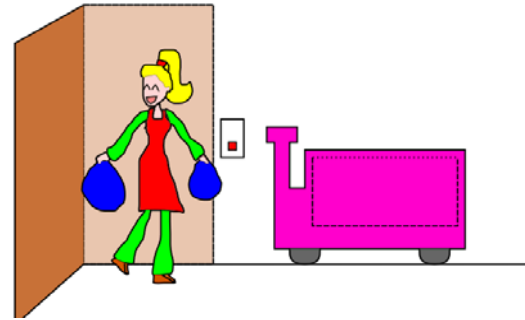
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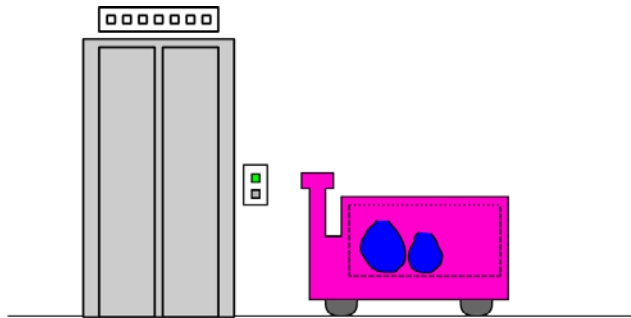
How it works



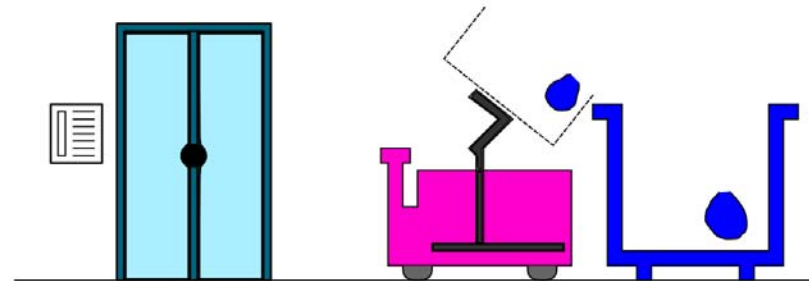
RFID signals -> it rings at the door



Happy housewife delivers the garbage



It goes to another floor to collect garbage, through the elevator. If it's full (level and pressure sensor) it goes to empty its case.



When full (or when the garbage collecting tour is over) it goes out to empty the garbage bin.

Equipment

- Mobile robot
 - Can carry up to 20 kg
 - Sensors:
 - pressure and level sensors (for garbage)
 - proximity sensor (path execution)
 - RFID sensor (to find house-doors, elevators, garbage container)
 - Actuators:
 - DC motors for navigation
 - 1 motor for emptying
- Intelligence
 - Predefined maps and path, online adjustment
 - Simple obstacle avoidance: if encounters a person, stops
- More!
 - If it had a robotic arm (e.g. PUMA) it could collect the garbage bag from the floor and load it on automatically
 - With some simple retina-like sensors, it could choose which type of garbage bag to collect (plastic, organic, paper...) according to the colour of the bag, and bring it to the proper garbage container.
- Estimated cost: from 1000 to 3000 euros
 - For a condominium with 60 families, it would be 50 euros per family!!!