

HERBGROUND: YOUR ALL-IN-ONE SMART PLANTER

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01

THE PROBLEM

Background - Singapore Green Plan

The Singapore Green Plan is a whole-of-nation movement to get every Singaporean on board; to transform Singapore into a glowing global city of sustainability.

City in Nature

Increased green spaces
and biodiversity

Resilient Future

Reduce reliance
on imports for
food supply

Sustainable Living

Inculcating sustainable
habits to the young
through education

Circular Economy

Towards zero waste

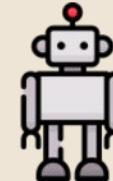


Opportunity

- With little farming land, Singapore **imports over 90%** of the food consumed in the country
- COVID-19 pandemic has exposed SG's **vulnerability to shocks** in the global food supply chain
- Urban farming complements SG's **30 by 30 target**.



Singapore: Rooftop/Car Park farms



Current Approach

Community in Bloom programme

- Gardening programme initiated by the National Parks Board (NParks) in 2005
- Number of registered community gardens rose to **over 900** across the island by 2015
- **80%** grow edibles and herbs



Community Gardens in SG

Gaps in current approach

- Community gardens are easily accessible, but the **inconvenience** brought about by the heat, cramped conditions and pests **deter more individuals** from adopting urban agriculture
- Individuals who have previously tried growing microgreens, feedbacked that difficulties such as **forgetting to water the plants** and **not having the time to tend to their plants** as main reasons why they did not continue



Problem Statement



**How might we make micro-agriculture
more readily available / convenient /
cheaper / less space needed / more
productive in homes & schools?**





02

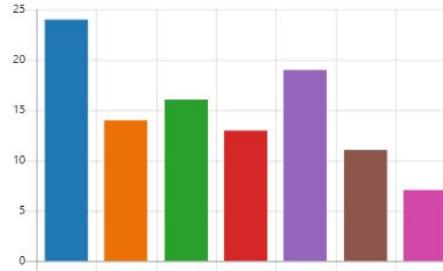
USER NEEDS AND WANTS

MARKET RESEARCH

2. What difficulties did you face while growing the plant.

[More Details](#)

- Forgot to water the plant 24
- Over watering 14
- Plant didn't get enough light 16
- No space to store the plant 13
- No time to take care of the pl... 19
- Messy 11
- others (please fill in question 4) 7



3. What do you need to make the process of growing plant more pleasant and enjoyable

[More Details](#)

- Automatic watering system 30
- Automatic lighting system 17
- Reminder system 16
- Less cleaning 12
- others (please fill in question 4) 5



Main Difficulty:
Forget to water the plant

Features they want:
- Automatic Lighting
- Automatic Watering

USER NEEDS AND WANTS



CONVENIENCE



SPACE



COST-EFFECTIVE



READILY AVAILABLE



PRODUCTIVITY

USER PERSONAS



TEACHER MICHELLE, 35

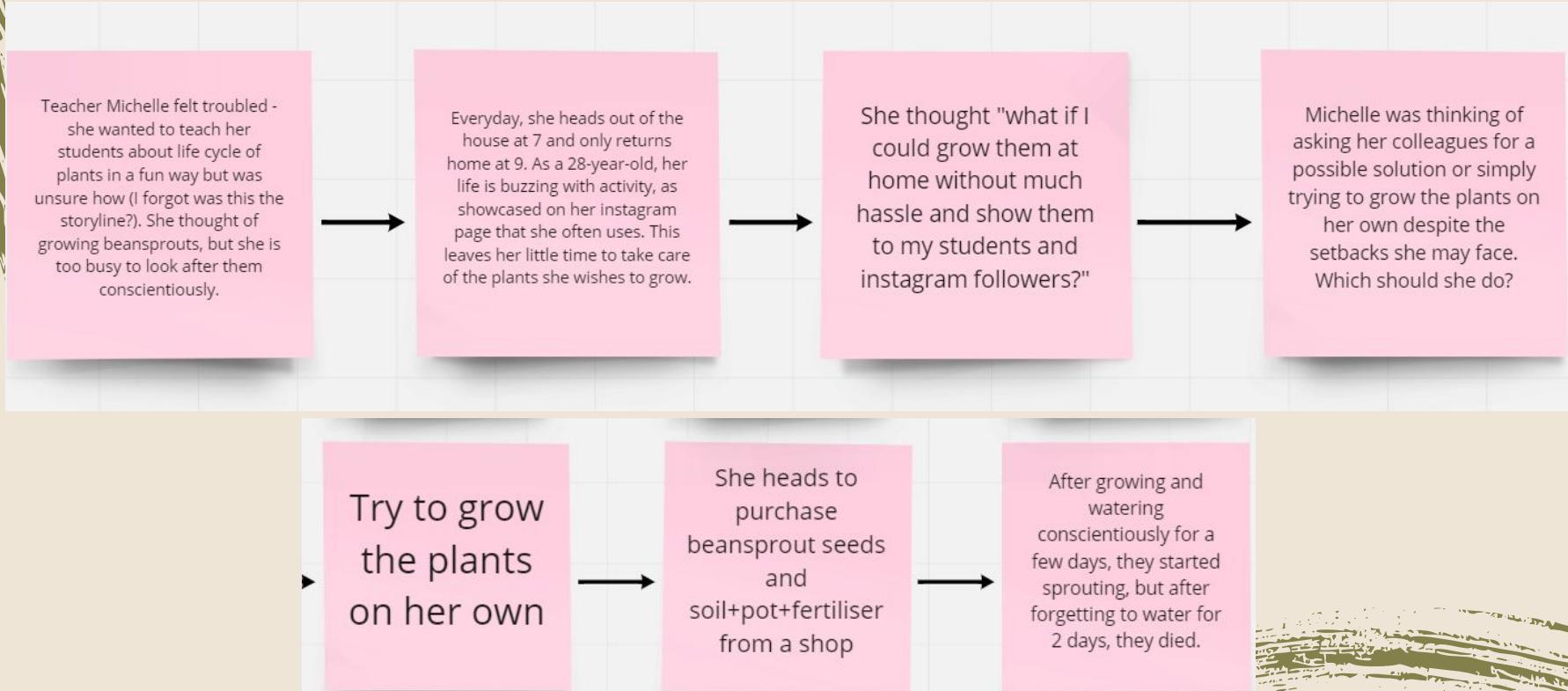
Dedicated yet Busy



UNCLE ADAM, 60

Adventurous yet Apprehensive

Teacher Michelle



Uncle Adam

Uncle Adam loves spending time with his grandchildren. However, he is not very well-versed with technology, so he can't really connect with his grandchildren virtually. As a nature lover with green fingers, he also hopes to be able to share his love for gardening with his grandchildren.

He is relatively free as compared to the average individual in society since he is retired. He waters his house plants daily and tries to learn to use the smartphone he has but is not the best at using it, even after his grandchildren have tried to teach him how to use it.

Through this experience, he thought "what if I could find a way to spend my time with my grandchildren and learn more about technology through gardening?"

Adam thought of attempting to grow the watermelon seeds he found in his backyard by hand. What should he do?

Grow his watermelon seeds

grandchildren: OMG YAY SEEDS LET'S PLANT!! *drops seeds onto floor and can never find them again*

Attaining to our User Needs

UI/UX	Overall	Characteristics	Technology
<ul style="list-style-type: none">- Guides & technical assistance provided by AI assistant on App- User-friendly interface- Able to track progress through screen/ app- Educational section on app	<ul style="list-style-type: none">- All-in-1 package: machine, planting pots, seeds all provided, delivered to house- Need to market it well<ul style="list-style-type: none">→ Family packages→ Social Media→ Varying difficulty levels- Collab with other online platforms to sell/ market- Can be used for educational purposes	<ul style="list-style-type: none">- Minimal Cleaning- Minimal Troubleshooting- Easy to set up, navigate, modify and harvest- Low power and cost involved (<\$100)- Safe and portable- Easy to integrate into surroundings as deco- Modular -> Customizable and prevents food wastage	<ul style="list-style-type: none">- Able to provide optimal growing conditions (light, water, protection against insects)- Able to detect height of plants, their water level

03

OUR SOLUTION

HerbGround - Your all-in-one smart planter



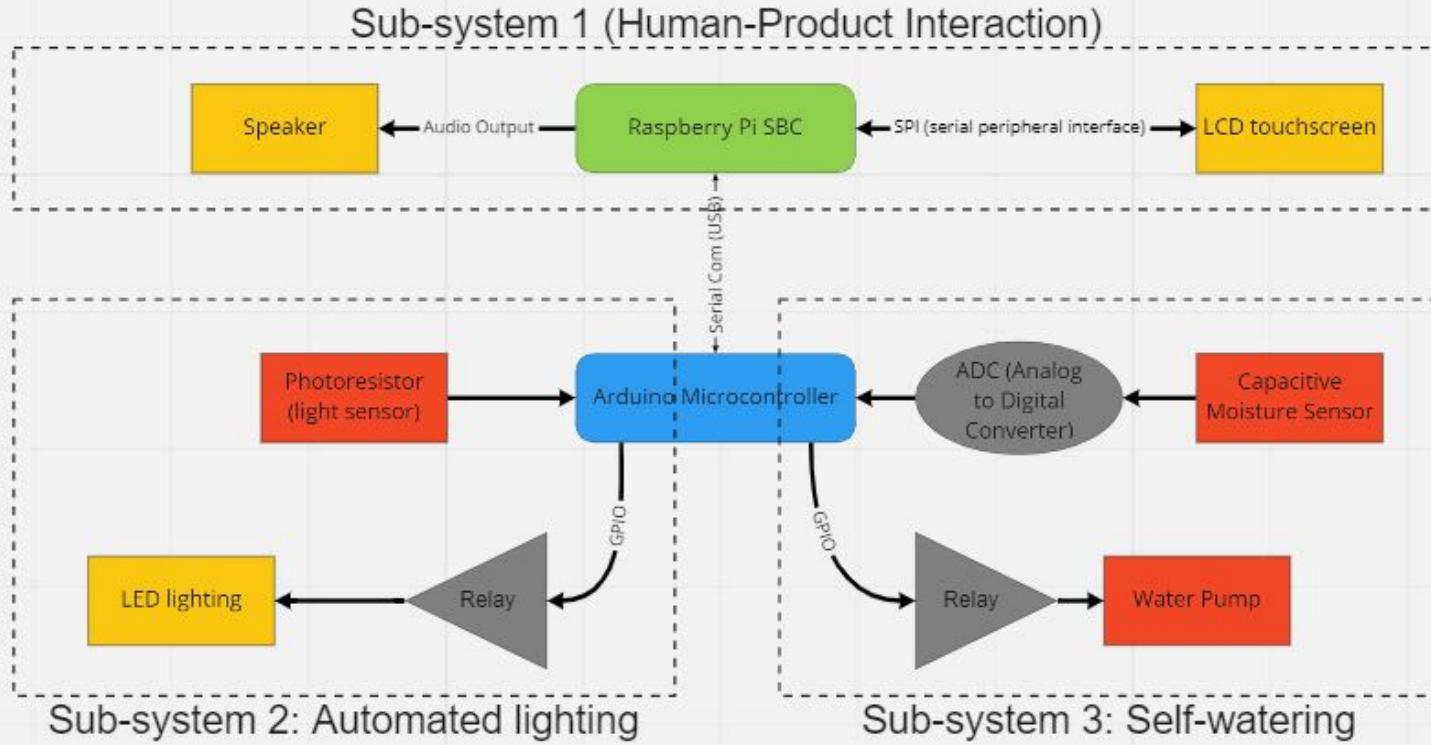
HERBGROUND - The Product



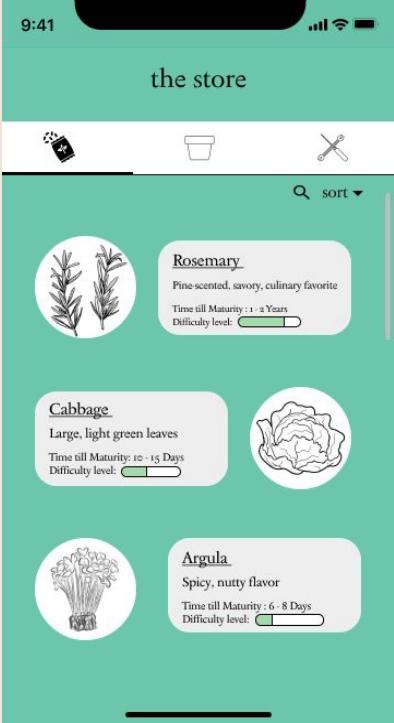
Key Features

- Self Watering
- Smart Lighting
- Minimal Cleaning & Maintenance
- App-based real time monitoring
- Detachable Solar Panel Module

HERBGROUND - The System



HERBGROUND - The App





04

UNIQUE SELLING POINT



Why buy our product?

VALUE PROPOSITIONS

USER FRIENDLY

Catered to various demographic of users, from kids to the elderly.

EDUCATIONAL

The app provides guides and tips for the users to learn more about urban farming.

CONVENIENCE

An all-in-1 kit, users simply need to plant the seeds and can enjoy microgreens, herbs and spices in 2 weeks without having to leave the comfort of their homes.

VALUE PROPOSITIONS

Continuity

A long term solution to help SG meet her 30 by 30 target, offsetting demand from overseas imports.

Empowerment

Everyone can play a part in contributing to the SG Green Plan

Interaction

A common activity that families can bond over together

FUTURE DEVELOPMENT

CIRCULAR

Integrates system to convert food waste(egg shells, vegetable stalks) into fertiliser.

MODULAR

Different growing area sizes, to suit different family sizes

GAMIFICATION

Sustainability-centric games within the app to reward users with seeds for growing

Business Model

Rent-to-Purchase

Rental of HerbGround for
3-Month Trial

\$10/month

Features

- Self Watering
- Smart Lighting

Loan-with-Purchase

Purchase of
HerbGround at
wholesale price

\$49

Features

- Monthly Seed Pack
- Self Watering
- Smart Lighting
- IoT and App

\$3.7M

Projected revenue
at 1M users

GTM Strategy

Beta Release
(Mid 2022)

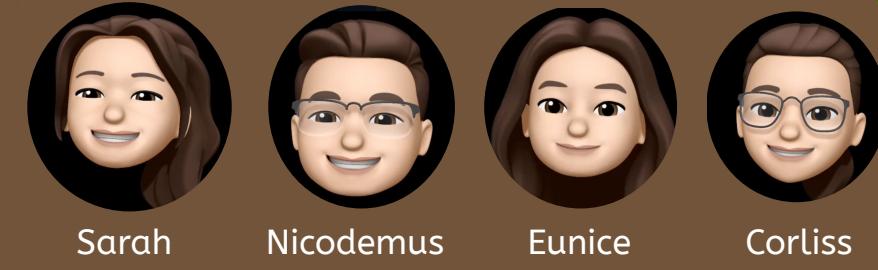
- Pilot launch HerbGround for free amongst primary and secondary schools
- >100 schools 6 months

Stable Release
(End 2023)

- Onboard HerbGround with 75% of schools in SG
- Launch with 30% of general public
- Target to have >10,000 users by end of 2023

Going Global
(2024)

- Foray into OS markets, starting with Asia-Pacific region
- >1M users by 2025



**ANY
QUESTIONS?**