



open**SAP**

TOUCH IOT WITH SAP LEONARDO PROTOTYPE CHALLENGE

IOT PROTOTYPE CONNECTED HEDGES



Story

“The hedge is grown so strong. I need to clip it. If I had it done earlier then the new branches would not have grown so thick. It is very hard work to clip the hedge at this stage.”

This is a common statement of gardeners. They wish some kind of help to monitor their hedges and to be notified so they can be able to react at the proper time to prevent hard work.

Maintained hedges are a delightful sight. In many cases this state is achieved only at the time of clipping. Some weeks later the hedges look untended again. The interval of clipping depends on the type of plant used in the hedge. Many owners of hedges rely on the clipping services of professional gardeners for the continuous clipping. These professionals would like to have a survey system of all the hedges of their clients to keep track of the state of the hedges.



Persona



Bob Garder

Gardening specialist

«I love to keep the gardens of my customers in a good shape»

About

- 35, single, since 2010 employed in a gardening company, offering gardening services
- 18 years of experience in the field
- 70% of the time out of office working at the customers sites, 30% office work. Sharing work with two other colleagues.

Needs

- I need to know how fast a particular plant of a particular customer's hedge grows and when it is time to clip it. Currently I have to drive from time to time to the customer's garden to examine the situation. I would like to avoid this travel.
- The members of our small team need to be up to date and able to jump in at any moment without having to deal with long explanations.

Pain Points

- From time to time a late reaction on plant growth occurs.
- Time consuming reports for my co-workers, no possibility to have a simple overview
- High car expenses due to unnecessary driving.

Responsibilities

- I am responsible to keep the gardens of my customers in a good shape. I have about 20 customers in my portfolio.
- In half of the cases I have to decide on my own when the time is come to clip a particular hedge to meet the customers' expectations.
- I have also to intervene in emergency situation or when a customer calls for help.

Main Goals

- Make customers happy with good services, keeping record of their needs.
- Keeping number of self-determined operations per customer in balance.



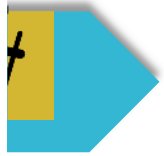
Point of View (PoV)

Point of View

As a gardener, I need a way to know the state of the hedge without having to drive far to the garden site so that car costs can be minimized.

Point of View

As a team member, I need a way to be up to date concerning the work of the other team members when I am working remotely so that I can continue the work of another team member.



UX Journey

User Experience Journey: Hedge inspection

| | | | | | | |
|----------------------------|---|---|---|---|--|--|
| <p>ACTIONS</p> | <ul style="list-style-type: none"> Take over work of colleague Read state report from colleague. | <ul style="list-style-type: none"> Look at map Decide which customer places to visit | <ul style="list-style-type: none"> Drive to place 1 Hedge is ok | <ul style="list-style-type: none"> Drive to place 2 Hedge has to be clipped | <ul style="list-style-type: none"> Drive to place 3 Major effort to reestablish hedge | <ul style="list-style-type: none"> Back to office Write Report into computer |
| <p>MINDSET</p> | <ul style="list-style-type: none"> Always losing time with those incomplete reports! Hope the hedges grew not too long after this rainy weather | <ul style="list-style-type: none"> Should I take the west route My experience tells me that in that area there could be more maintenance need | <ul style="list-style-type: none"> I could have spared time and costs | <ul style="list-style-type: none"> Great, just in time | <ul style="list-style-type: none"> Oh no, the state of the hedge is miserable The report is incorrect! | <ul style="list-style-type: none"> Stupid work Happy with result of work |
| <p>FEELING</p> |  | | | | | |
| <p>TOUCH POINTS</p> | <ul style="list-style-type: none"> Report PC | <ul style="list-style-type: none"> Map | <ul style="list-style-type: none"> Hedge Report Car | <ul style="list-style-type: none"> Hedge Report Car Hedge clipper | <ul style="list-style-type: none"> Hedge Report Car Customer Clipper, Saw | <ul style="list-style-type: none"> PC |



Prototype

Launch Page: Overview of on map (color=state) and on list below.

Connected Hedges

Change area:
Area 21

| | | | |
|--|---|---|---|
| 9 LOCATION Hedge Complex Sensor out of order | 8 LOCATION Single Hedge Threshold 1 reached | 3 LOCATION Single Hedge Everything OK | 2 LOCATION Hedge Complex Threshold 2 exceeded |
| 12 LOCATION Single Hedge Everything OK | 15 LOCATION Single Hedge Everything OK | 2 LOCATION Hedge Complex Threshold 1 exceeded | |

Detail page of one hedge with state, history, growth rate and environmental conditions:



Single Hedge



Unistrasse 45, Zürich

Settings

Threshold 1: 5cm
Threshold 2: 15 cm

[Change](#)

H25-3



Mapped



Connected



On



Contact Person
Smith: 0795566789

[Notify](#)



LAST STATE

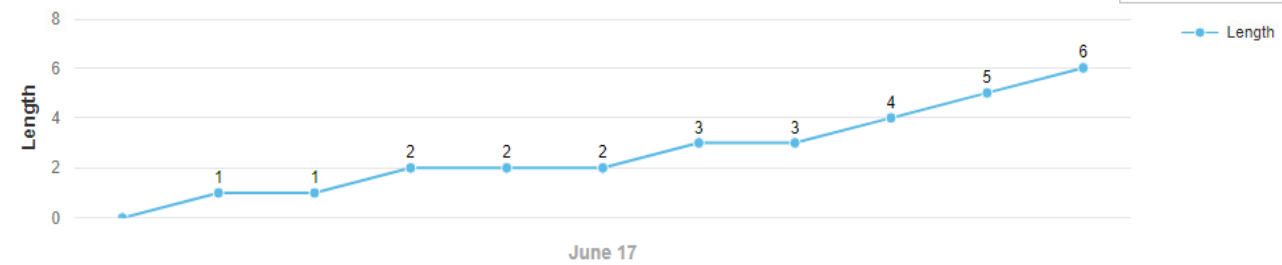
Threshold 1 Exceed

6 cm
June 30, 2017

History

May 31: Clipped
May 15: New Sensor
[See All](#)

Growth in cm



Rain/Sun

