Learning Reflection

R0328: Modelling of Digital Service

MDS_Team3

UrbanFarming-IOT

13.04.2022

UrbanFarming-IOT

UrbanFarming-IoT is a mobile application and a service that offers a way to monitor and take care of customers' plants. It will make it easier for the customer to see how healthy the plants are - what is the water level, acidity etc.

Main part of the product would be an app that also has IOT sensors connected to it by Bluetooth/WLAN to track the data. And the ability to pair multiple sensors and devices together under a single application.

A very important focus is the ease of use and the displaying of data in an attractive manner.

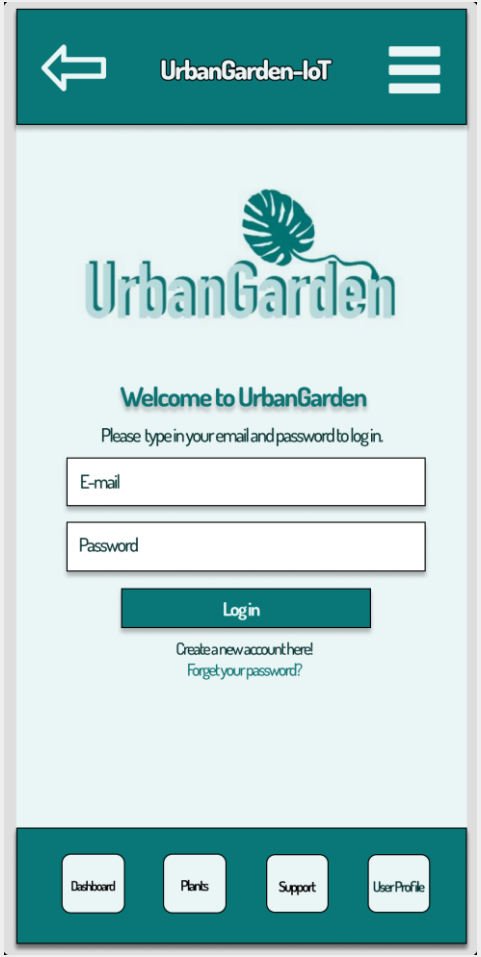
Project overview

The product:

UrbanFarming-IOT is a smart garden mobile application, which gives the user data from the garden's sensors aimed at people who are interested in trying their hand at high tech gardening.

Project duration:

About 135 hours in total per person.



Project overview

The problem:

- Smart gardens are still quite unknown as a hobby and we'd like to change that.
- Setting up you garden can be quite a hassle. Due to the knowledge needed.
- Smart garden applications can still be pretty hard to understand & use.

The goal:

- A smart garden application on a mobile platform to make this more approachable to your average person.
- A smart garden application that is easy to understand & use.

Project overview

Siim Laineste

My role:

We didn't have clear roles for the project, but I did look at the problems from a developers viewpoint.

Responsibilities:

We shared the workload in our team as evenly as possible. So each of us had a hand in everything.

Project overview

Jackson Wilken

My role:

Although no there were no clearly defined roles, cohesively we all took part in achieving our goal, which I played a key role in.

Responsibilities:

Wireframing, coordinating with other team members to produce our outcome, prototyping and researching.

- Jackson Wilken

Project overview

Ida Bragge

My role:

Our team did not have clear roles on this project but I have been the unofficial project manager here.

Responsibilities:

I have organized the meetings, given tasks to other group members and also been responsible for most of the designing work like logos and photographs in addition to taking part on each assignment with the team.

-Ida Vilhelmiina

Project overview

Matias Laukka

My role:

I can't say that our group had a clear role divide on this project. I was focused on whatever happened to be important at the moment.

Responsibilities:

I worked on multiple things. If I had to pinpoint a couple responsibilities, I'd mention user research, personas, user journey maps, and generating text for presentations.

Understanding the user

- User research
- Personas
- User Stories

User research: summary

Our research for this project was somewhat limited.

It mostly consisted of general research in the area of smart gardening, UI/UX Design and mobile application design. Personas and user journey maps were constructed based on the overall knowledge of the field and its customers that we accumulated during this initial research phase.

Our research definitely did change how we saw the average smart garden user – almost anyone could have a little more green in their lives and this is a booming field right now.

Persona: **Juuso**

Problem statement:

Juuso is a lover of exotic plants who needs information on foreign flora because of the lack of information online.

Persona: **Elsa**

Problem statement:

Elsa need a way to synchronize her busy lifestyle with gardening and getting better results with it easily at home.

Name

Elsa

Age:

29

Occupation:

Sales manager

"Life is what happens while you are busy making other plans."-John Lennon. And Elsa agrees.

Goals	Frustrations	Solutions
• To be able to keep up with her gardening and synchronize that with her busy lifestyle • To get better results in home gardening	• To find mobile app that's scalable for home gardening as well and not only for industrialized use • To find an app which also offers information about how to grow the plants instead of just offering pure statistic data on their growth.	• Offer app in private person/ home gardening and industrialized versions • Offer information about the plants and growing plans to the user • Make the information easy to find in the app

User Functionality or Features

1

Creating an account / Logging in

Creating a new account and logging in later helps the user retain their personal smart garden information regardless of where they are in the world.

Maybe we should add Google / Facebook login?

2

Add / Remove Sensors

This functionality allows the user to dynamically add or remove sensors from the smart garden application. Our goal is to make it as easy as possible to go with a custom set of sensors.

3

Plant automation

Plant automation is one of the key functionalities of smart gardens. Our goal is to make plant automation something that's easy to modify on the fly. You can also turn earlier automations on or off according to your needs.

4

Plant information

This is one of the more open questions in our design at the moment. What is the best way to convey information about how to grow your plant? Should we link this to automation?

User Stories

1

Persona

As a User I want to Have an overview of my plants' health readings so that I can make an educated adjustment to my plants well-being.

2

Persona

As a User I want to easily connect my sensors to my application so that I can easily start monitoring the plants.

3

Persona

As a User I want the application to teach me how to take care of my plant in an easy-to-understand way so I can keep it healthy and growing.

4

Persona

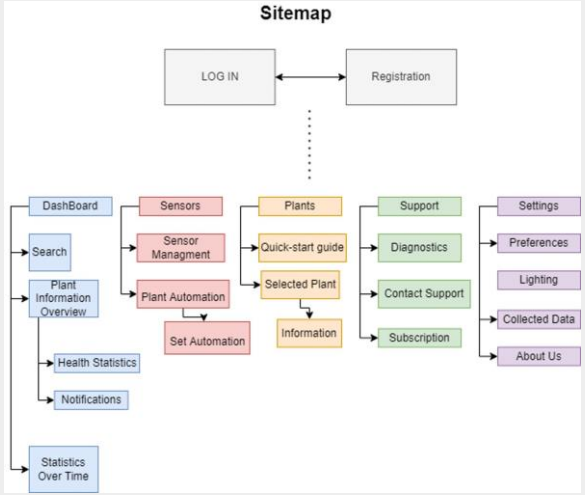
As a User I want to add sensors to my application in a structured manner so I can have a good overview on which sensors belong to which soil bed.

Starting the design

- Wireframes
- Prototype

Wireframes

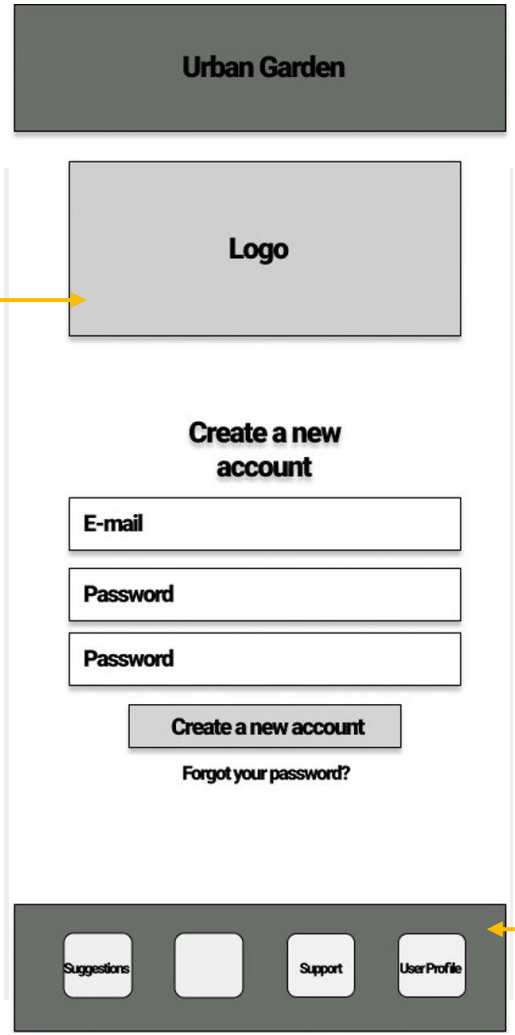
In our wireframes we wanted to clearly but with simple elements to define our application, what requirements it should have and how the application would roughly look like. We went through some mobile apps that looked good and clear to us and tried to make our application wireframes to match.



Our site map and login page

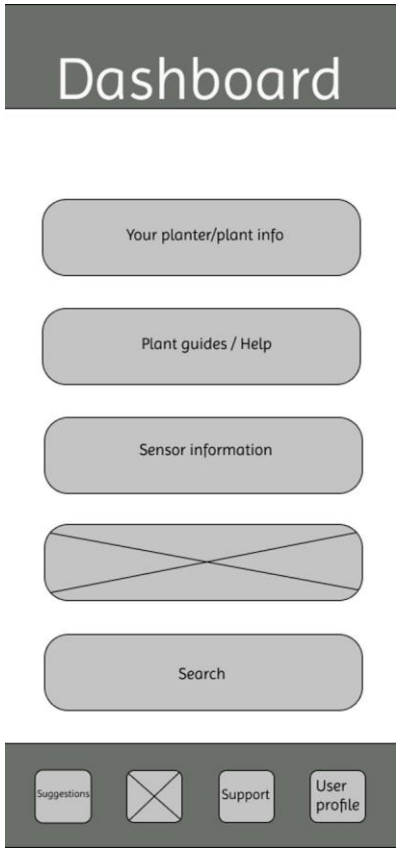
Digital wireframes

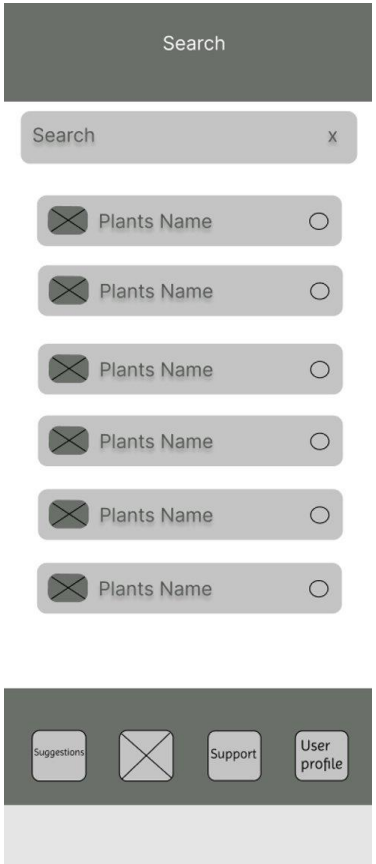
We wanted to have clear look on our application and the logo on the top of the page and all the details underneath that

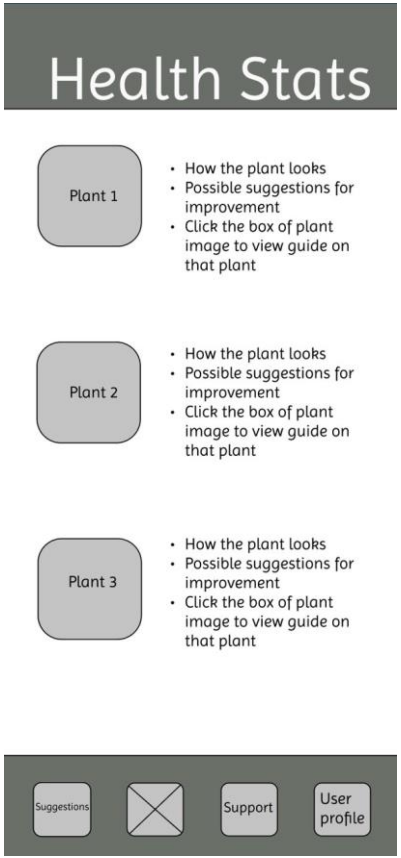


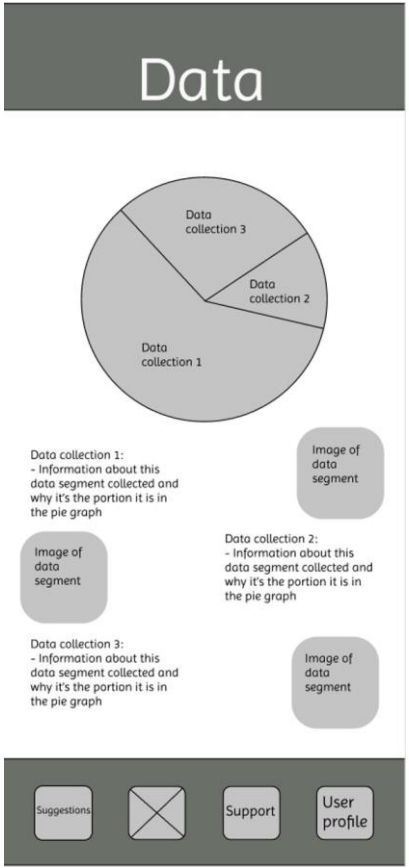
Quick menu on the footer for easy navigation

Digital wireframes









Digital wireframes

Subscription

Subscription package 1 — 5,99€ p/m

Subscription package 2 — 11,99€ p/m

Subscription package 3 — 19,99€ p/m

- When you hover over each subscription bundle, information appears here as to what is offered compared to the bundle previous/ after.

Suggestions | Support | User profile

Notificiations

May 5
- Don't forget to water your 'Basil'

May 7
- Your corriander needs attention :(

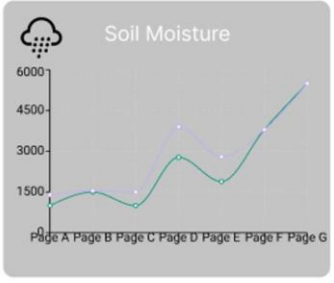
Yesterday
- You added 'Rosemary' to the planter!

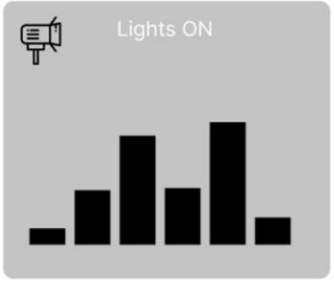
Today
- Remember to check all plants, we're thirsty!

Today
- Congratulate your friend on their first harvest!

Suggestions | Support | User profile

Plants Information Over Time





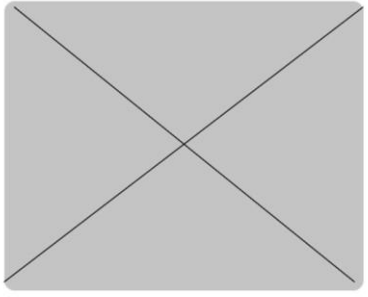
Suggestions | Support | User profile

Plants

Logo

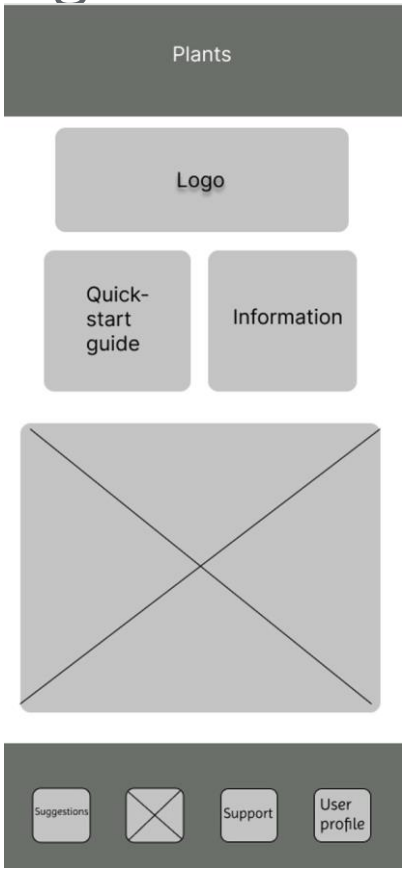
Quick-start guide

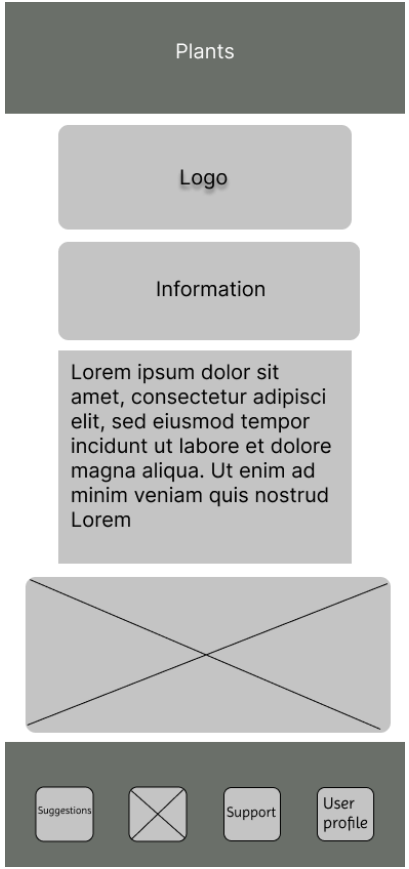
Information

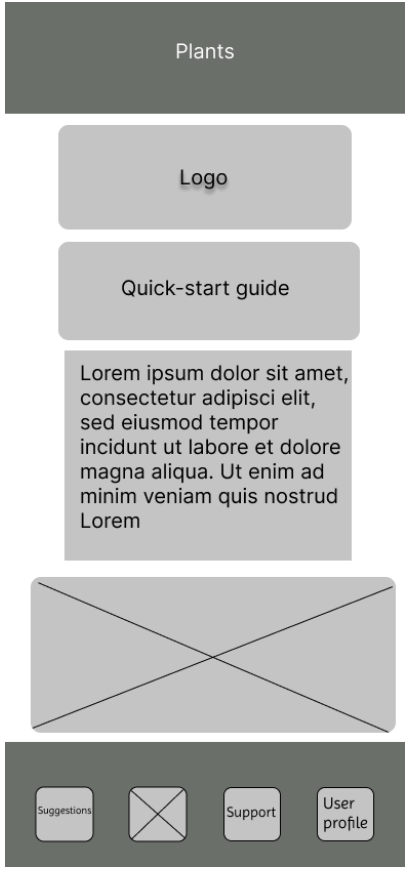


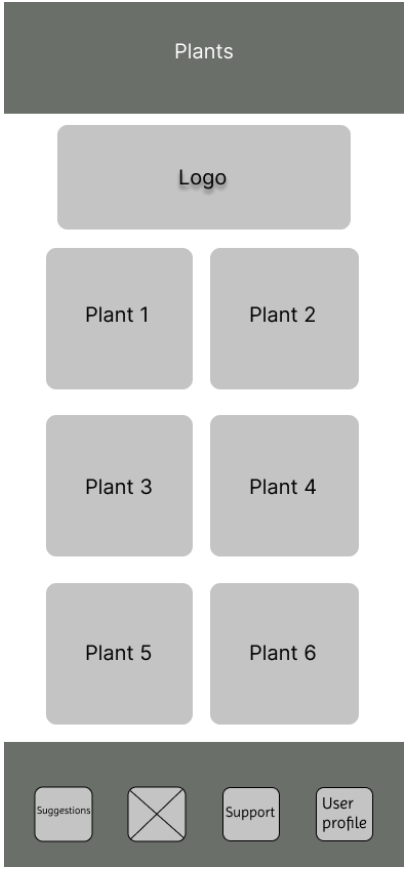
Suggestions | Support | User profile

Digital wireframes

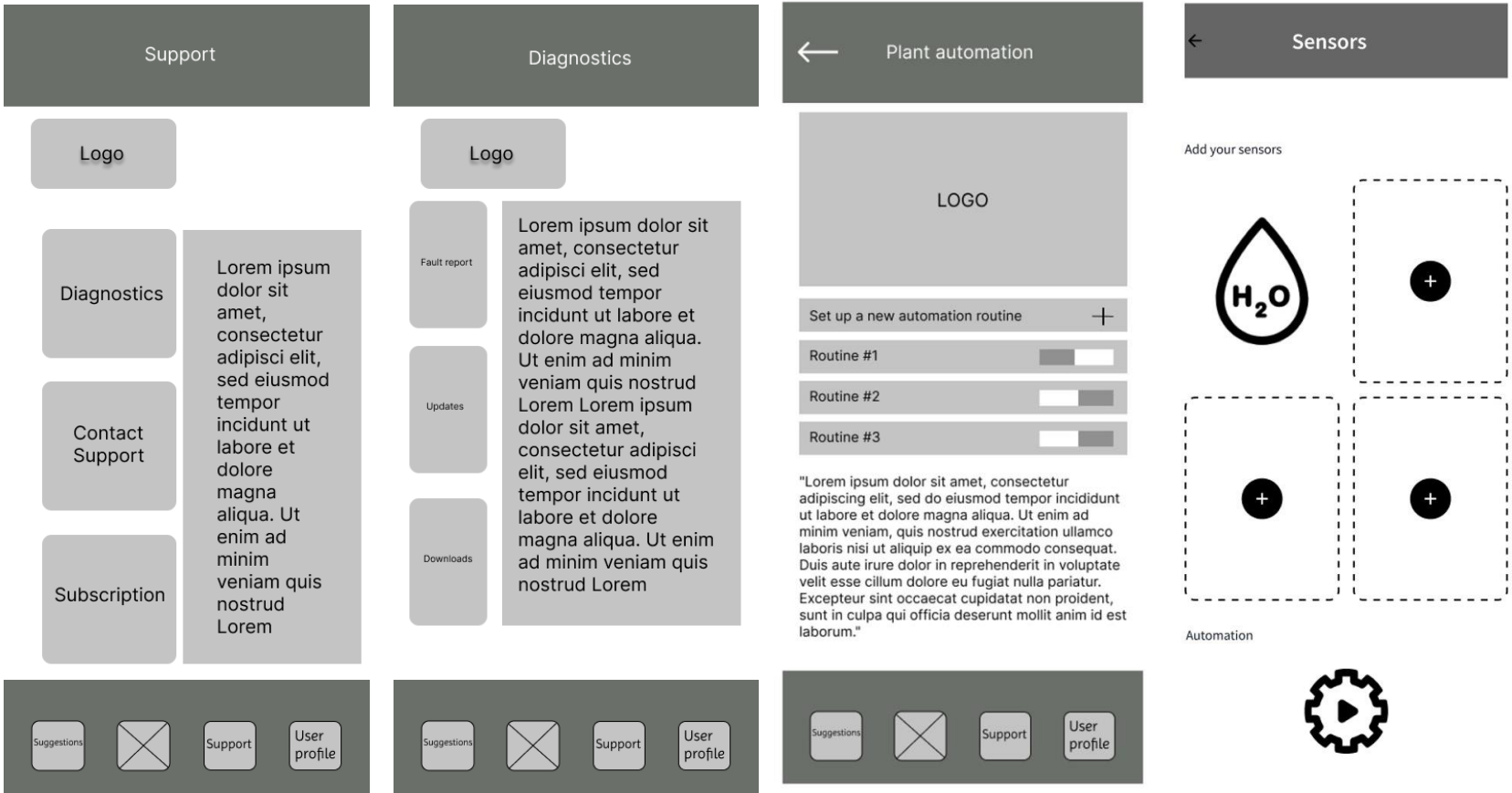








Digital wireframes



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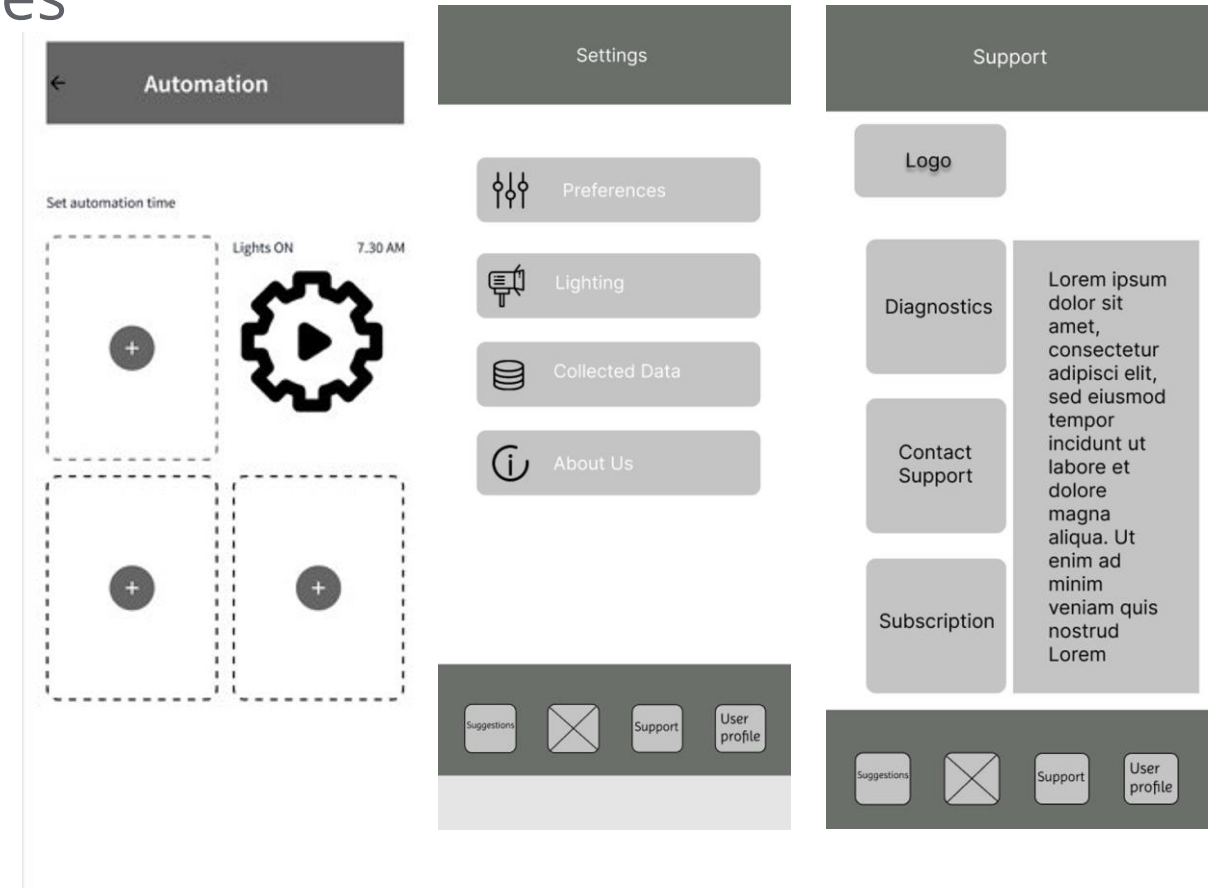

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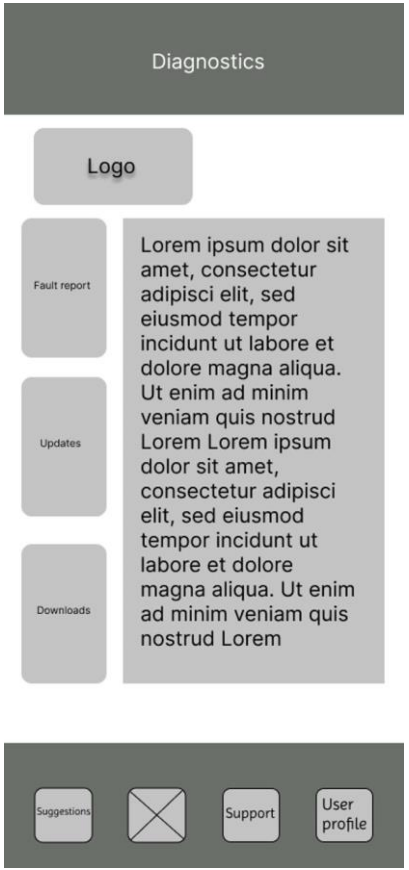
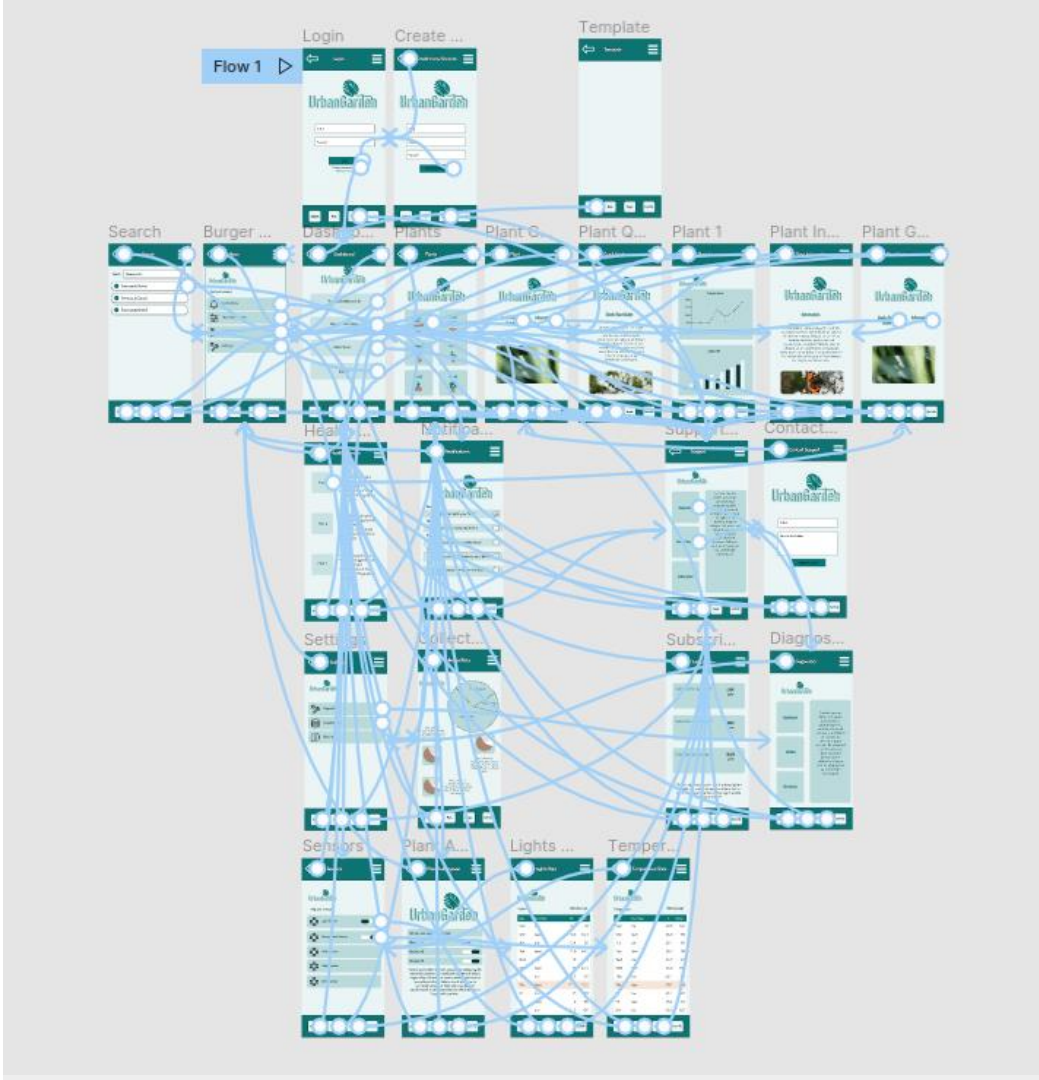
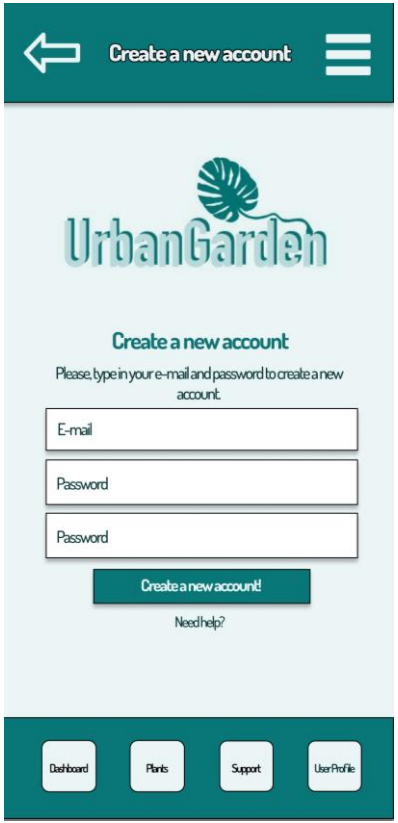


High-fidelity prototype

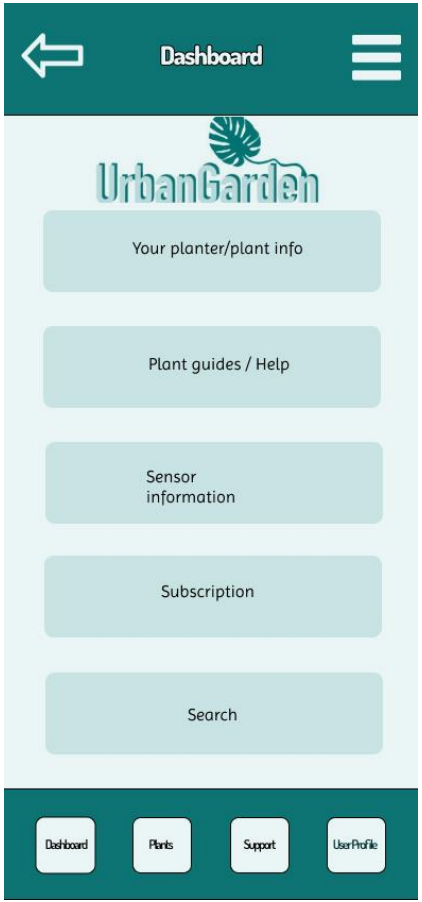
[UrbanFarming Prototype – Figma]

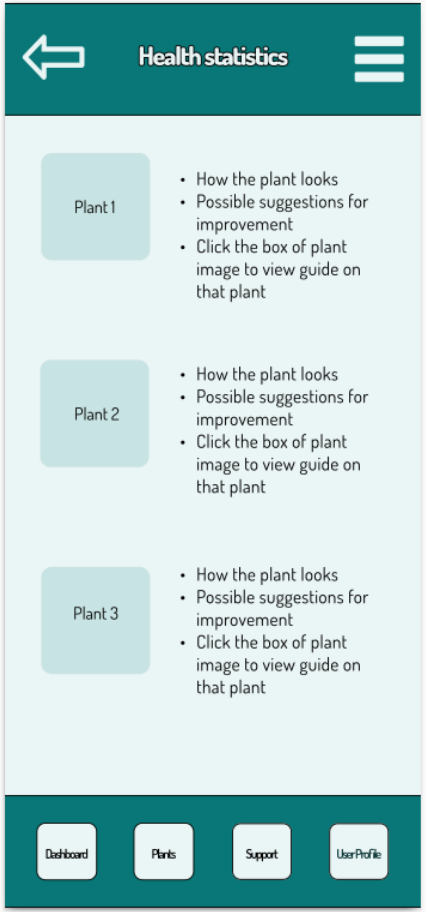


Prototype Main pages



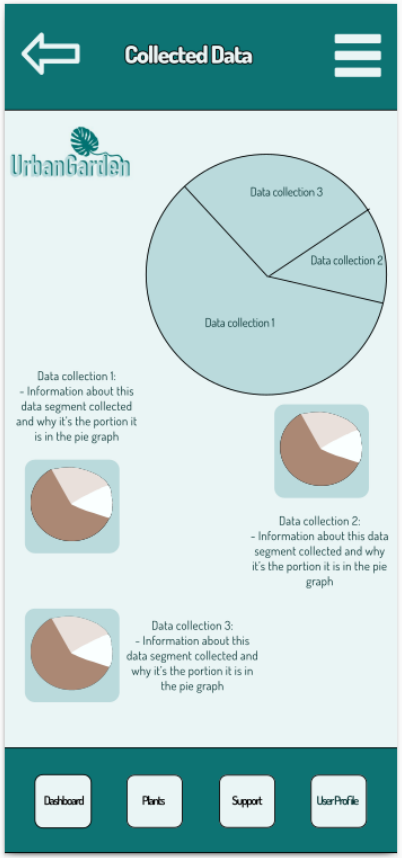
Prototype Plant pages

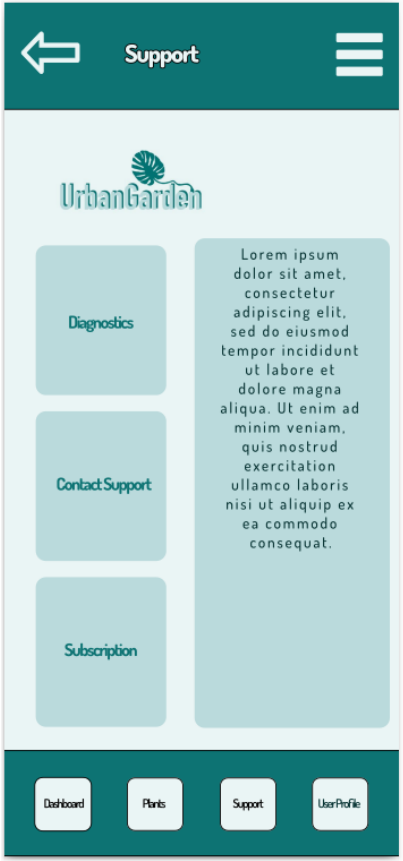


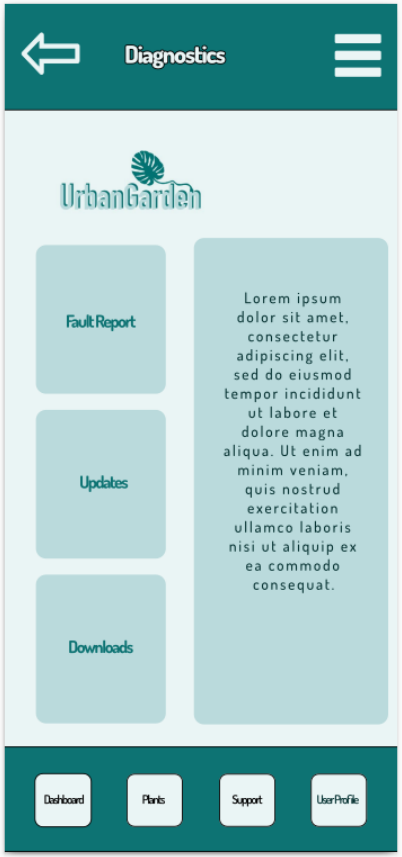


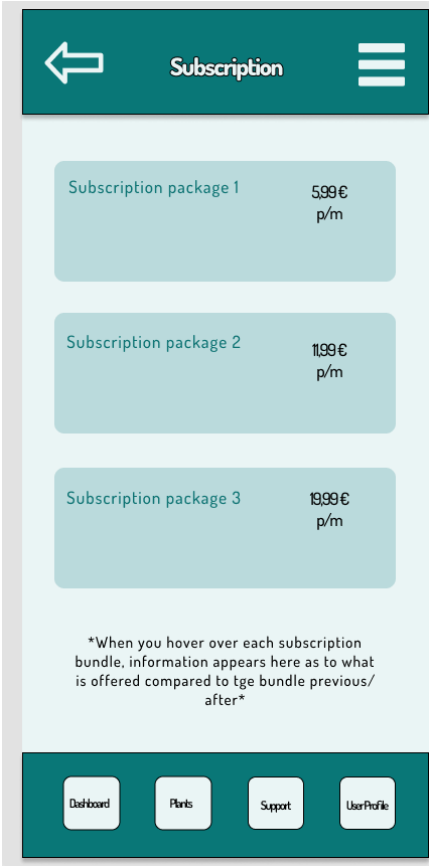
Prototype Plant pages

Prototype Support pages

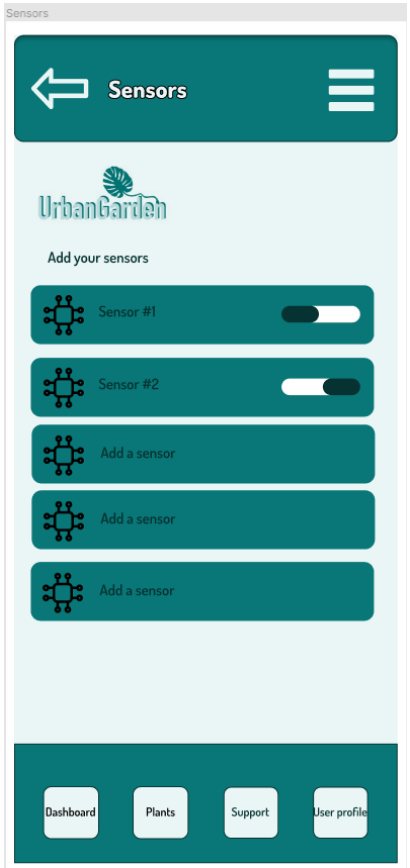


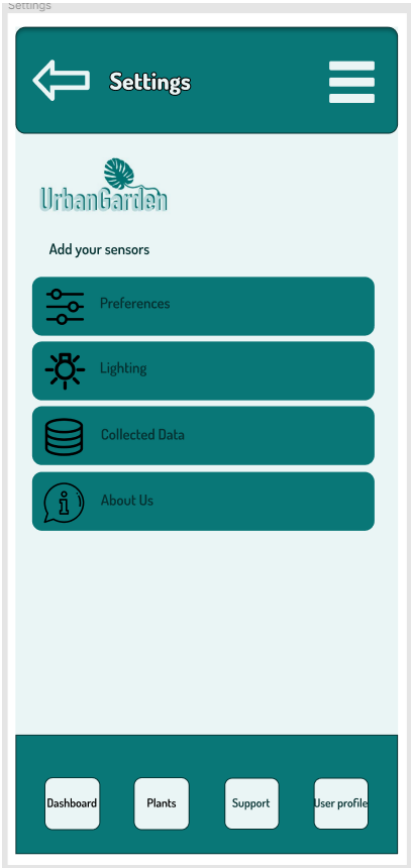




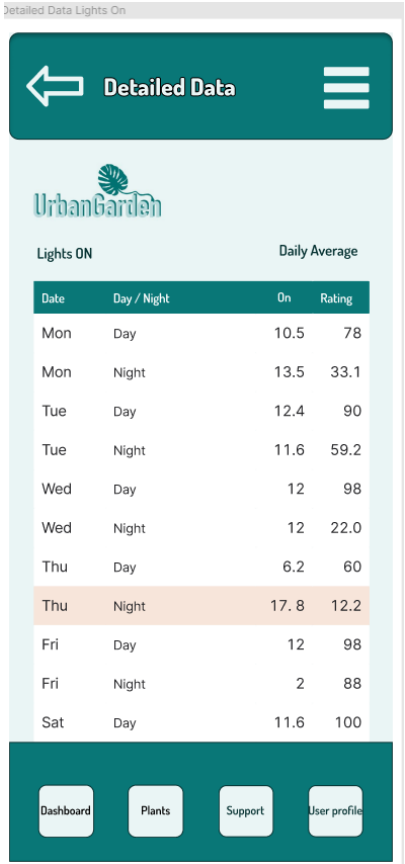


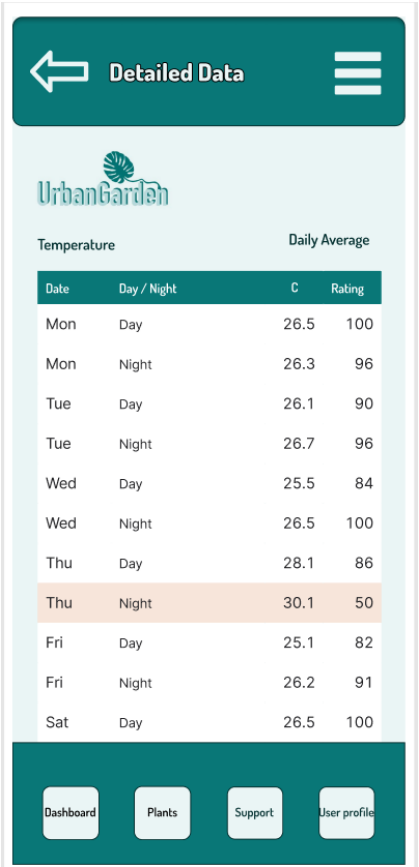
Prototype Sensors, General Settings





Prototype Statistics



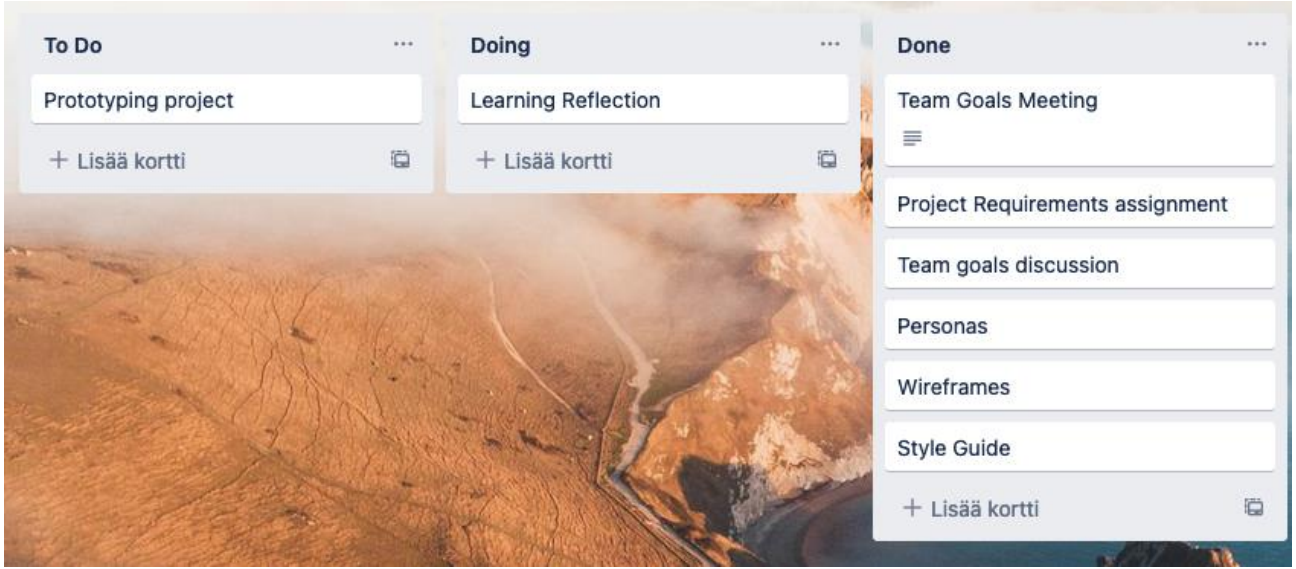


Project Management

Trello

Trello screen shot

1



Trello screen shot

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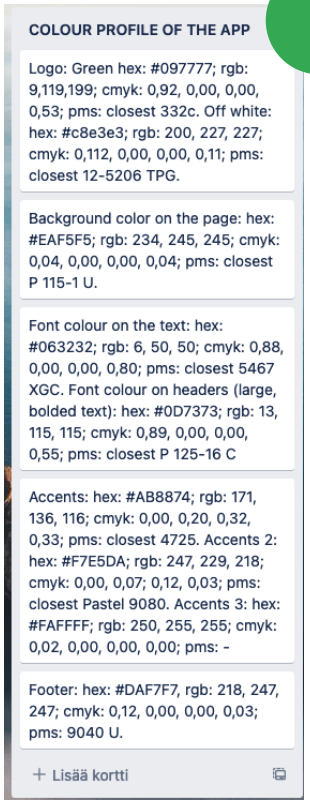

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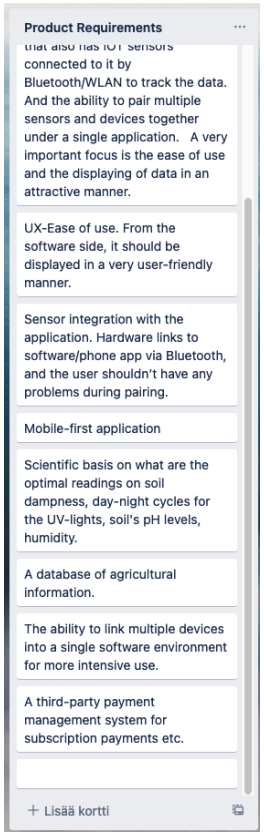

3

Going forward

- Takeaways
- Next steps

Takeaways

Impact:

Overall this project had been achieved on-time and well executed.

Our team members had vastly different schedules, and timing our regular meetings was the trickiest part.

What we have learned:

For those of us who had prior UI/UX experience, there was still new skills learned.

Figma was new for almost all of our team, and using it throughout our project, has lead to us having learned a new skill, moving forward.

Next steps

1

We would do the finishing touches on the visual side of the application, since there's still some things we didn't get to perfect quite like we'd have liked to.

2

We would streamline the application's flow rate to get rid of unnecessary pages, texts or links. There was still some clutter left on the pages.

3

We'd like to add overall functionality. There's still things like the plant grow guide and its integration with automation that'd be an interesting challenge both UI and logic –wise.

Let’s connect!

For those who are interested to connect with us, please don’t hesitate to seek our information via Laurea University of Applied Sciences email service.

Reference and Credit

Google