

# Design Decal Final Project

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# Brainstorming things that bug me:

- Classes I want are not offered some semesters
- Want to eat healthy but don't know where to begin
- Not knowing how the clothes I buy online will look on me
- Not knowing where to eat/hang out
- People going back on their word
- When I don't do the things I was suppose to do/learn
- When people want experience from you when you are looking for experience
- When I have to take classes I really don't want
- When my roommates take a long time in the bathroom
- Global warming
- End up waiting for a whole day for your package

# **My problem: Global warming, how to promote going green**

- Chose this problem out of all of them because I think it will have the biggest impact and greatest change. Also, it is one of my personal passions to help reduce the harm that we do to the environment.

# Assumptions that I jotted down

- People are busy with their everyday lives so they don't have the time to be thinking about a big issue like Global Warming.
- People feel distant from the problem.
- Not very informed about what contributes to Global Warming or what they could do to help reduce it.
- People want to help, but don't really know how to help.
- Feel discouraged as an individual when they try to make a change, because there are so many factors that contribute to damaging the environment.

# User Research: Interviews

Interviewed people: 3

Person1

- 1. When you think of Global Warming, what do you think of?**

Ice caps melting, polar bears getting displaced. Really, really warm weathers and sea levels rising.

- 2. Do you believe that Global Warming is a big issue? If yes, have you ever researched about Global Warming yourself to learn more about it? If not, why?**

Yes. Have not researched about it in depth, but just a little bit. The biggest contributors are the factories so I personally think that I can't help it, or do anything that will affect it alone.

- 3. What do you do as an individual to be green? If nothing, why?**

Recycle. While brushing teeth, I turn off the water. Think that small things can help.

- 4. Do you think it's within our grasps to help undo the environmental damages? If no, why?**

We can't really undo the environmental damages, but if we as a planet worked together, we can decrease the impacts. A single person can't, but if a person encourages other people to do good, then we can have an impact.

Person2

- 1. When you think of Global Warming, what do you think of?**

Eminent danger, and we need to do something to stop it. Need to take action.

- 2. Do you believe that Global Warming is a big issue? If yes, have you ever researched about Global Warming yourself to learn more about it? If not, why?**

I don't think it's a big issue right now, but maybe it will be in the future. Also have never researched about global warming because not interested in it personally.

- 3. What do you do as an individual to be green? If nothing, why?**

I don't think that I can do anything that can have an influence.

- 4. Do you think it's within our grasps to help undo the environmental damages? If no, why?**

If everyone gets together and does something then we can, but it's impossible for an individual to make a difference alone.

# Interview cont.

Person3

**1. When you think of Global Warming, what do you think of?**

Melting ice, hot water, change in the sea level. You see lakes shrink to nothing. Water shortage. There is so much waste and waste affects climate change. Air pollution. When I think of global warming I think of all the environmental problems. It also affects species, like polar bears.

**2. Do you believe that Global Warming is a big issue? If yes, have you ever researched about Global Warming yourself to learn more about it? If not, why?**

Yes, Global Warming is a BIG issue. One thing we have to prioritize. Global Warming is true. So many things are impacted because of Global Warming. Haven't really researched that much into it, but only researched about water conservation/resources since I have experienced water shortage personally. Also because I haven't seen any changes in MY lifestyle, I didn't really research about it. Only search about issues if it directly affects me.

**3. What do you do as an individual to be green? If nothing, why?**

Use insulated container for tea so that I don't have to keep using those compostable paper cups. I recycle, shorten my shower (5-7 mins). While brushing teeth, turn off the water faucet. Turn off the lights as I exit the building. Try not to throw away food. Only eat what you can. Also take public transportation.

**4. Do you think it's within our grasps to help undo the environmental damages? If no, why?**

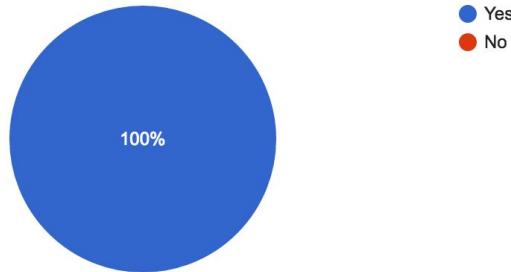
Yes, think of all the waste that we produce! If everyone showers less, produces less waste, etc. it will help contribute. Little change, if we all do it together will make a HUGE difference.

# Interview Conclusion:

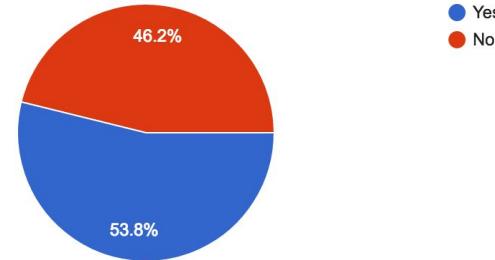
- Found out that people do think Global Warming is real, and think it's a big issue, but never really research about it to learn more so that they could help.
- Working together is the key to helping reduce the damages done to the environment
- People think that they somewhat contribute to the cause by doing small, everyday things like recycling, turning off lights/ faucets when not used, and etc.

# User Research: Survey Results

Do you think that Global Warming is a big issue? (13 responses)

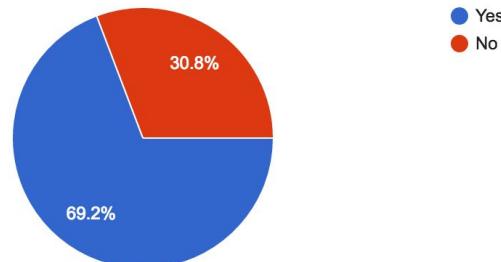


Do you feel like "Global Warming" seems like an issue that is too far away or too hard for you to contribute to alone?  
(13 responses)



- From the survey results, we can see that all the people that I surveyed believed that Global Warming was a big issue. From this we can conclude that it is an issue that many people care about, however more than half believed that they could not make a difference alone.

Do you feel like you contribute to the well being of the environment in your day-to-day life?  
(13 responses)



# Do you think that regular people (like yourself) can have a big impact on helping the environment?

(13 responses)

No. It is difficult to make an impact because you are just one individual. The most that individuals can do is try and convince other individuals (like friends and family) to hopefully contribute to your cause too. But, as an individual, our actions are almost menial. While we can choose to spread awareness and better ways to better the environment, we can do little without the help of others.

Yes, if everyone does their part, it adds up!

Not individually, but collectively-yes

yes because if everyone takes a small step, the effects will be big

Every person counts when it comes to amplified impact and strength in numbers

I think every little bit we do can make a huge difference because each person doing one thing will amount to a lot of change.

Yes.

Addressing environmental issues and helping out are group efforts. We may think we have no overall impact as an individual person out of billions, but if the masses all thought this then we would never be able to create change. Thus, we must stay confident that we each make individual impact.

Sometimes - I feel like there are many things everyone can do on a daily basis but it's also very disheartening when you're trying to do the easy little things (e.g. putting waste in the right bins, not littering, etc.) and seeing other people not put the slightest effort in.

yes,

I can only see small impacts being made by individuals, like using public transit or using eco-friendly cleaning products. But I think these do add up to bring tangible improvements.

No, because it's a public good, so it will be overused and polluted despite my personal effort.

I think if enough individuals make a change, we can together make a difference.

Many people believed that they could only make a difference as an individual only if many people contributed to the cause. This means that people are only willing to do it, if many people are also willing to do it. They need someone to encourage them or "convince" them to join the movement.

## Do you/did you donate money to organizations that promote going green?

(13 responses)

Yes

Yes

No, because I am poor. And, I do not know any legitimate organizations that promote going "green".

No, Don't know any organizations like that

not yet mostly because I don't have a job yet

No, I'm too poor

No because I generally donate to other causes that more generally deal with affecting people directly in a visible way.

Yes.

no.. maybe when I'm not a student living off my parents and currently in 20k debt LOL

no

No, I'm not the type to initiate unless I'm approached by someone / organization

No, first of all I am college student who can barely pay my own rent and second, I don't have enough information to make a judgement on the effectiveness of each organization that promote going green, what if my money is going somewhere where I don't want it.

yes.

- The purpose of this question was to understand why regular people that think Global Warming is important do not contribute to the cause by donating to organizations that help promote going green.
- From my survey we can see that the young population hesitate to donate money to organizations because they can't visibly see their contributions doing something, also because they are too "poor" to donate money.
- This was a strange and an interesting observation because although many students buy personal belongings without feeling like they wasted money, it seems like donating money to an organization makes them feel like they are just giving away money. They don't receive something physical in return (like buying clothes from the store).

# Conclusion from survey:

**Conclusion:** Many people thought that Global Warming is a big issue.

A little more than  $\frac{1}{2}$  believed that GW was an issue that was too far away/hard to contribute to.

**COLLECTIVE COLLABORATION** is important

**VISIBLY** seeing where their contributions go, and **GETTING** something in return is important.

# Synthesizing research: Survey + Interview

- People need some kind of encouragement to get them to help.
- It has to be something that is a part of their everyday lives.
- It needs to involve a huge groups of people contributing to the event.
- Will need to be something that is well worth the money and clearly helping better the environment.

**GOAL:** Want to make something that helps grassroot people contribute to the effort, while having fun and making it an everyday thing instead of a huge problem.

**Persona:** Grassroot people/regular people

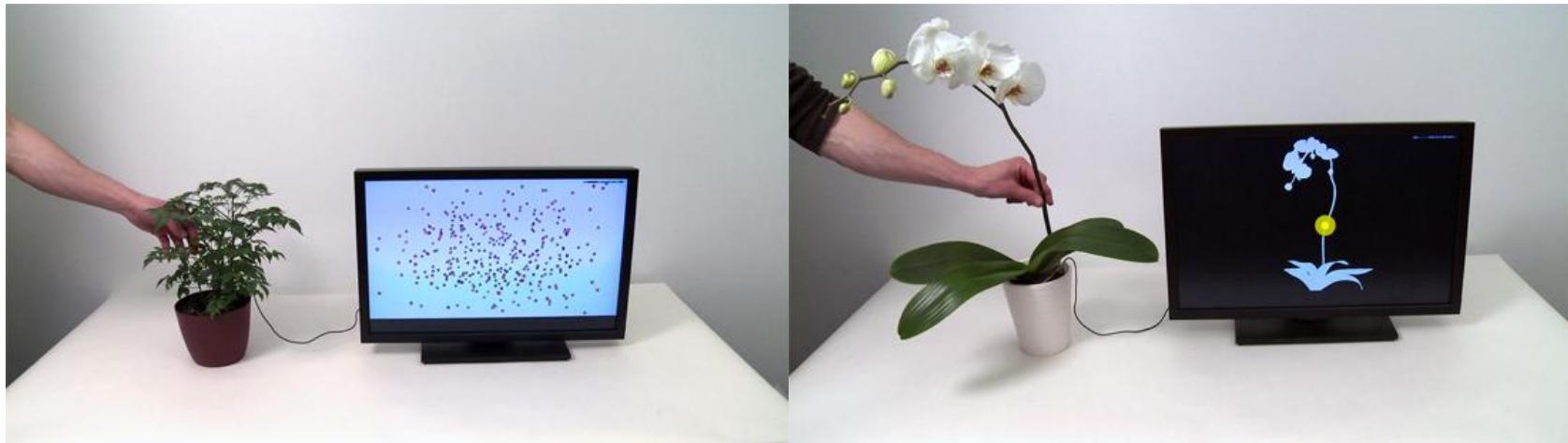
# Brainstorming:

- An App that shows the things people could do to reduce their carbon footprint
- An interactive plant app (encourage more people to have more potted plants at home)
- A garbage can that interacts with the users
- Redesigning the thermos to discourage the usage of plastic bottles
- Program that allows restaurants to give their food leftovers to homeless centers instead of throwing it out (reduces food waste)
- Encourage biking and keep track of how much they biked. They can get points for how much they biked and get rewards.

# What already exists on market:

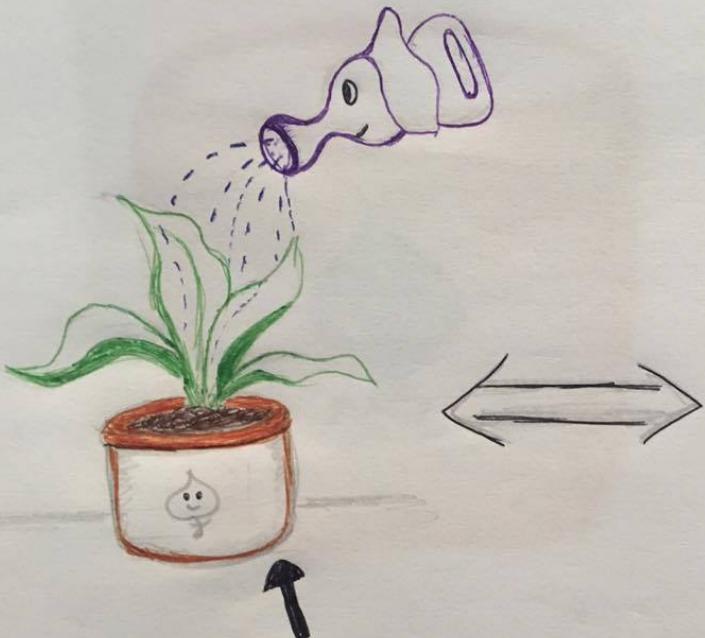
- "BOTANICUS INTERACTICUS": Interactive Plant Technology:

<https://www.youtube.com/watch?v=EcRSKElucjk>

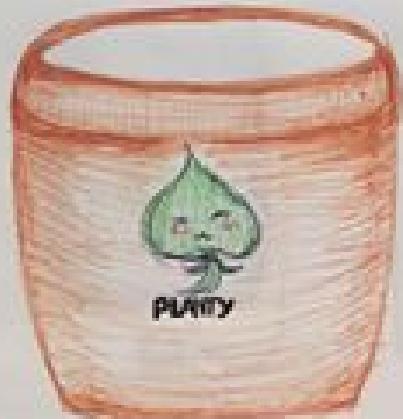
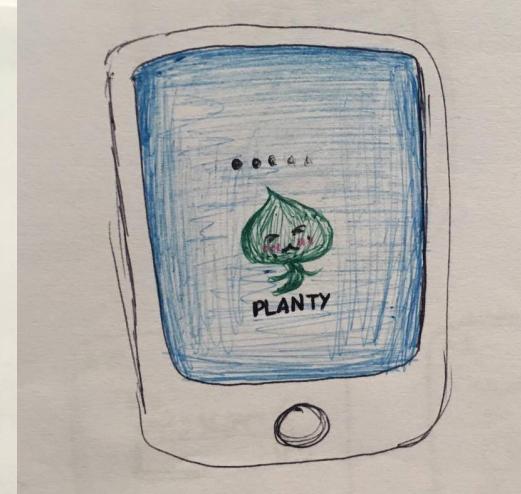
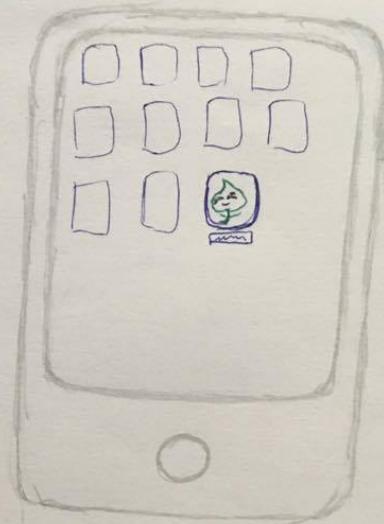


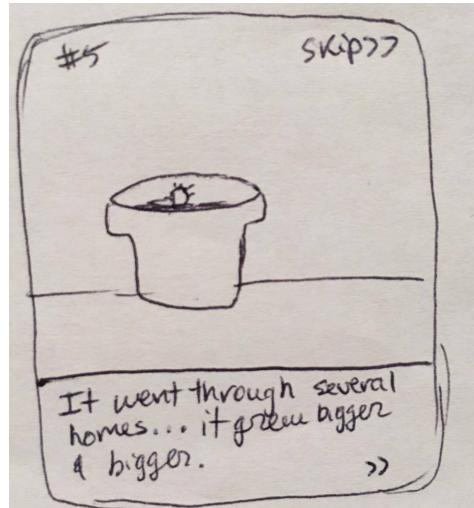
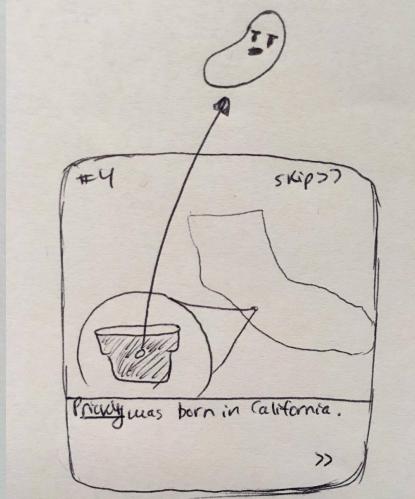
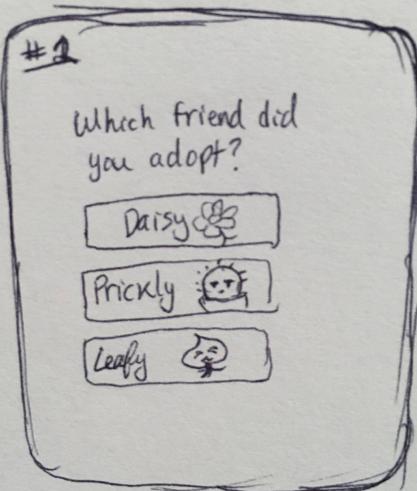
# Lo-fi prototype:

- An interactive potted plant, that when watered, senses the water and it will be communicating with you through your phone.
- When watered, it will be happy and give you gold coins.
- By playing the games , you can also earn silver coins .
- With the coins you can get cute supplies and decorations for the virtual plant.
- When it starts needing water, the plant in the application will get dehydrated and sad.



Will know that it got watered.





#9

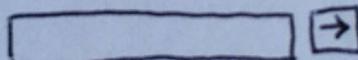
Rename Pricky?

Yes

No

#10

What would you  
like to rename him  
to?



itembox

happy

Hello!

PRICKLY



My story

MY PLANTS

Games

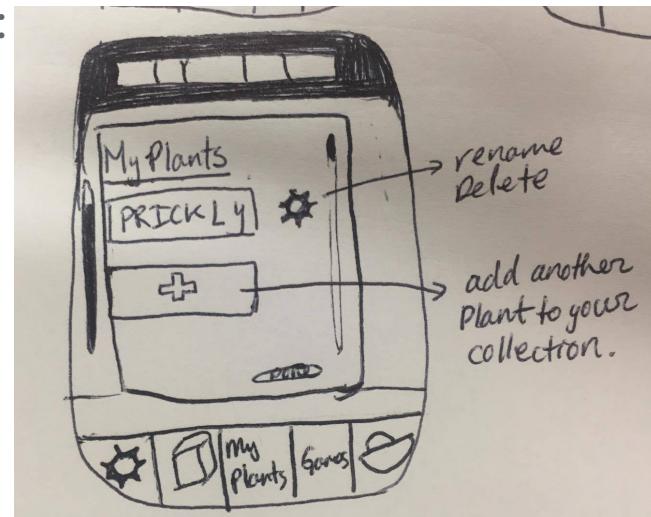
Shop

# The different states:



# The different tabs

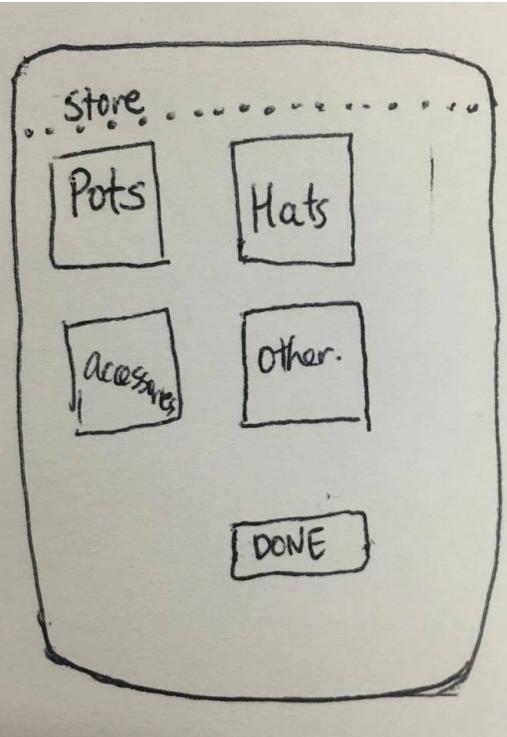
My Plants:



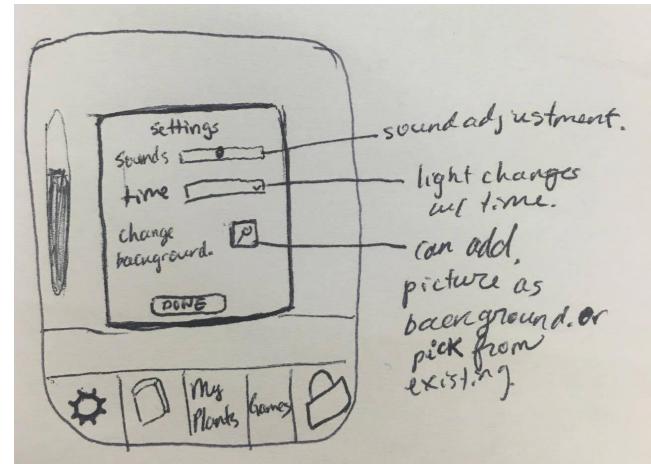
Games:



Shop:



Settings:



# User testing notes: lo-fi prototype

- Maybe have instructions on how to care for the plant.
- More interactions between user and plant (rubbing belly-> it could say “It tickles”)
- When the plant hasn’t been watered for a long time, make it so that the user is not able to interact with the plant because they need some kind of reward when they water the plant.
- Show how much coins the user has.

# Synthesis: what I learned from user testing

In order to make it more interactive, I added several modes:

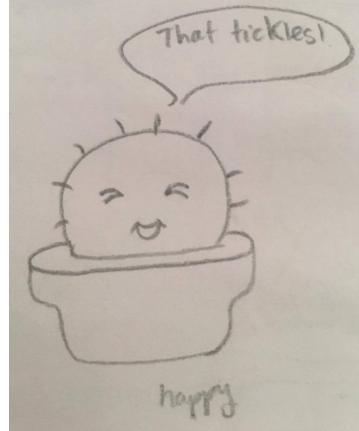
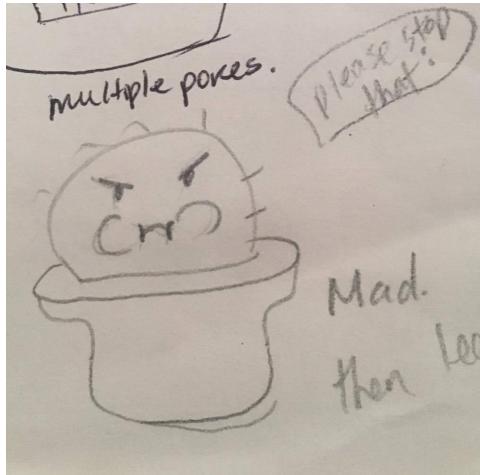
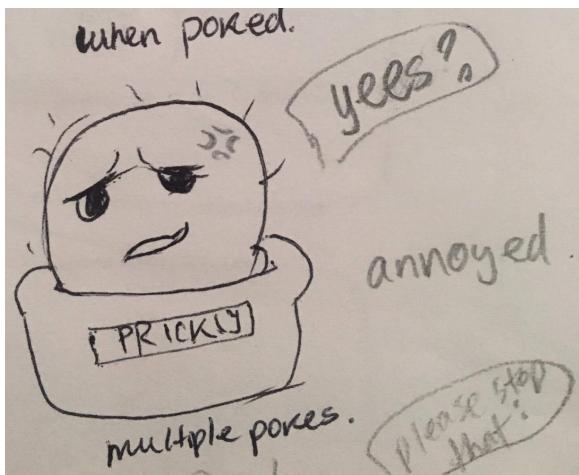
- sleeping (at night)/awake (in morning)
- when poked -> surprised/annoyed/mad then leaves if the user continues to bug it
- when rubbed -> will smile and in text bubble will say “It tickles”
- yawns when it gets close to sleeping time and slowly goes to sleep.

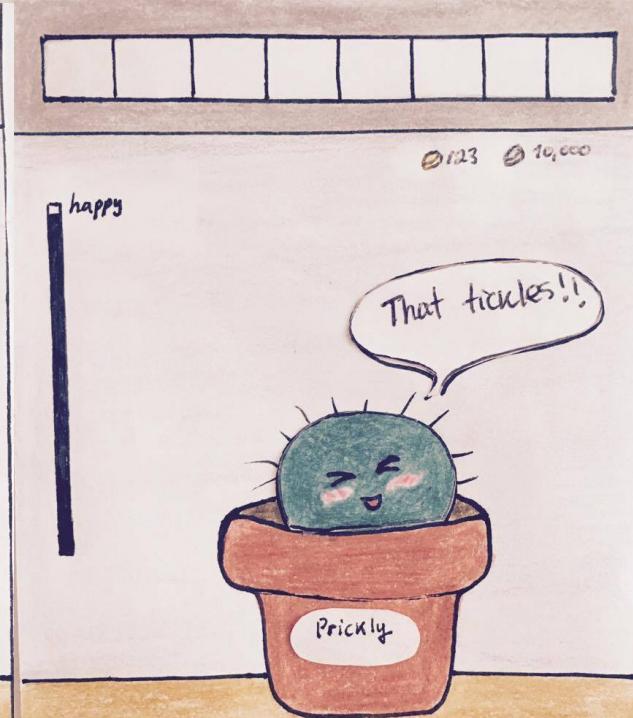
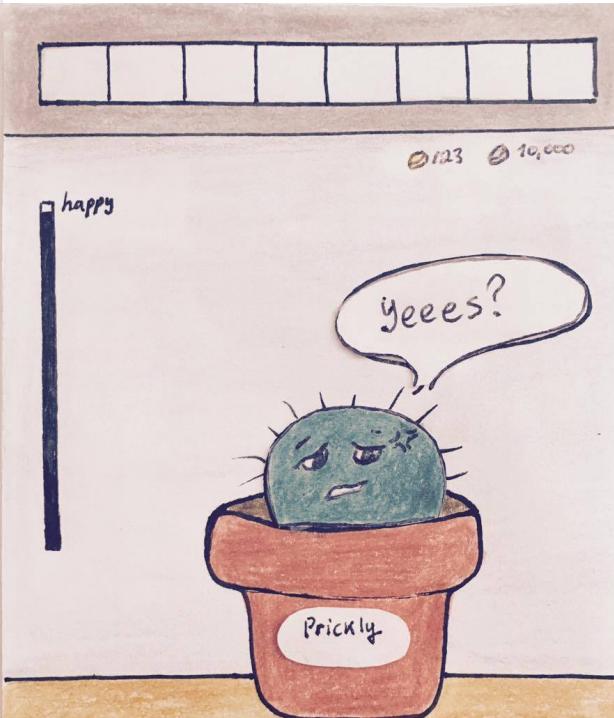
When happiness level is too low, stop the plant from responding to the user’s inputs, unless they water it.

When happiness level is empty, the plant will leave and not come back until they water it.

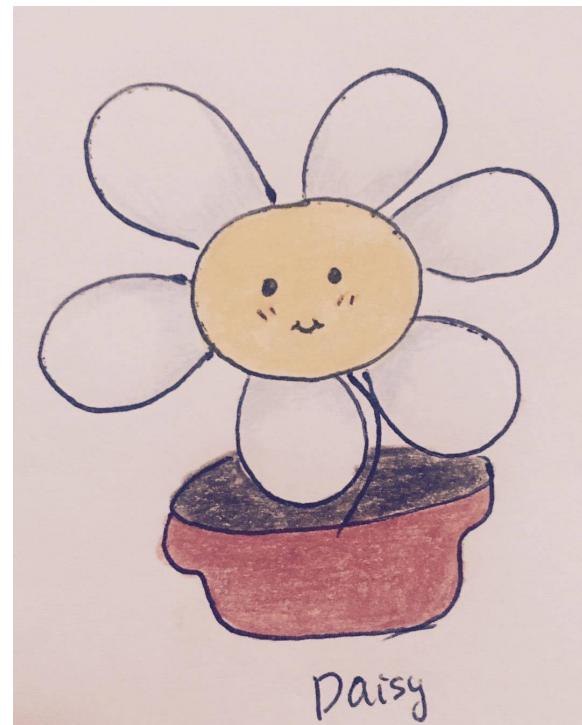
Add to the home screen how many coins the user has.

# Brainstorming ideas:





# The different plants:





Which friend did you adopt?

Daisy



Prickly



Leafy



SKIP >>>



Story of how prickly came to be  
...

>>>

SKIP >>

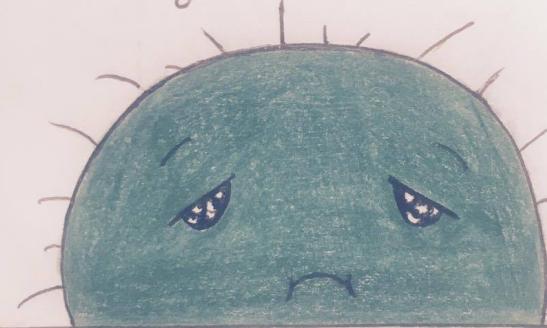


Prickly was born in  
California.

>>>

Welcome  
Home!

SKIP >>



Prickly wished for the day when  
it could be in a permanent home...

>>>

Skip>>



It went through several homes... and it grew bigger and bigger.

>>>

Skip>>



One day it finally got a notice that it was adopted! Prickly was so happy!!

>>>

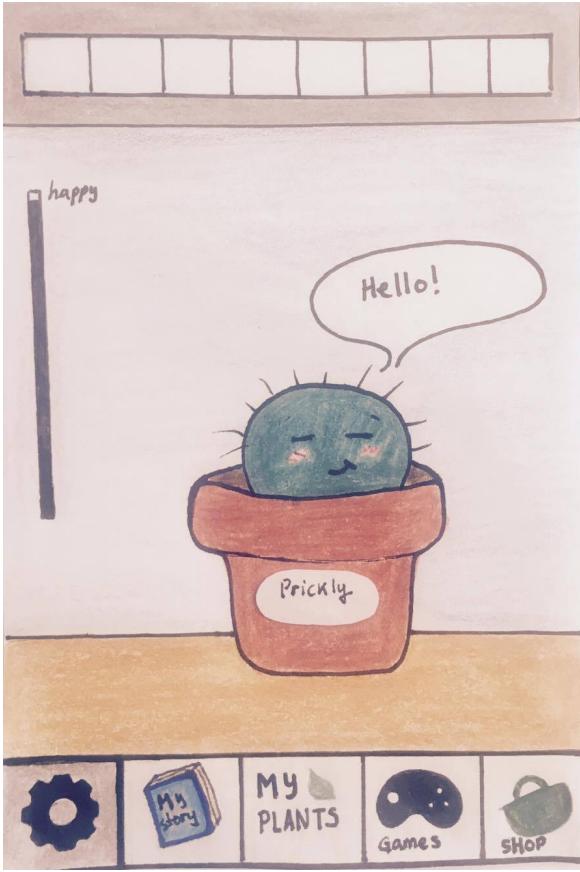
Thank you for adopting Prickly! Hope you can keep him happy!

I entrust my friend to you!

>>>



What would you like  
to rename it to?



# Hi - fi prototype:

-My hi-fi prototype is made from inVision which can be viewed:

<https://invis.io/ZN7401K98>



# How to better the Hi-Fi:

- Add more games
- Add more personalities to the plants. Each one can have a distinct type of personalities.
- More variety of plants could be added.
- Maybe make it so that all your plants can interact with one another?
- Connect with friends, to make it more of a shareable experience?

# Storyboard:

Before:



After:

