Proposal : THIS = THEN = THAT

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https://github.com/veropesant/cart360-2019

Project Presentation - Research questions

Question one:

The project is addressed to everyone really, because it is a subject that everyone has to think about. It could fit in many circumstances, but possibly in some sort of convention to raise awareness about climate change, or any exposition relating to environment. That could be the kind of project to go viral on social media, because it is a cute idea with a much greater hidden meaning. People like that on facebook. The only thing about social media is that it can rapidly become superficial and get lost in the millions of other videos.

The message that is meant to be delivered by this project has a great audience and therefore would be appropriate in a lot of circumstances. It is not specific to one country or one very precise subject. It is wide and that's why I brought up the idea of social media. Today, it is probably the fastest way to reach the most people. It is a platform to consider in a project like this.

My project is probably not going to occupy much space. My original idea requires only one plant, so the space required to exhibit my project would be pretty small. In the future, if my idea changes or expands, and the possibility of interacting with multiple plants becomes realistic, then I could feel the need for a bigger space to exhibit my work. For now however, it is a pretty small project and I can use it as an advantage to display it in many different relevant places, therefore possibly reaching more people, considering that it would be pretty simple to grab it and bring it anywhere really.

Question two:

My goal is to showcase the importance of plants in our lives. I want to use a plant as a representative of our planet for a bigger message, but also illustrate how people usually neglect their home plants. I want to show that plants are not

simply something you can let die; there's going to be consequences. Our climate is one of the biggest problems our society is facing right now and I believe we must sensitize people to the importance of it.

With my project, I hope to touch the viewer in a simple but effective way. That is, use a minimalistic approach with an everyday object, but add a hidden meaning that puts everything in perspective. I want to be able to make visible the plant-human interaction to try and bring a sense of proximity with nature and the user. We have a close relationship with nature and we need nature more than it needs us. We need to understand this relationship and that's what I'm trying to achieve through this project. I believe that by creating a "humanised" version of a plant, I and possibly reach a greater audience. It is common to attribute human characteristics to our animals to feel closer to them, and that's a little bit what I'll be trying to recreate. Create an interactive experience with a plant to spark a greater love and respect of nature in the viewer's mind. Since simply talking *about* the importance of nature doesn't seem to work, let's make the plant itself talk about it.

Question three:

My project is challenging in a simple way. It relies on people looking beyond the object in front of them. The idea is to guide their reflection in a particular instead of showing them directly. It is not a revolutionary project, but one that is going to make you stop and wonder for a while what is the true meaning behind what you are seeing at first sight. I'm not sure it is going to "help" the viewer per say, but it is definitely going to make them put themselves in perspective for a while. Question themselves and ask questions such as: What can I do to help?, How can I change the way I live for the best?, Where is our society going?, etc.

My project is challenging if the viewers are willing to put their lifestyle in perspective. An open mind is necessary for my project to reach its true potential. For others, it can simply be a fun way to interact with a plant, but when you truly spend a little time with it, you realise the plant is actually capable of communication and has something to say.

The goal is also to touch the user's emotions and challenge their beliefs. There is nothing more effective than human emotions to spark actions, in my opinion. If I'm able to create a semblance of relationship between plant and human, than a bond is created and some kind of taming. This creates a bit of attachment to the plant and then the user would go "Oh but I don't want her to die, she's so nice". That's my goal.

Question four:

I am trying to tell the world (myself included) that they need to make a move and change the way they live. It's hard to make considerable changes in the way we've been living for so long, I myself struggle to do so, but we reached a point where we have no choice. Our planet, our home, is dying and this slow death starts with the loss of our forests. People unconsciously burning down thousands of acres of forest for business means is incredibly horrifying. Without trees and plants, we simply cannot live and that's just scientific fact. With my project I hope to educate people about the importance of trees/plants, because that's definitely one part of the problem: The lack of awareness on the subject. Another problem comes from the people governing our countries, but that's a different matter.

I am also trying to reinforce the bond between humankind and nature. Most people seem to have a lack of pity when it comes to non-human species. Of course I'm not going to correct that in one school project, but I like to think I could at least help a bit. We have to understand that nature and humankind make one. If we listen, we can understand; and that applies to humankind as much as animals and plants. Plants were there long before us, they have priority.

In short, my goal is for people to understand the importance of our relationship with nature, wake up and take actions, because if nature perishes, we perish with it.

Three Similar Project

Lua the Smart Planter:

https://www.indiegogo.com/projects/lua-the-smart-planter-with-feelings#/

Lua the Smart Planter has a lot of similarities with my project when you first look at it, but in the end they're going to be pretty different. Lua is an interactive planter that helps you understand your plant's needs. Whenever your plant feels thirsty, of too hot, or needs more light, it's going to show it to you by displaying emotions on it's screen. The face is customisable, and there are many options for the color of the pot.

Lua has a total of 13 emotions, but 6 of them are essential: Thirsty, Sick, Vampire, Squint, Cold, Hot. Those are the vital emotions, but there's also a few random emotions. One of the random one is Grumpy, which would be triggered if it is expected to rain that day. However, since the project is still improving, this feature is not yet confirmed.

Lua works with a reservoir and different sensors. The reservoir helps reduce the frequency of watering while providing your plant with all the water it needs. It also allows to trigger some of the different emotions. For example, when Lua is Sick, it means the reservoir is full and there is too much water. After all, a plant can also die if it gets too much water. On the other hand, when the reservoir is empty, the emotion displayed is going to be the Thirsty one.

Lua's sensors are the following: Water-Level sensor, Light sensor, Movement sensor and Temperature sensor, all helping the user to stay up to date with their plant's needs.

(picture and information/quotes from linked website)

Botanicus Interacticus:

https://www.youtube.com/watch?v=EcRSKEIucjk

Botanicus Interacticus is a project developed by Disney Research Hub. I've always loved looking at their project because I can always imagine how, in classical Disney style, we could add a little magic to their technologies. Their ideas are always fun and creative. In this case the technology was created with the idea of designing expressive interactive, living or artificial plants, but also to explore the boundaries of interaction between computing and physical environment.

Their technology doesn't represent any threat to the plant, which is great, and is non-invasive and surprisingly simple. For it to work, they simply place a wire in the soil of the plant, which allows them to interact with the plant in many ways that go from simple touch to more complicated gestural interaction. They've been able, among others, to detect touch and grasp location and track the proximity between the user and the plant.

In the video, they show some examples of interactions made with the test plant. We can see on the screen a scan of the plant, lighting up at the exact place where

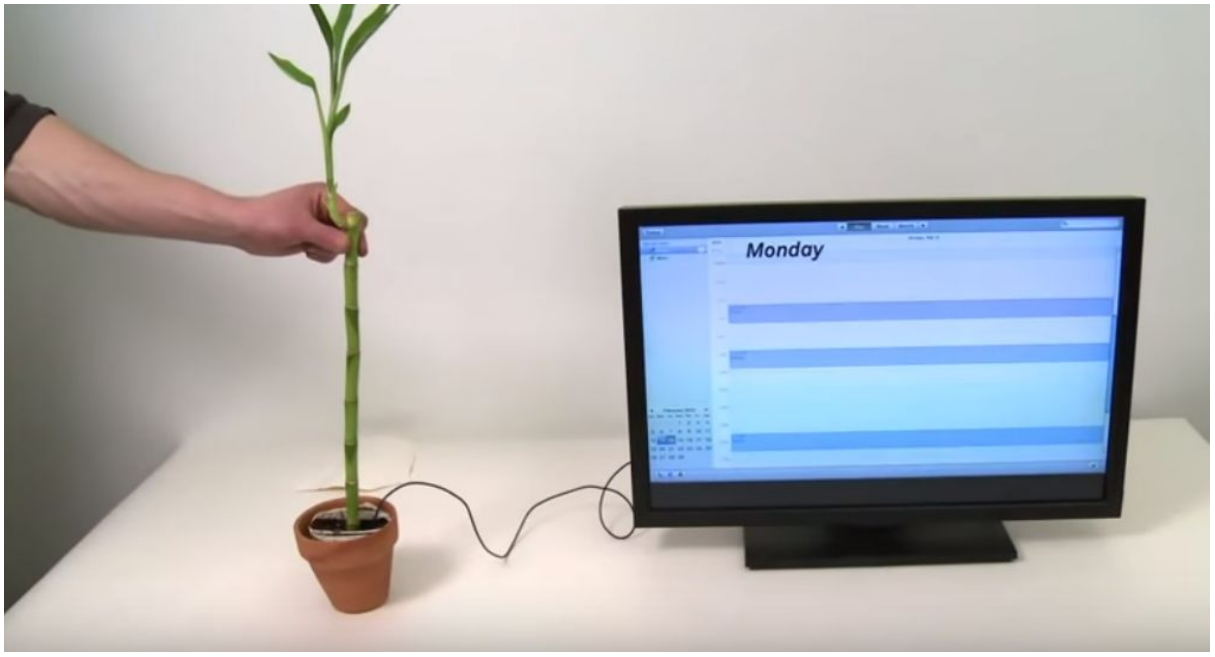
the user touched the plant in real life. One of my favorite example was the one with sound, where depending on the softness of the touch, sounds with different intensity were played. The sounds were soft when there was slight contact and more ‘chaotic’ noise was played when the contact was rough.

One interaction that was really impressive was the one made with bamboo. Each section of the bamboo branch represented a day of the week on a calendar, and you could switch between the different days with a simple touch of the branch.

The plant is treated as a electric circuit, which allows many interactions to be made, but which also means that depending on the sort of plant, the interactions will vary significantly.

Finally, they also created ‘artificial plants’ by using the patterns found in the different plants and reproducing them as electrical circuit, with resistors, wires, etc.

That is such an interesting way to make plants interactive and so surprisingly simple!



(picture and information/quotes from linked video)

Florence Project:

https://www.microsoft.com/en-us/research/project/project-florence/

The Florence project uses scientific analysis of the plant and its surroundings to create the representation of a Plant-Human interface in a artistic way. In this project, the plant is able to receive human input input, communicated to it through light. The plant is then able to answer back to the stimuli, resulting in a plant-human conversation. The goal of the project is to, quote, “enable people to converse with a plant by translating their text sentiment into a light frequency the plant can recognize and respond to” and therefore propose an idealisation of a future where plants and human could live in greater harmony.

To communicate with the plant, you need to type your message on the computer, connected the plant and used to monitor the plant’s ecosystem. Once you’ve typed in your message, the program translates it in stimuli to be communicated to the plant. Using different colors (red for positive and blue for negative) and based on the plant’s ability to respond to such variations, an answer is triggered and then generated, depending on the plant’s current “mood”. They can then print the previously generated answer and display it.

This project provides us with the capacity to have a conversation with a plant which means that a deeper understanding of plant’s behaviour can be achieved.

For this project to work, sensors of many types are used: soil moisture, air humidity, carbon monoxide, and air temperature. The data collected by these sensors is combined with the, quote, “Natural Language Processing of the human conversation”, to generate the plant’s conversational response. The different moods of the plant are based on common reactions of plants when exposed to certain environmental conditions and then compared with similar human sentiment such as thirst and tiredness.

(picture and information/quotes from linked website)

How is my project going to be different?

My project is going to resemble each of the previously mentioned projects in certain way, but overall be considerably different. While using some of the same concepts, my project is going to be set in a completely different scenario and with a completely different purpose. Most of the project presented are based solely on technological progress, while the Lua project is mainly a fun way to take care of your plant. My project is approached in a more critical way, to make a point about society and sensitize the public to the proximity we have with plants. The florence project is probably the closest to my idea in terms of meaning, but there is still a slight difference.

An inevitable resemblance is how I'm going to use sensors to interact with my plant. However, the information collected is not going to be used in the same way. For example, instead of simply displaying the plant's need like in Lua's

project, my plant is also going to trigger a reaction in an exterior component. For now, an idea would be to illustrate some people living around the plants, moving, and when the plant's life conditions get bad, the people around it slowly begin to regress, and eventually die, mimicking the plant's vital conditions. In a perfect world, my plant would also be able to send notification, containing a shocking message like: "Are you really going to let me die?" or something around that. In the context of an exposition, an interactive real time video could be displayed with the plant's cry for help.

The core difference between my projects and the others is how it is interpreted and the message it conveys. Its purpose is to shock and make the viewer think about greater problems, while putting themselves in perspective.

Storyboard