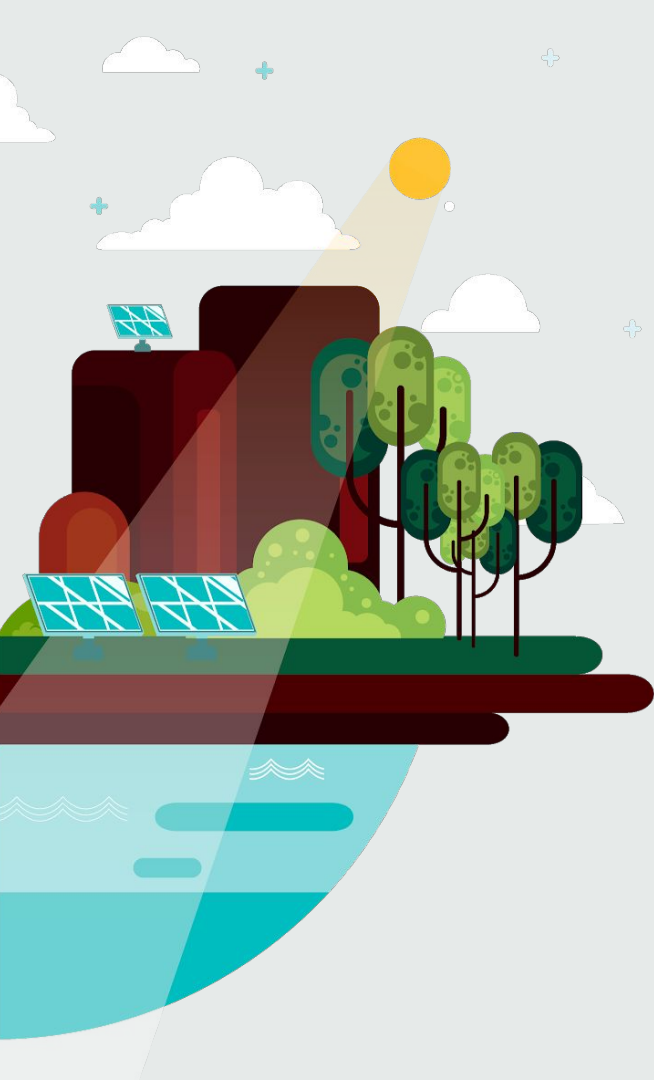




sprouts

Keep going. Keep growing.



Project Goal

Help users to learn how to care for their plants while also reducing their stress levels.

MVP

- Add plants
- Water plants
- See plant details (how often to water, sunlight)

01 Understanding the issue

Project research, empathizing with the user, identifying pain points

02 Lo-fi Design

Rough sketches and user flows

03 Mid-fi Design + User testing

A/B testing to validate designs, iterating and improving as needed

04 Hi-fi Design + User testing

Adding colour, branding, more user testing to validate/improve designs



Project Research



State-Anxiety

State-anxiety: short-term emotional state usually caused by a certain environment/stimuli

How can we help?

Interaction with indoor plants can reduce physiological and psychological stress (Lee M.S. et al., 2015)

Indoor plants produced positive response amongst University students under stress (Chang & Chen, 2005)

- Higher alpha brainwave activity (EEG): associated with relaxation and less stress
- Lowered state-anxiety level

Project Tools

DESIGN

- Sketch
- InVision

FRONT-END

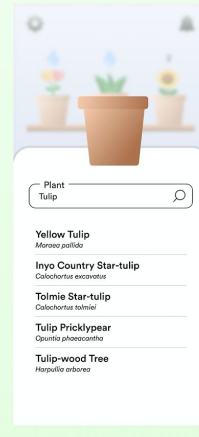
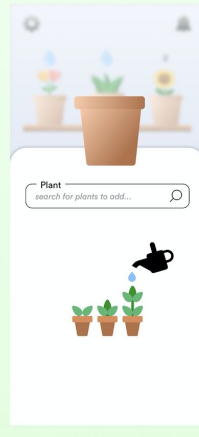
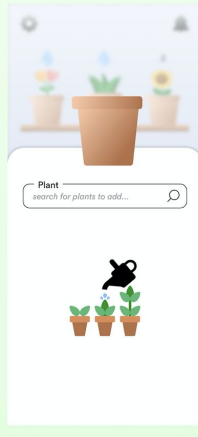
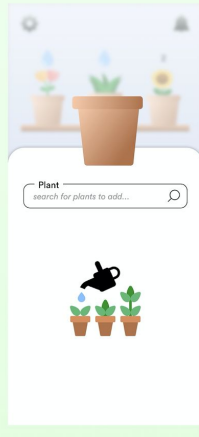
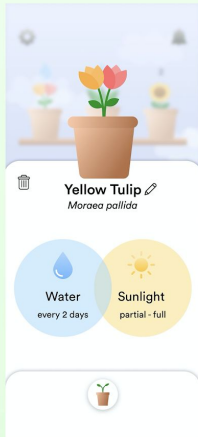
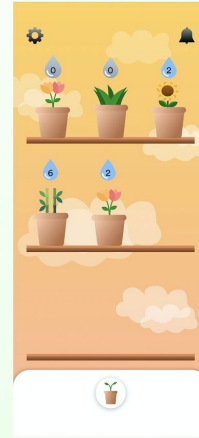
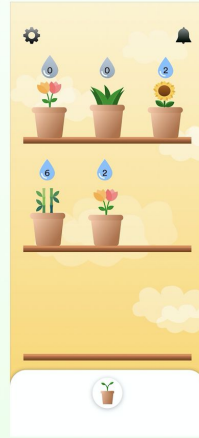
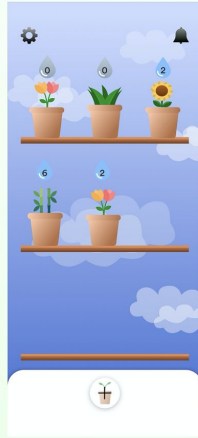
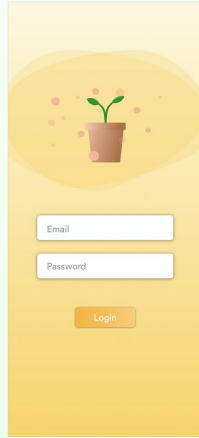
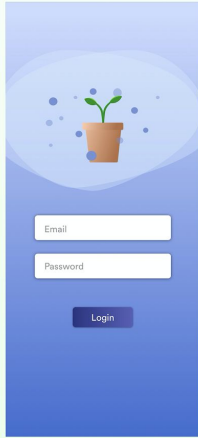
- Xcode
- Swift

BACK-END

- Node.js and Express.js
- MongoDB Atlas
- Amazon EC2
- JavaScript

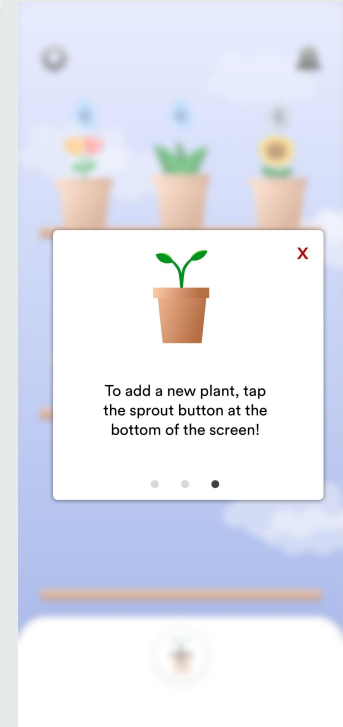
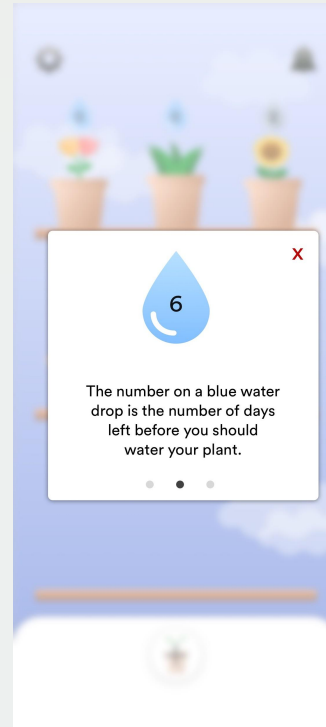
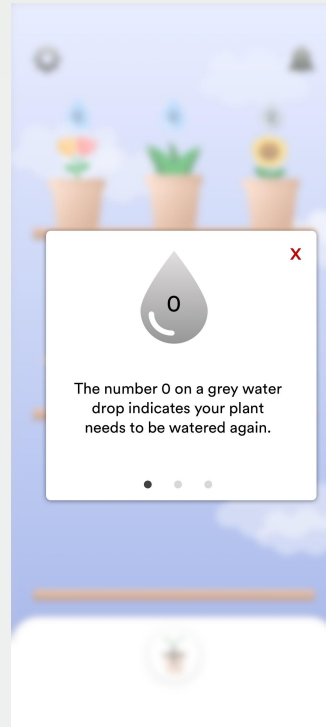
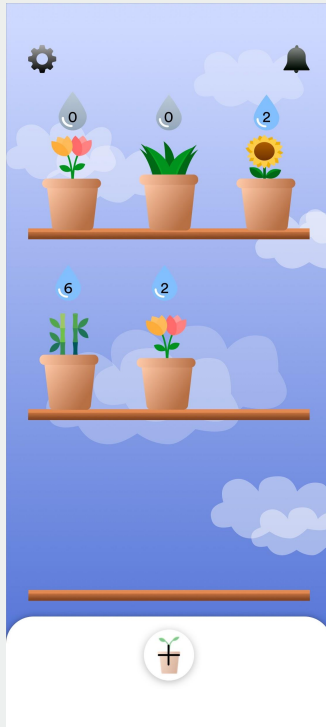


Hi-fi design + UI Library



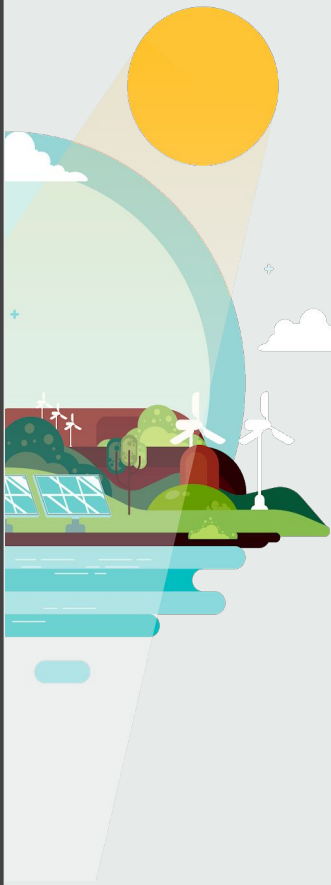
Hi-fi User Test Findings + Solutions

- 'Add plant' button not intuitive
- Unclear purpose of numbers above plants
- Dry plants should have grey drop



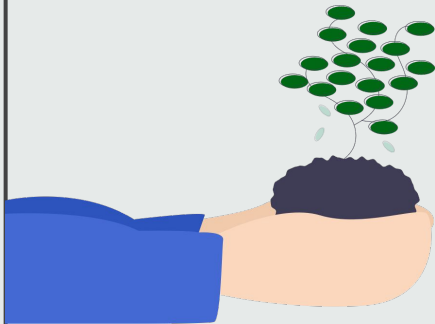
iOS Development

- iPhone app built natively using Swift 5.1
- Built using Protocol-oriented and MVC Architecture design, as specified by Apple
- REST API communications, supporting HTTP GET, POST, and DELETE



Back-End Development

- Express.js used on top of Node.js for building REST URIs
- MongoDB Atlas used to store users and plant collections
- Hosted on an AWS EC2 instance





Thank You!

References

Chang, C.Y. and Chen, P.K. 2005. Human Response to Window Views and Indoor Plants in the Workplace. *Department of Horticulture, HortScience*, (40)5, 1454-1359.

Lee, M. S., Lee, J., Park, B. J., & Miyazaki, Y. (2015). Interaction with indoor plants may reduce psychological and physiological stress by suppressing autonomic nervous system activity in young adults: a randomized crossover study. *Journal of physiological anthropology*, 34(1), 21. doi:10.1186/s40101-015-0060-8

