PLANTR SENSING YOUR PLANTS

JEN JIANFEN ZHANG, JORY RICE, PAUL BARTELL, WHITNEY SCHMIDT.
JEN JIANFEN
Graduate Student in MHCID
I am a designer who studies in MHCID program. I am responsible for the visual design and user experience design of this project.
Contact me: jianfenz@uw.edu

WHITNEY
Undergraduate Student in CSE
I am a UW student focusing on software engineering and writing. I am mainly responsible for writing in this project.
Contact me: wps5@uw.edu

PAUL
Undergraduate Student in EE
I am a EE student at UW focusing on embedded systems and controls. I am mainly responsible for iterative design, interactive prototyping and hardware.
Contact me: pbartell@uw.edu

JORY
Undergraduate Student in CSE
I am a designer focusing on software engineering. I am mainly responsible for task development and ideation in this project.
Contact me: joryr@uw.edu
HOW TO TAKE CARE OF THE INDOOR PLANTS?
CARE INFORMATION
Offer care information for all types of indoor plants using proper indoor plants database in order to give people knowledge of how to take care of their plants.

SENSING TECHNOLOGY
Humidity/light/temperature sensors inserted into the plants’ earth to measure the humidity/lighting.

SOMETHING IS WRONG
Diagnosis and find an expert for the sick plants.

ANTHROPOMORPHISM
Intelligent plants act like human interacting with people.
THREE TASKS
TASK 01 | ADD A PLANT – LEARN HOW TO CARE FOR A PLANT

WHY THIS TASK
Offer care information for all types of indoor plants using proper indoor plants database in order to give people knowledge of how to taking care of their plants.

TASK DESCRIPTION

1 Care Information
Jack has just purchased a cactus from IKEA. He wants to know some basic care information for his cactus.

2 Connect to the sensor
Jack adds his new cactus on his Plantr and connect to the sensor in the pot.
**TASK 02 REMINDER – REMEMBERING HOW TO CARE FOR A PLANT**

**WHY THIS TASK**
People tend to forget to water their plants. Plantr will send user message if their plants need something.

**TASK DESCRIPTION**

1 **Reminder**
When Jack passes by his plant, if the plant needs water, Jack will receive a message.

2 **Water the Plant**
After Jack waters the plant who needs water, the plant will send ‘Thanks’ message to Jack.
TASK 03 DIAGNOSING A PROBLEM AND GETTING HELP

WHY THIS TASK
Lots of people don’t know what to do if their plants are with something wrong. Plantr can help user to take care of the plants even when they have something wrong.

TASK DESCRIPTION

1 Check Plant Condition
Jack can check the temperature, PH and other related condition of his plant if Jack find something is wrong.

2 Diagnosis & Find an Expert
Jack can ask for help by diagnosing his plant according to the symptoms or call an expert for help.
DESIGN ITERATION
DESIGN ITERATION

CONTEXTUAL INQUIRY → TASK ANALYSIS → PAPER PROTOTYPE → VIDEO PROTOTYPE → USER TESTING → INTERACTIVE PROTOTYPE

CREATIVITY → FOCUS

ITERATION
EVIDENCE OF CHANGES

CONTEXTUAL INQUIRY

TASK ANALYSIS

PAPER PROTOTYPE

VIDEO PROTOTYPE

USER TESTING

INTERACTIVE PROTOTYPE
John! I am so thirsty! Give me some water.

Lyla
Living Room
4 mins ago

John, I really need some water today! U should remember that. OK? Or I will remind you when you passed by! ;)

TOMMOROW

MIKE

You need to water me these days! :)

INTERFACE DESCRIPTION
Plantr allow **plants talking with each other** according to their own conditions.

When user buy a new plant and put it among other plants. Other plants will **come to say hi and welcome the new member.**

User’s plants can talk about **their feelings and express happiness, sadness and other emotions** to user.
Plantr offers a database for indoor plants to care information. After a user adds a plant, Plantr can automatically generate a care schedule for certain plants.

Press the ‘add’ button on the top and go to the ‘add a plant’ page. Then, input some basic information, choose a species, and connect to the sensor. Finally, press ‘Done’ on the top. The plant will be on the ‘My plants’ list.
Plantr can help user to take care of the plants even when they have something wrong. User can press the plants to **check the water supply, PH, temperature and light condition** and let user know what’s wrong. User can **diagnose the problem** using Plantr and can even use it **find a nearby nursery store** and ask for their help.
Plantr will send user messages if their plants need something.

When user passes by the plants and they will send user message that 'Hi, Jack! I am super thirsty! Please give me some water. TT'
INTERFACE NOT YET IMPLEMENTED
CONTRIBUTION
We add a social network for plants which makes the whole plants care more interesting;
We add a feature that can help people when they find something wrong with their plants;
We come out with an idea that create a database which generate the care information automatically and send people reminder message for better plants care;

NEXT STEP
Hardware for realization of Plantr;
Refine the user experience design;
Do further user study;
PLANTR SENSING YOUR PLANTS

JEN JIAN ZHANG, JORY RICE, PAUL BARTELL, WHITNEY SCHMIDT.