

Plant project

Human Computer Interaction

A1 - Interviews



Group informations

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Group members:

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Who we are and why plants

We are four students of Computer Engineering at Politecnico di Torino and a group of friends that have already teamed up together in the past, hence we know the benefits in our exchanges and different approaches to problem solving. Given that, we chose to work together once again on this project, confident of what we can do.

When choosing the theme for our project, we thought about medicine, psychology and then nature. We decided to pursue the path of plant care, since animal care is usually more covered. In fact, looking at apps and web sites we noticed that those helping for taking care of plants are unusual. Accordingly, we decided to put some effort into something that may help people with their gardening.

After choosing the theme, we were able to start with the interviews. Since there are many people having plants at home, it was easy to find possible respondents.

The first two interviews concern two normal users that use plants either for aesthetics or for cooking, while for the others we talked to an expert user who worked in the field and an extreme user which gave us some insight into outdoor cultivation thanks to its studies

Who did we choose?

Normal users:

Luisa

Sofia

Domain Expert: Vincenzo

Extreme user: Antonio

They all agreed to make us use their recordings and photos. Their artifacts will be added at a later time. All 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.

Our questions:

Have you ever had plants? Which ones, how many, and why?

How often do you use your plants for cooking in a week?

What do you like about succulents?

How much time do you devote to their care in a week/month?

What are some upsides and downsides in owning plants according to you?

What would have you liked to know before owning your first plant?

How emotionally affected would you be if a plant died?

Do you like the idea of giving a plant as a present to someone?

What's your opinion on fake plants?

Which colors do you think of when speaking about plants?

How good do you think your knowledge of plants is from 0 (newbie) to 5 (expert)?

What are 3 things you like the most about owning plants?

What are the 3 major struggles you encountered in taking care of a plant?

Have you ever used auxiliary devices to take care of plants?

What is your opinion on informative material you can find online about taking care of a plant?

What would you advise to a newbie?

Interview #1 – Sofia

Why her & interesting notes

Sofia is a student of "Processi Territoriali" at the University of Bologna, she was in Torino for a visit to one of our friends, while speaking about our courses she told us before the interview that she was interested in plants and would be happy to participate in it so we choose her as a normal user. The interview was conducted the 10 of October in our friend's apartment by Pietro and Kevin, Pietro was asking the questions and Kevin was recording and taking notes.

We started off with some simple general questions about which type of plants she owns or owned and how much she cared for them, after obtaining the knowledge of which type of plants she owned (in this case Succulents and Edible Plants) we asked questions about why she liked these types of plants and how often she used edible plants for her diet, after that we asked about troubles she had with her plants and other general questions that gave us informations about the "vision" of a normal user when talking about our domain of interest (for example, the 3 colors that makes her think of plants, if she would like them as a gift or gift them to someone, if she liked fake plants). We concluded the interview by asking if she had used applications or devices for helping her with taking care of the plants and her advises for novice plant owners.

Some interesting quotes in this interview for our needfinding are:

- "Se non sei esperto a volte è difficile capire che cosa hanno e anche se riesci a volte non puoi fare molto per curarle.."
"If you re not an expert then sometimes it's difficult to understand what is going on with them and even if you do sometimes there is nothing you can do to help them" by that we can see that there is the need to make it easier for non-experts to find what is wrong with their plants.
- "..le applicazioni le vedo molto dispersive.."
"for me applications are dispersive" meaning that even though for some types of plants and problems she decided to try out some applications she did not obtain the informations she wanted and ended up asking to someone expert in some other ways.

Conclusions:

We need to give non-dispersive informations from reliable sources, making easy finding the knowledge that non-expert users need.

Our questions:

Have you ever had plants?

What made you interested in them?

How many times a week do you use your plants for cooking?

What do you like about indoor plants?

Where do you keep them?

How much time a week/month do you devote to their care?

What are (some) pros and cons of owning plants?

How emotionally affected would you be if a plant of yours happened to die?

To which kind of person would you give a plant as a present?

What's your opinion about fake plants?

Which colors do you think of when speaking about plants?

How good do you think your knowledge of plants is from 0 (newbie) to 5 (expert)?

What do you think are the 3 major struggles in taking care of a plant?

Which are the most purchased plants in your experience?

Have you ever used auxiliary devices to take care of plants?

What is your opinion on informative material you can find online about taking care of a plant?

How can an application help a newbie?

Interview #2 – Vincenzo

Why him & interesting notes

Vincenzo studies botany at the University of Rome. Being his father a florist, as a child he grew up in an environment full of plants and developed a passion for them. This passion initially start while working alongside with him, selling mainly flowers and bouquets as gifts (roses and orchids mainly) and later undertaking studies on the subject.

His studies and his past make him believe that he is an almost expert, rating himself with a 4.5 out of 5 on a self-assessment scale, as he claims that he is quite experienced but at the same time never stops learning.

Focusing his study on plants and considering his passion for them, we ask Vincenzo expert questions.

He has obviously been and still is an owner of many plants that tend to be small, specifically houseplants, kitchen plants and small cacti. These plants are mostly kept in the garden, some on the balcony and others in the house. He is not the only one who takes care of them, in fact his parents give him a hand when he is away from home for long periods. Each category of plants he owns is different, so it has to be treated in many ways. Although he tends to see plants in a more cynical way now, if any were to die, especially if it is a gift, he would be sad.

Concerning on the aesthetic side, the most characteristic colours of a plant are yellow, green and white.

When he is away from home for obvious reasons he has no way to take care of them, but when he does have them available he does so for about 2-3 hours a week. Vincenzo also lets us know that in addition to taking care of them, he uses kitchen plants in many of his recipes, in fact for him this is one of the great advantages of always having plants on hand.

It also emerged from the interview that Vincenzo also owns house plants for a specific reason, i.e. for ornamental purposes in his home, as it gives his living environment colours that would not be there without them. On the other hand, he states that it is on average challenging to take care of them as insects (aphids and mealybugs) are very common, which could lead to an infestation. another problem is definitely over-watering and finally wrong exposure to the sun.

In Vincenzo's opinion, a plant is not a suitable gift for everyone, as the person receiving it as a gift may not grasp the real level of importance Vincenzo gives it. In this regard, Vincenzo also mentions what might actually be the important factors behind the adoption of a plant, such as especially the ecological aspect and the concept itself of caring for a living being. Vincenzo also points out that fake plants are not a good replacement for their real counterparts, as they convey sadness.

Although an expert in the trade, Vincenzo has never used any auxiliary devices related to plant growth other than a few books at a younger age. Having learnt through experience, he is able to manage everything (such as adjusting fertiliser and using other products) simply with props.

In this regard, he feels that the information found on the net can be misleading and often not very technical, and that it really does not help much, or what is worse, conflicting information. On the other hand, he believes that applications or tools designed specifically for the correct growth of a plant can certainly be of help, if of course supported by data and information that is actually useful, such as soil moisture, soil type, sun exposure and pH.

Our questions:

Have you ever had plants?

Why those and not others?

How often do you use your plants for cooking from 0 (hardly ever) to 5 (everyday)?

In which dishes do you use them?

How does your diet benefit from using them?

What is a downside instead?

How much time do you devote to their care?

How much would you say they impact your daily routine?

Would you want to take a different amount of time to care for them?

Why is that you don't have how much time you wanted?

How difficult are the plants to take care of?

Did a plant ever die? If yes, how did that make you feel?

Who would you give a plant as a present to?

What's your opinion on fake plants?

What do you think about their aesthetic?

Where do you keep your plants?

How do you know where to keep them?

Interview #3 – Luisa

Why her & interesting notes

Luisa works at a bakery in Ragusa, and she's a food enthusiast. We could reach her thanks to her daughter, a friend of us. Specifically, we chose her because she uses plants mostly for cooking rather than aesthetics. The semi-structured interview was conducted using a video chat (WhatsApp) because of the distance. The interviewer was Riccardo, while Luca was taking notes about the answers.

We started off with some simple general questions about which type of plants she owns or owned and how much she cared for them. As implied before, we put our focus on aromatic plants and their use in her (and her family's) diet. We then asked her satisfaction with what she does now and how.

Some interesting quotes in this interview for our needfinding are:

- "Mi è dispiaciuto quando una pianta è morta (rosmarino) ma provo grande soddisfazione ogni volta che mangio qualcosa di buono cucinata col mio peperoncino"

"I got sad when a plant died (rosemary) but I gain huge satisfaction every time I eat something delicious using my peppers": it's clear that there's an emotional response and a sense of achievement linked to plant care

- "Non mi piacciono le piante finte. Sono solo plastica, non mi piace il loro impatto estetico e non mi danno di niente, non ne vedo lo scopo"

"I don't like fake plants. They're plastic, they're not aesthetic nor they give me any positive vibes, I don't see their purpose" this statement resonates with what we already said

- "Dicono che alcune piante non dovrebbero stare con altre, ma sono solo detti, tramandati dai nonni, e non riesco a trovare niente di concreto al riguardo su internet. Vorrei che qualcuno mi dicesse chiaramente cosa fare e cosa non fare"

"They say some plants don't go along well with others, but that's just acquired knowledge from grandparents and you can't find anything about it on internet. I would like someone to speak to me clearly on what to do and what not to"

Our conclusions:

Users don't need cold numbers and encyclopedic notions, they need to have access to concrete, down-to-heart advices, maybe even from peers. They don't have the time nor the will to fill the gap between theory and practice

Our questions:

What do you study in our field of interest, and since when?

What kind of experience do you have in cultivation and plant care?

What do you think the 3 major errors made in taking care of a plant are?

What do you think are the 3 major struggles in taking care of a plant?

What do you think about using your plants for cooking?

What is your opinion on
informative material you can find online about taking care of a plant?

Have you ever had plants? Which ones, how many, and why?

What would have you liked to know before owning your first plant?

What's your opinion on fake plants?

Which colors do you think of when speaking about plants?

Interview #4 – Antonio

Why him & interesting notes

Antonio is studying Agricultural Science at University of Turin in master degree. We could reach him thanks to a friend of mine living in Gruglasco, which asked for help on a Telegram group on our account. The semi-structured interview was conducted using a video chat (WhatsApp) because of the distance. The interviewer was Riccardo, while Luca was taking notes about the answers.

We started off with some targeted questions, and he provided interesting insights on plants and technical issues in the agriculture field. Then, we ended with some simple general questions to obtain a well rounded interview.

Some interesting quotes in this interview for our needfinding are:

- "Pensare che il bio sia meglio del convenzionale è un errore. Spesso non funziona e non ci sono evidenze su una maggiore qualità" "La giusta dose di fertilizzante è importante" "Bisogna dare importanza all'agrosistema"

"You shouldn't take for granted that organic food is better. There's no evidence for that" "The right amount of fertilizing is crucial" "The agrosystem is often overlooked"

There are some specific needs that regards agriculture that may be interesting to cover

- "Poco reddito per gli agricoltori, serve più sostegno e valorizzazione del prodotto" "L'agricoltore medio non ha un livello di istruzione alto ed è ostile al cambiamento" "Non c'è ricambio generazionale, il lavoro c'è ma poche persone vogliono farlo"

"There's no money in farming. Farmers are not taken care of and valorized"

"Farmers don't often pursue higher levels of instructions, so they may be hostile to new techniques"

"Generational change is not there yet. There's job demand but young people don't want to engage in it"

- "Non penso che le persone dovrebbero usare in cucina le proprie piante, oltre a quelle aromatiche, si corrono rischi. I prodotti nei supermercati sono molto sicuri"

"I don't think people should use their plants in cooking other than aromatic ones. That's risky. In supermarkets products are safe" this differs from what others perceived

- "Non mi piacciono le piante finte, ma sono pratiche per chi vuole decorare casa senza dover star dietro alle piante e prendersene cura. Alcune sono molto realistiche"

"I don't like fake plants, but they're practical if you want to decorate your house, Without putting a lot of effort in it. Some can be pretty realistic" this also differs from what others said

Our conclusions:

As already said, there are some specific needs that may be interesting to cover and that no one brought up in this way. Also some perceptions may be less popular than anticipated

Recap: what we gathered and next steps

In summary we found out that for different type of users there are different needs, for normal users there is the need to gaining the knowledge of both the process of irrigation of the plant (when and how much) and the main diseases that can afflict the plant (fungi/insects are the most common).

Another thing we need to take in mind is that for non-experts information on the internet is a little dispersive and sometimes disinformation is spread through rumors that can be detrimental to the life of a plant.

The extreme user made us think of very different problems and needs, like the lack of funding for agriculturists and the average lack of education on the sector, he considers the use of fertilizers necessary for the correct growth of the plant as well as correct irrigation, respect of the right temperature range for each plant and respecting the agro-ecosystem. Again he thinks that information on the net can be misleading since not every source is reliable.

Our expert user confirmed that the needs of a generic user are the one described above, the more you are expert the less you will need the use of applications or devices, he gave us knowledge of the most bought plants and info about which problems his client had and asked help for, that are pretty coherent with what we extracted from interviewing normal users.

For normal users it would be more effective having non-dispersive information from reliable sources also for professionals with low knowledge eg. Farmers

In the end the main needs seem to be: identification of the plant and its characteristics (irrigation, range of temperature, soil and seasonality), identification of diseases that are afflicting a plant and information on how to fight them and correct use of fertilizers, in our next steps we will try to go deeper about this topics and how much they are known and needed for a non-expert user.