



food forward
make the change

presented to you by: charisse(4),desiree(8), jolie(14)



Our team!

(from left to right) Charisse (4), Jolie (14), Desiree (8)

Desiree	worked on the script, helped with the ideas for the form, worked on the slides, contribute in planning, came up with ideation.
Jolie	Made the Google form to interview others, worked on the slides, contributed in the overall planning, worked on script.
Charisse	proposed the idea of the app and most of its functions, worked on and edited the slides, proofread and edited the script

distribution of work!



CONTENT PAGE



1. **Project Title** : Defined Problem and Reasons
2. **How might we Statement**, we have used to branch out on ideas
3. **Ideation** : Materials Used & Reasons for design.
4. **Why is our project innovative?**
5. **Advantages and disadvantages**
6. **Personal reflection** (more elaboration on problems faced, overcoming or finding ways to do so)

PROJECT : A way to stop food wastage

Problem at hand :

- Singapore produces millions of food waste. Food waste is one of the biggest waste streams in Singapore

Reason to look deeper :

- Food waste is a threat to the environment due to greenhouse gasses
- No proper effective way to encourage citizens to stop their food waste



DIY Cloth cover for water bottle

Singapore food waste

Where does all the food waste come from?

According to

<https://www.towardszerowaste.gov.sg/zero-waste-masterplan/chapter3/food/>,

Despite Singaporeans' love for food, households are one of the largest generators of food waste, contributing around half of the food waste generated in Singapore! This however, is due to them ordering too much when eating out, cooking too much food, etc.

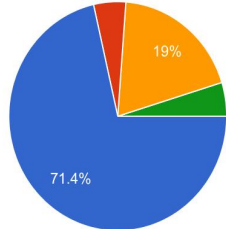
We want to utilise our app to do our part to prevent food waste! Where there is unsold or excess food that is still suitable for consumption, consumers and food establishments can donate them to food distribution organisations such as The Food Bank Singapore, Food from the Heart, Willing Hearts and Fei Yue Community Services.

How-Might-We-Statement?

How might we help to create a more efficient way to manage consumers' food waste using an app?

Do you think it would be helpful to communicate with other people through a food expiry app? (like if they want the food)

21 responses

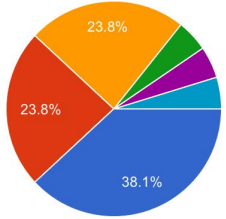


- Yass
- Nope
- Sometimes
- If I want food I'll just get some, a lil troublesome

Copy

Does your food expire so fast that you cannot eat it in time?

21 responses

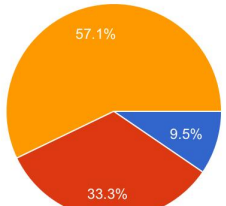


- Yup
- Nah
- Idk
- sometimes
- im broke i dont have food :(
- Not very often

Copy

After your food expires, do you just throw it away?

21 responses



- Nah
- Yup
- Sometimes

Copy

key interview/key results!

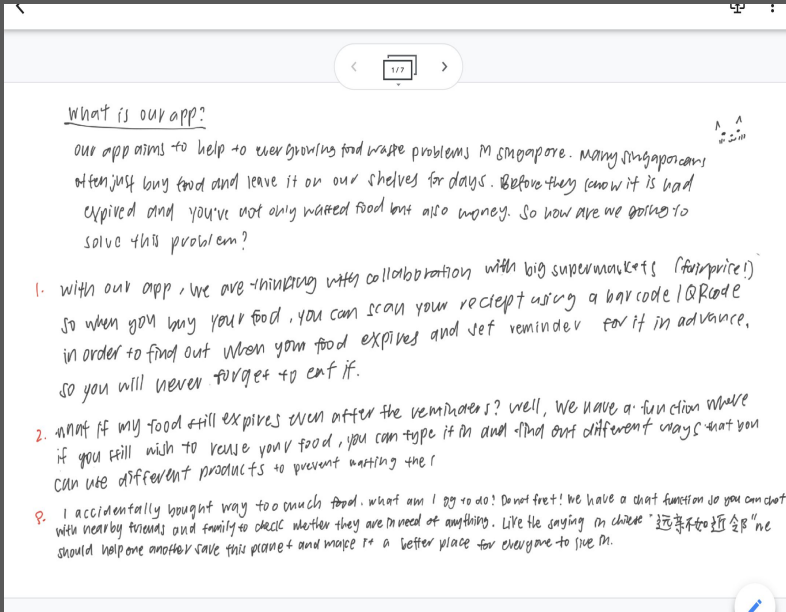
TARGET AUDIENCE: Everyone from young to old

Results:

57% of students interviewed would throw away their food after it expires

71% of respondents would find it useful to use an app that reminds you whenever your food is about to expire or to communicate with other people through a food expiry app

Ideation :



long processes of planning...

Brainstorming:

Notifications-will that be too annoying?will people even look at it?

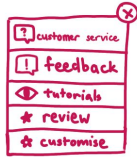
Collaboration-is it going to be fixed on fairprice?if we were to expand what would we change?

chat-how would people be able to communicate using this function,will people be safe while this function is available

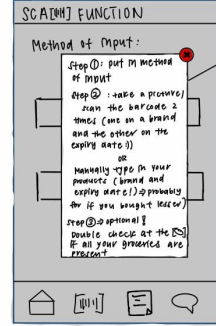
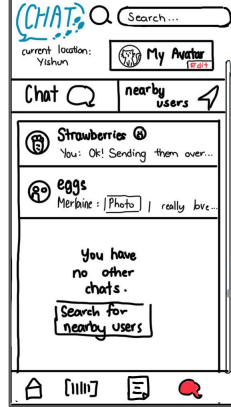
qr code- can qr codes be able to scan the product and the expiry date of the product?



settings & other functions:
when opened, looks like this

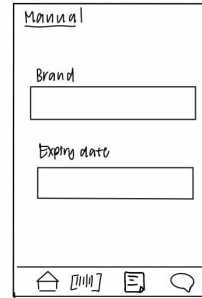
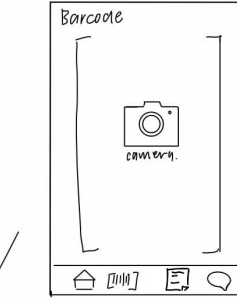
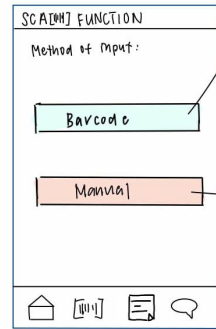


* icons unconfirmed, placeholders



* mimicking google (sense)

guide for new users

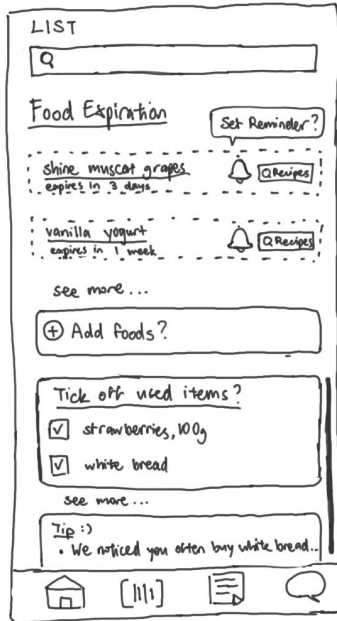


PROTOTYPE

How does it work?

Our app "Food Forward" aspires to reduce food waste through expired food. It allows users to track and get notified of their food purchases' expiry dates through a scanning function. Users can find various ways to use their food, including recipe suggestions and sharing of unwanted food items to fellow app users through an implemented chat function. We could also collaborate with grocery stores to incorporate information within their barcode to make input of food into the app easy.

Rough sketch of the product.



What does our app mainly promote?

Physical Wellness:

As the app collects information on your groceries, it can also compile what is most often bought. If those things are unhealthy, the app will notify you of it and provide reasonings as well as some suitable alternatives.

Environmental Wellness:

Waste management is a major problem for the environment, even more so for Singapore as shown earlier. It is what we focused on solving most by tackling the root problem i.e consumers' poor food waste management.



WHAT MAKES OUR APP INNOVATIVE?

To save the environment, we need to start with ourselves. What makes our app stand out is the fact that you can access it as an average person, and still be able to impact the environment.

Our app is considered innovative because (to our knowledge) there has been no other app out there that would be able to actively help users manage and reduce their output of food wastage, as well as make users more conscientious of one's impact on food wastage.

What are the advantages of this app?

Our reminder function allows people to be more conscious of their food wastage, and also reminds them when their food is going to expire. This will result in the users of the app to reduce their food wastage overall.

Our chat function in our app, allows people to bond with their neighbours and also develop a sense of sharing with their peers. This builds relationships.

Our scanning function can also automatically upload the food into the food expiry list, so that it will not be an inconvenience to the users.



Pictures:

<https://www.foodnavigator.com/Article/2023/03/21/what-do-children-think-of-supermarket-progress-in-food-waste>

<https://www.waste360.com/food-waste/analyzing-food-waste-city-level>

What are the disadvantages of this app?

After conducting an interview, we realised that many people thought of scanning their food and/or uploading it into the list as a hassle. This many also disencourage people to download the app.

People may view the chat function as an invasion of privacy, as you will be able to see who around you has the app.

The alarm sound for the reminders may also be viewed as annoying..



Pictures:

<https://www.canstockphoto.com/invasion-of-privacy-warning-11078316.html>

https://www.flaticon.com/free-icon/hassle-free_535994

how may we fix this?

We will impose strict regulations and guidelines for security, and also allow the people to hide their profiles by switching to a private mode if needed to ensure their utmost privacy.

The users of the app will be able to select their own choice of alarm from the wide range of noises that we give them. If it still bugs the user due to the constant notifications there will also be a choice to off it completely.

Feedback on Prototype from interviewees

FEEDBACK



***Some people
might be too
lazy to use the
app.***

We are aware of this and have taken measures to make our app as convenient and user-friendly as possible, as well as adding many QOLs to improve our app.

For example, things like ways to utilise food scraps, food near expiration etc are automatically suggested to you by the app, cutting down the user's need for research.

The scanner function also helps cut down manual action so that you don't have to put grocery details by hand, which helps for bulk orders of groceries that have become more common ever since COVID-19.

All tutorials are also automatically compiled so that you can reread and view them anytime to refresh your memory if you're confused on how to use the app.

We are also open to any constructive criticism and advice to improve our app on this front.

DESIGN THINKING



Empathize

Understanding people



Ideate

Generating your ideas



Define

Figuring out the problem



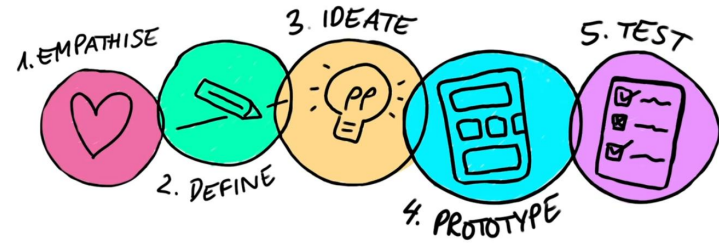
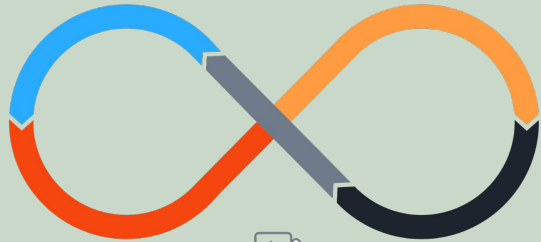
Test

Refining the product



Prototype

Creation and experimentation



steps the exercises themselves are the specific process is very very flexible

What Is Design Thinking? An Overview

Research from youtube videos : " what is design thinking?"-AJ&smart

- Learned that design thinking is a **philosophy** and a set of tools to help you solve problems
- Looking for **problems** in everyday life to come up with ideas for ideations or to improve our prototype

PERSONAL EXPERIENCES/ REFLECTION

S.T.E.M.



THANK YOU :)

for giving us your kind attention

