

Story

The REAL Smart Garden is a system that interconnects sensors and machines (lawn mowers, scarifiers, seeding / fertilizing machines and sprinklers) to autonomously cultivate lawn.

Sensors measure height and dryness of the lawn. Depending on measurements and user configurations, the lawn is mowed and/or watered. The area is bounded via integrated GPS sensors. The position of the machines can be viewed on a map display .

Furhtermore, filling status of seeds and fertilizer can be monitored in the application. If configured, seeds and fertilizer are automatically ordered if a predefined threshold is reached. Additionally, working hours for the machines can be configured. Lawn mower and scarifier are emptied automatically if full.



[Source: <https://www.pitopia.de/scripts/pictures/detail.php?pid=931067&>]

Peter

Hobby Gardener

„I am a passionate hobby gardener, but I need more time to care for my plants and vegetables instead of cultivating the lawn every day”

About

- 65 years old, married, retired, passionate hobby gardener
- I have a rural cottage with a huge garden consisting of lawn, plants and vegetables.
- I like to care for plants and vegetables, but currently need much time to cultivate the lawn instead.
- Though I am still in good shape, I am not getting younger anymore and need to pace myself.

Responsibilities

- Water lawn, plants & vegetables
- Seed and fertilize lawn
- Order new seeds and fertilizer
- Cultivate my garden in general

Main Goals

- Keep surroundings of my house well-tended
- Cultivate plants and vegetables for own needs
- Having fun with my hobby. 😊

Needs

- I need some help to speed up the lawn care
- I need more time to cultivate my plants and vegetables
- I need somebody to tell me when seeds and/or fertilizer are out (or ideally reorder new ones automatically)

Pain Points

- Caring for the lawn takes way too much time
- Every time I want to seed or fertilize the lawn, seeds or fertilizer are out.
- The machines to cultivate the lawn are too heavy to handle and carry.

Point of View

As a Hobby Gardener

I need a way to automate the process of mowing, scarifying, seeding, fertilizing and watering my lawn


so that I have more time to cultivate my plants and vegetables.

Point of View


As a Hobby Gardener


I need a way to automate the process of ordering new seeds and fertilizer


so that I am never out of stock when I need to seed or fertilize my lawn.


<p>ACTIONS</p>	<ul style="list-style-type: none"> ▶ Gather equipment (hose, lawn mower etc.) 	<ul style="list-style-type: none"> ▶ Mow lawn ▶ Scarify lawn (optional) 	<ul style="list-style-type: none"> ▶ Empty collecting tray(s) 	<ul style="list-style-type: none"> ▶ Spread seeds and fertilizer (optional) 	<ul style="list-style-type: none"> ▶ Water lawn 	<ul style="list-style-type: none"> ▶ Clean up equipment
<p>MINDSET</p>	<ul style="list-style-type: none"> ▶ “I have to carry this heavy equipment again” 	<ul style="list-style-type: none"> ▶ “So much work still to do” 	<ul style="list-style-type: none"> ▶ “Mowed the lawn at least” ▶ “Still a lot of work to do” 	<ul style="list-style-type: none"> ▶ “Such an awful amount of work to get an evenly growing lawn at the end” 	<ul style="list-style-type: none"> ▶ “Would there only be some rain, so I could skip this step.” 	<ul style="list-style-type: none"> ▶ “Lawn is done again, finally” ▶ “Let’s care about flowers and vegetables”
<p>FEELING</p>						
<p>TOUCH POINTS</p>	<ul style="list-style-type: none"> ▶ Garden Hose ▶ Lawn Mower ▶ Scarifier ▶ Fertilizer (opt.) ▶ Seeds (opt.) ▶ Equipment Storage Box 	<ul style="list-style-type: none"> ▶ Lawn Mower ▶ Scarifier (opt.) ▶ Lawn 	<ul style="list-style-type: none"> ▶ Lawn Mower collecting tray ▶ Scarifier collecting tray (opt.) ▶ Container 	<ul style="list-style-type: none"> ▶ Seeds ▶ Fertilizer ▶ Lawn 	<ul style="list-style-type: none"> ▶ Garden Hose ▶ Lawn 	<ul style="list-style-type: none"> ▶ Garden Hose ▶ Lawn Mower ▶ Scarifier ▶ Fertilizer (opt.) ▶ Seeds (opt.) ▶ Equipment Storage Box


The REAL Smart Garden

 **4**
NOTIFICATION
Lawn Mower 1
All OK

 **1**
NOTIFICATION
Scarifier 1
Needs Attention

 **1**
NOTIFICATION
Seeder / Fertilizer 1
All OK

 **2**
NOTIFICATION
Sprinkler 1
All OK

 Configuration



Lawn Mower 1



Husqvarna AUTOMOWER® 220 AC



Connected



On Cutting Height: 6cm

Battery Status

90 %

Feb 17, 2017 00:00:00



Battery Status

90 %

Feb 17, 2017 00:00:00



Notifications (4)

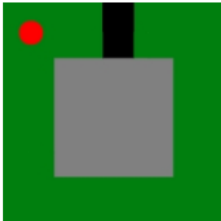
Battery is full
Lawn moving finished

Feb 15, 2017

Feb 15, 2017

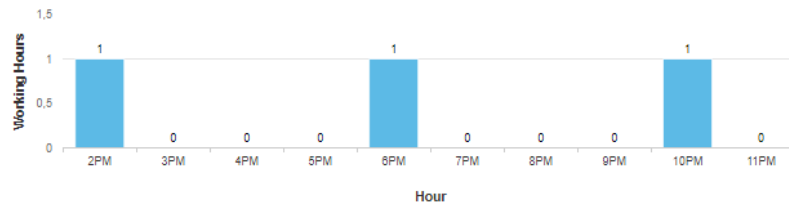
[See All](#)

Peter Miller, Example Street,
Example City, US



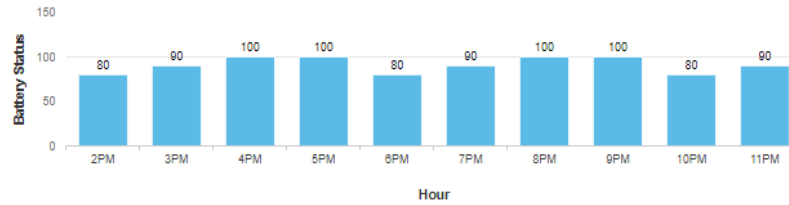
WORKING HOURS

Hourly



AVERAGE BATTERY STATUS (IN %)

Hourly



FILLING STATUS (IN %)

Hourly

