

Plant project

Human Computer Interaction
A2 – Refinement and Project Focus



Group informations

Group name: Giancono

Group members:

Luca Scibetta, s303976

Riccardo Lucifora, s304813

Pietro Gancitano, s303880

Kevin Cardinale, s305035

Domain

We started by choosing the theme of plants, plant-caring and people who take care of plants. Our first interviews were made of generic questions about plants in order to understand how and why the users came to have plants, but also what they like in plants and how they take care of it.

We noticed that all the interviewed feel deeply emotionally connected to their plants. Moreover, most of them have shown to have chosen their plants with an aesthetic mindset, they like the colors of plants and the life they can perceive from them. Most problem they faced came from difficulties in taking care of plants.

We, then, chose to focus our attention on the most widespread problems. For the next interviews we decided to start by putting the interviewed at ease with some generic questions and then start with specific questions about the aforementioned problems. We focused separately on the two problems and then, for concluding the interviews, we once again passed to some generic questions, this time aiming to try to evaluate the experiences of the interviewed. We included also a question to understand how a user may choose to buy new plants hoping that something interesting may come out of it.

Who did we choose?

Interviews:

Filippo

Contextual inquiry:

Vanessa

Both of them agreed to make us use their recordings and photos. The interviews were performed in Italian, as we all could speak and understand it. We will, when necessary, show them in Italian to give you the "raw" content, and then translate it to English. Questions were written and decided together, even if some modifications were made along the way to capture different angles or drop them altogether when we were content with what we gathered.

The reasoning behind our choices will be given after, along with a brief descriptions of the interviewee.

Interview #1 — Filippo

Our questions:

Do you have plants at home?

Do you think they have an impact on your house aesthetic?

How do you take care of them? Do you like it?

How do you decide how much water to give them?

Which kind of information do you have on the right quantity to give them?

Has plant infestation ever occurred to you?

How do you solve your problem? Was it effective?

Do you know other harmful insects other than cochineal?

How would you feel about having more information about this kind of issue?

Have you ever repotted a plant?

How do you decide when a plant need to be repotted?

When was the last time you did it? Can you tell me what you did and how it went?

How do you decide which kind of soil your plants need? Do you use specific ones?

How do you decide which vase to use for your plants?

How would you feel about having access to more detailed information?

How do you look up for relevant informations?

How do you decide which plant are you going to buy next?

How satisfied are you with your plants in a scale from 0 to 5?

How does the effort you put into taking care of your plants compare with what you expected when you bought them?

Why did some plants die?

Would you like to have more precise informations about watering plants?

Why him & interesting notes

Filippo is a student at polytechnic of Turin and a friend of friend. He loves his plants and taking care of them. He made us aware of both known and previously unknown issues. We were able to inspect problems of insect infestations and we also talked about repotting operations, like the selection of an appropriate pot. He also talked to us about how he behaved during critical phases of plants growth. The interview took place on the 25th of October at the polytechnic of Turin, the questions were carried out by Luca, instead photos, recording and notes were handled by Kevin.

Relevant quotes:

"Se ci sono piante che richiedono specifici tipi di vaso sarebbe lecito informarsi"

It would be good to discover if some plant needs specific type of vases

Our comment:

Common users often know they need specific informations, but **they don't know where to find them.**

"Prendo quello che trovo al supermercato"

(Talking about specific types of soil needed by plants) I take whatever I found at supermarket.

Our comment:

Convenience is one of the main need for users, they go for what is easy to find. Although loving their plants they probably do not want to **struggle** for their plants.

Wrapping up:

He is a standard user, he has a good level of experience and exploits this to increase the wellness of his plants. He wants to find information he can trust **effortlessly**.

Filippo's photo #1

Photo of Filippo and
Luca taken during the
interview



Our questions:

Do you like being in contact with nature?

What do you think about plants?

How do you know when to give water to plants?

How do you know which vase to use?

Have you ever dealt with insects that were dangerous for your plants well-being?

What can you tell us on how you behaved?

Have you ever encountered also plant fungi?

How do you solve your problem?

You mentioned repotting. When do you do it?

Which kind of soil did you use to do it?

Can you explain to us how to do repotting?

Which are the risks of it?

How do you decide which plant are you going to buy next?

How much effort do you put in taking care of plants comparing to the expectation you have when you bought them?

Interview #2

Contextual inquiry with: Vanessa

Why her & interesting notes

Our contextual inquiry was done with Vanessa, a colleague of a friend, that is very passionate about her plants and was available to teach us about how to know when to irrigate and how to repot during the interview. She also showed us her favorite plants and where she kept them. The interview was conducted on the 27th October in her apartment by Pietro and Riccardo, Pietro was asking the questions and Riccardo was recording, taking notes and photos. We started off with some general questions and then moved on with specific questions of things we wanted to examine closely after our first interviews.

Relevant quotes:

"Una pianta che ha bisogno d'acqua lo fa notare rinsecchendosi, una cosa che può aiutare è infilare il dito nella terra"

A plant in need of water can show it drying, and also putting your finger in the dirt can help

Our comment:

She is an immediate user, and she uses her **experience** and some **empirical methods** to take care of her plants. She could be a **useful companion** to less experienced users such as the ones we interviewed for the last assignment

Why her & interesting notes

"Ho scoperto alcune cose tramite internet, ma la maggior parte chiedendo a persone esperte nel settore"

I gained my knowledge on the internet but mostly speaking with experts in this field.

Our comment:

This means that even users like her prefer **speaking with someone** rather than having to fend for themselves on the internet, where information can be confusing, contradictory or even inaccurate

"Non sapevo quanto fosse delicata una pianta rispetto all'esposizione solare e soprattutto le malattie che la potessero affliggere"

I didn't know how solar rays can affect some plants and how many illnesses they could get

Our comment:

This remark, as we said earlier, that a lot of users **face challenges they weren't prepared for** when they bought their plants.

Wrapping up:

This inquiry helped us obtain more data on user needs and it also gave us actual knowledge about the ability of a common user to **perform some procedures** such as repotting and infestation handling. We also took a look at her problem solving skills, related to the information she could fetch

Vanessa's photo #1

Photo of Vanessa and
Pietro taken during
contextual inquiry



Vanessa's photo #2

Photo of Vanessa with
her plants taken after
the interview



User needs brainstorming and deep needs

After all our interviews we brainstormed together to consider which user needs we obtained during this process, in the end we come up with a list.

- **Users need a way to recognize the type of the plant**
 - All the interviews of the common users indicated this need, and it was confirmed by the expert user that one of the most important things is KNOWING the plant and its needs
- **Users need to be able to know plants needs (irrigation, exposure, etc...)**
 - Derived from the interviews of Sofia and Luisa
- **Users need a way to give and receive advice from other people**
 - Every user seems to need a way to obtain information that is easy and with reliable feedback
- **Users need a way to know how and when to do tasks like repotting, irrigating and using fertilizer**
 - Extrapolated from common users interviews
- **Users need a way to recognize problems damaging a plant**
 - Derived from interviews on non-experts
- **Users need a way to discover informations on financing in the field of agriculture**
 - This need was indicated by the extreme user Antonio
- **Users need a way to get advice on buying plants they might like**
 - Derived from Sofia's interview
- **User need to be able to assert if position and exposure of a plant are suitable for its growth**
 - Both the expert and the extreme user consider the exposure of the plant of extreme importance

We used
Google
Jamboard

Users need
a way to...



Deep needs solutions

From all the needs we brainstormed we decided to combine the ones that are correlated and to focus on this three deep user needs:

- 1) Users need a way to recognize a plant with its description and main needs.
- 2) Users need to be able to understand if something is damaging a plant.
- 3) Users need a way to give and receive advices from/to other users.

Deep needs solutions

For each of the deep needs we brainstormed a list of solutions and choose the ones that convinced us all and were more coherent with our domain

- 1) The system will manage to recognize the plant (through a photo) and then show the informations about it to the users, these informations will include: irrigation (how much, how often), recommended soil and pot material, use of fertilizers, correct exposure to sunlight and common problems. The system should also use a similiarity algorithm to give a **list of possible answers** relative to the plant species so that if the exact recognition is wrong the user can find useful informations, with an **explanation** and a **brief overview** of the plant.
- 2) The system will **recognize patterns** and characteristics common to plant having some disease or problem (infestation, fungus, sunburns, etc...) and give to the user information on how to help the plant.
- 3) The system will feature a **forum** and a **feedback system** in which each user can upload advices, opinions, comments. A user will be able to open a thread to ask questions or answer to others' quetsions. We may consider to implement a live chat for best user interaction.

Project name and value proposition

After two rounds of voting, we opted for **Plant Hug**, as it has a nice balance between recognizability, uniqueness and storytelling.

For the one-line value proposition the first one was immediately loved by every member of the group:

"Knowing is caring"

Inspired by the english saying "Sharing is caring", this line is recognizable and it combines the two purposes of the application, **knowing** more about plants and **taking care** of them.

Project name and value proposition

The process to decide our project name consisted of a brainstorming session, followed up by a voting session

Our propositions:

- **Phyto**

This is the "elegant" one. It's just ancient Greek for "plant".

- **Plant Hug**

This is the "emotional" one, as it aims to put focus on the actual act of taking care of a living being.

- **Plant Lovers**

This is the "catchy" one, as it's what you would likely expect, without too much fireworks. Easy recognizability and interpretability are its strengths.

- **BAMBOOzled**

This is the "fun" one, as it's actually a pun. "Bamboozled" is an English term for "confused, surprised" and it happens to have the word "bamboo" in it. It may not be the most immediate one.

Plant Hug

Knowing is caring

