GSORTING

SPRING 2023 CAPSTONE PROJECT
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CONGYING ZHANG

AGENDA

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To be continued
（sprint 2）

01

Project Description

Project Description

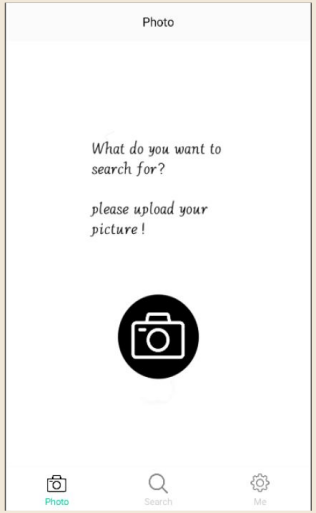
“Gsorting” is a mobile application developed by Pace University students for CS 691 and CS 692 projects.

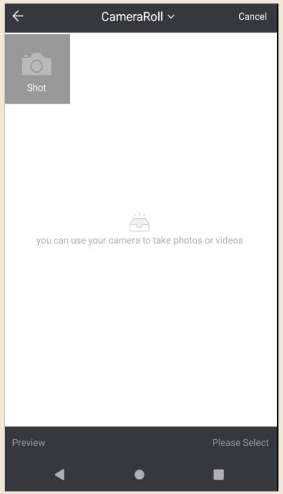
- Primary goal- Identify waste types and give disposal recommendations
- Feature Function- text search and photo scan search.
- Better - Intuitive interface and user-friendly design, easier to use! Helps users stick with it easier!

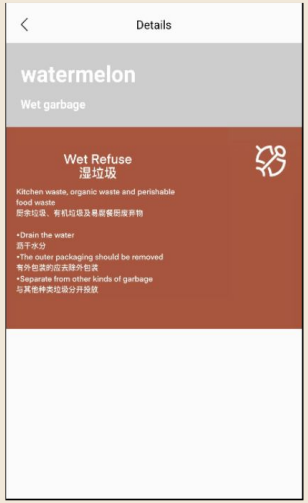
02

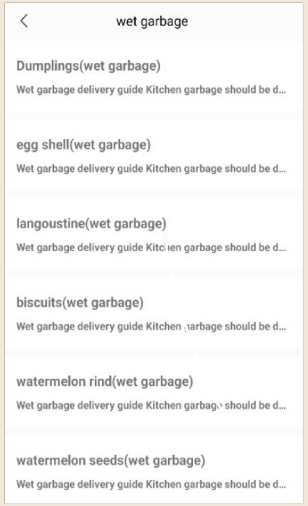
MVP

Minimal Viable Product



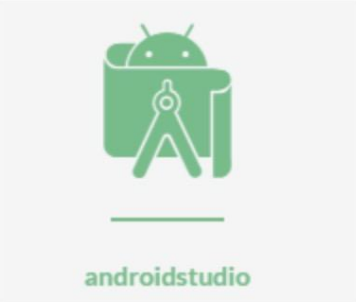






03

Technologies


androidstudio

Java

JUHE API

04

Personas

Persona 1-Eco-Conscious Edith

Name: Edith Lucy

Age: 30

Environmentally conscious homeowner: This person is environmentally conscious and actively seeks ways to reduce their household's carbon footprint. They may use the Gsorting app to identify and dispose of household waste in an environmentally friendly way.

Persona 2 - Busy White

Name: Mr. White & Mrs. White

Age: 33 & 28 (Mr. White & Mrs. White)

Busy Parents: This persona is a pair of busy parents with limited time to do household chores. They can use the Gsorting app to identify the type of waste and get quick disposal advice to get rid of household waste quickly.

Persona 3-Student Sam

Name: Sam Peter

Age: 20

Student tenant: He's a college freshman. He may not be familiar with the waste management regulations of the city where the university is located and he can use the Gsorting app to properly sort his household waste and avoid fines.

05

Architecture Diagrams

Architecture Diagrams

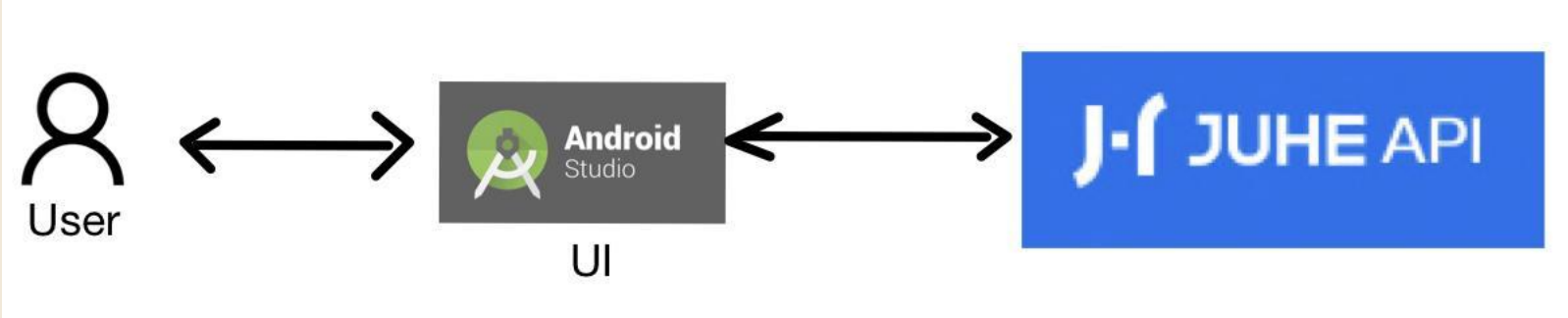
01 Conceptual Diagram

02 Sequence Diagram

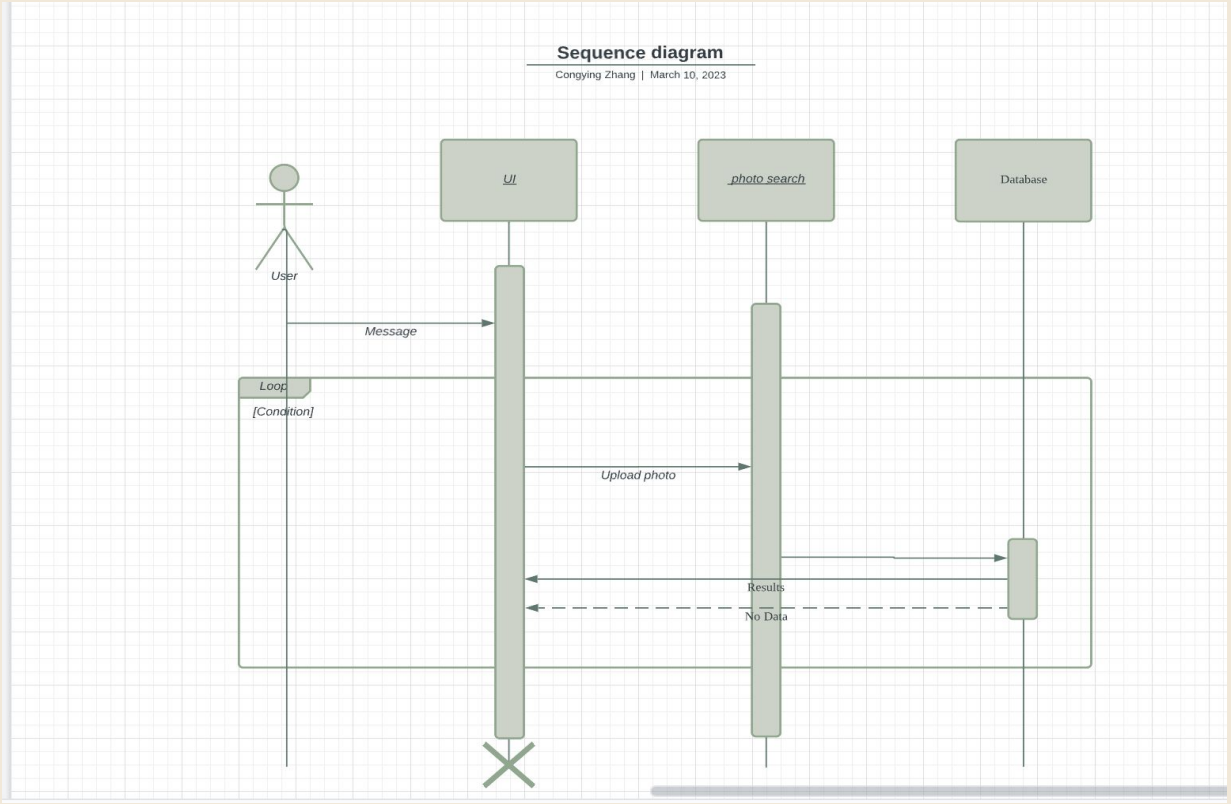
03 Class Diagram

04 Use Case Diagram

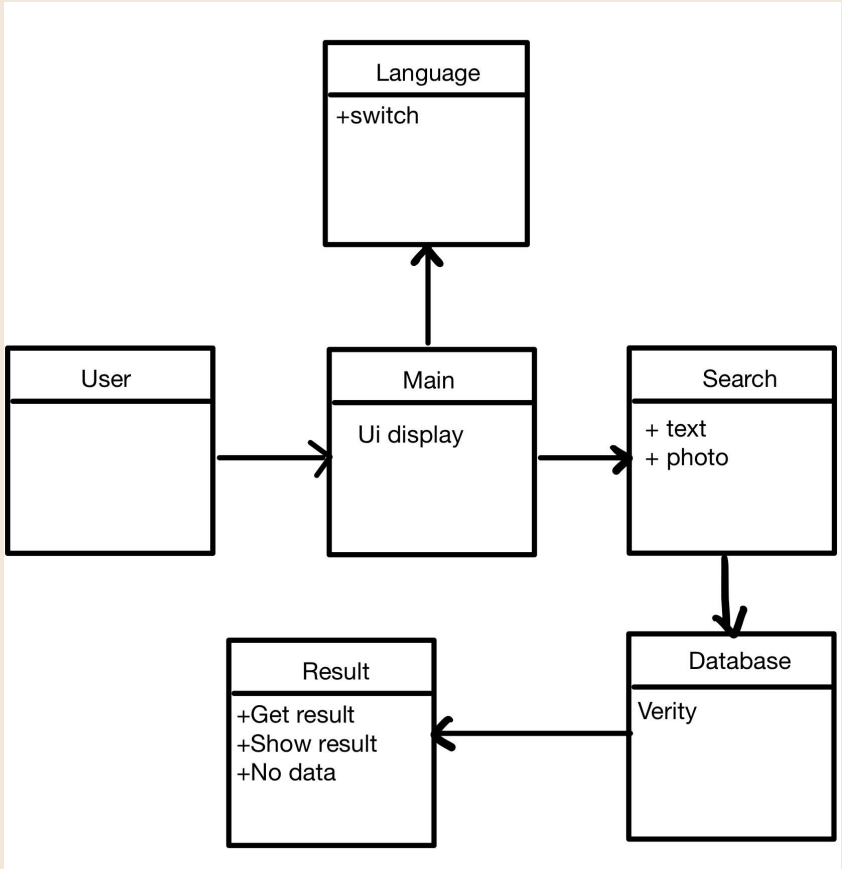
Conceptual Diagram



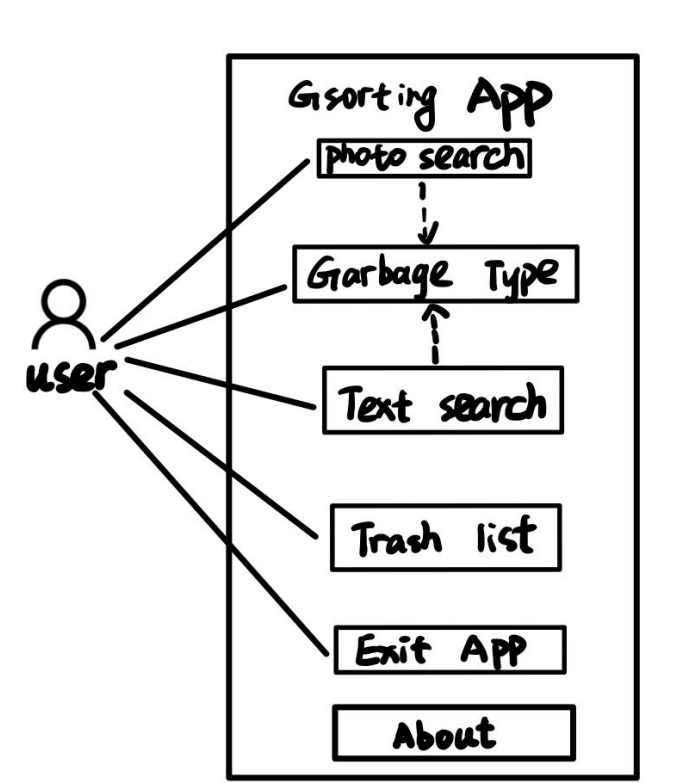
Sequence Diagram



Class Diagram



Use Case Diagram



06

Product Backlog

ID	Name	Creation Date	Description	Sprint	Priority
US1	Menu	01/24/2023	As a user, I hope to have a menu button that allows users to switch UI from one to another so that I can freely choose which category of ga	1	High
US2	App reliability	01/24/2023	As a user, I want the app's reliability to be over 90% of successful running. This App would not be interrupted by other apps when it's workir	1	Medium
US3	Setup Language	01/24/2023	As a user, I want the app's ability to set up the language(Chinese, English, and so on). So I can use it no matter what language I'm using.	1	Low
US4	Welcome Screen	03/10/2023	As a user, I want the home screen to be simple and easy to navigate through the different calculators so that the app is not difficult to use.	2	Low
US5	Language Switch	01/24/2023	As a user, the content of the app should not be confused by the language, I want to set a language change option so that people from a diff	1	Low
US6	Warning Message	03/10/2023	As a user, I want to be warned when performing operations such as reset, so that I never lose my data.	2	Medium
US7	Account	03/10/2023	As a user, I want my Settings and information to be recorded so that I can respond to my preferences more quickly when changing devices	2	Medium
US8	Camera Scan	01/24/2023	As a user, I want to scan stuff so that I can search for more details on the app	1	High
US9	Picture Viewer	01/24/2023	As a user, I want images to distinguish the types of junk I'm looking for so I don't have to read a lot of text while searching for information.	1	High
US10	Word description	01/24/2023	As a user, I need as detailed text description as possible to introduce the knowledge of garbage classification to me, so that as to improve r	1	Medium
US11	Help Button	03/10/2023	As a user, I want to be able to use the help page when I don't understand a feature in the app so that I can get help where I need it.	2	Medium
US12	About	01/24/2023	As a user, I want to know the information of the developer of this app, which helps me to understand this app	1	Low
US13	UI	01/24/2023	As a user, I want the app to have a good UI design, so that I can use it more smoothly	1	Large
US14	Upload picture	01/24/2023	As a user, I want to upload the picture I would like to use for my profile.	1	Medium
US15	Settings	01/24/2023	As a user, I want to be able to change settings so that I can use the app with my preffered options.	1	Medium
US16	Register	03/10/2023	As a user, before I have a account, I want to have a nickname and save my personal imformation on the app, so that I won't reveal my real	2	High
US17	Searcher	01/24/2023	As a user, I want to search for this item to find out what category it belongs to, so that I can realize how to recycle or dispose of it.	1	High
US18	Text editor	03/10/2023	As a user, I need to create my own Garbage notenook, so that I write down the garbage I used to search and remember them.	2	High
US19	Password Change Function	03/10/2023	As a user, I don't want my current password anymore, so that I can click a button to enter a new one.	2	High
US20	Exit Screen	03/10/2023	As a user, I want to see a "goodbye, see you next time" sentence when I close the app	2	Medium
US21	Clickable picture	01/24/2023	As a user, I want to have a clickable picture so that I can select the detailed spam classification information THAT I want to know/search for	1	Medium
US22	Logout Function	03/10/2023	As a user, I want to have logout function so that I can switch to another account.	2	Low

07

Sprint 1 Backlog

ID	Name	Creation Date	Description	Sprint
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US3	Setup Language	01/24/2023	As a user, I want the app's ability to set up the language(Chinese, English, and so on). So I can use it no matter what language I'm using.	1
US5	Language Switch	01/24/2023	As a user, the content of the app should not be confused by the language, I want to set a language change option so that people from a different country can use this app directly.	1
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US12	About	01/24/2023	As a user, I want to know the information of the developer of this app, which helps me to understand this app	1
US13	UI	01/24/2023	As a user, I want the app to have a good UI design, so that I can use it more smoothly	1
US14	Upload picture	01/24/2023	As a user, I want to upload the picture I would like to use for my profile.	1
US15	Settings	01/24/2023	As a user, I want to be able to change settings so that I can use the app with my preffered options.	1
US17	Searcher	01/24/2023	As a user, I want to search for this item to find out what category it belongs to, so that I can realize how to recycle or dispose of it.	1
US21	Clickable picture	01/24/2023	As a user, I want to have a clickable picture so that I can select the detailed spam classification information THAT I want to know/search for.	1

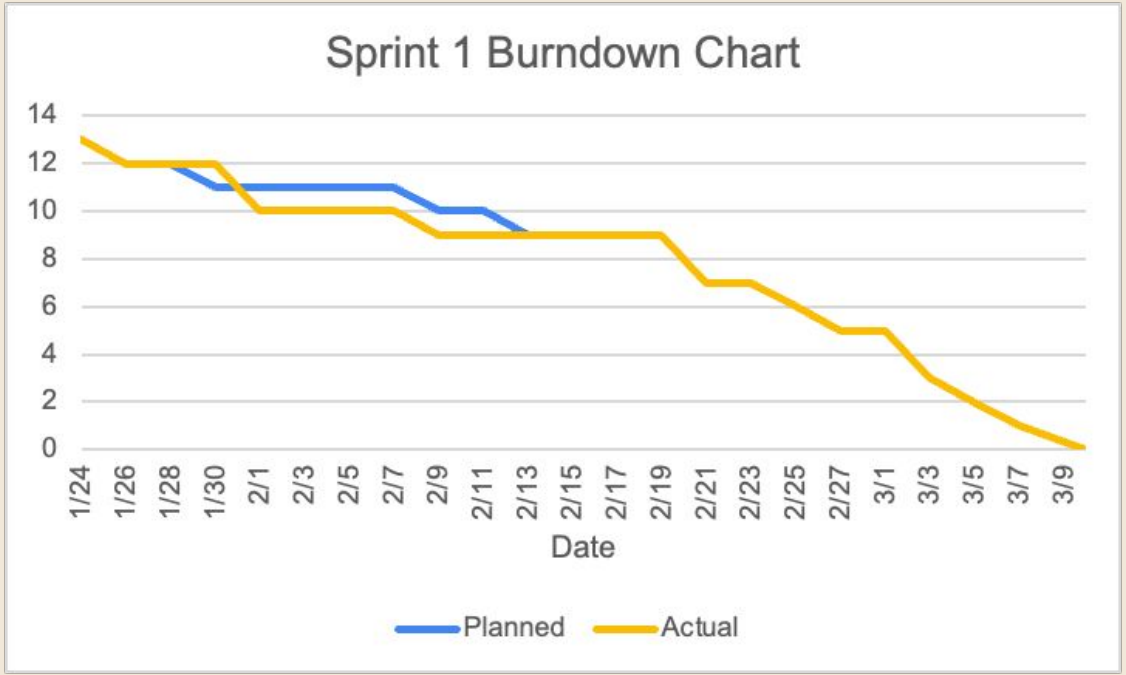
08

Metrics

ZERO WASTE
TOTE BAGS
MK PLAN
Here is where your presentation begins

Team velocity and Burndown Charts

Sprint 1, I completed 13 user stories

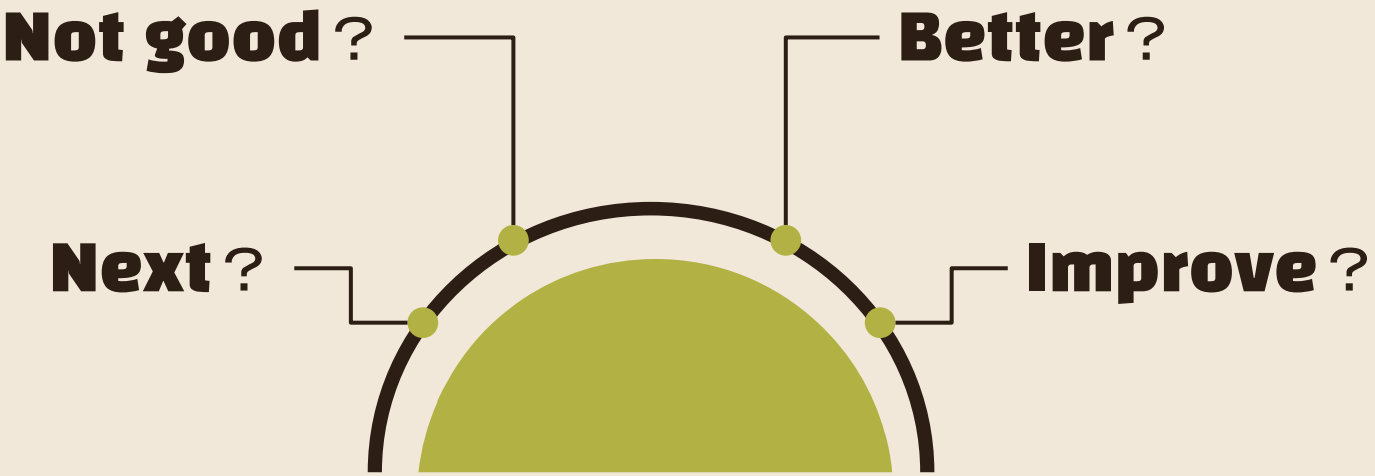


Completed/Committed Ratio

=13/13

=100%

09 Retrospective



Retrospective

What is going well?

01

- ***Gsorting's database accesses***
- ***UI design is easy to use***

What needs to be improved?

02

- **Not yet using machine learning**
- **Haven't finished getting users to create accounts**

What to do next?

03

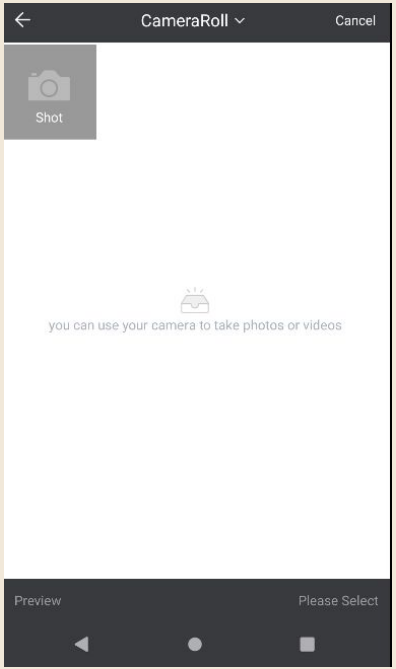
- Access to AWS for the app

10

GitHub

https://github.com/htmw/2023S-czhang

11. MVP Project Demo



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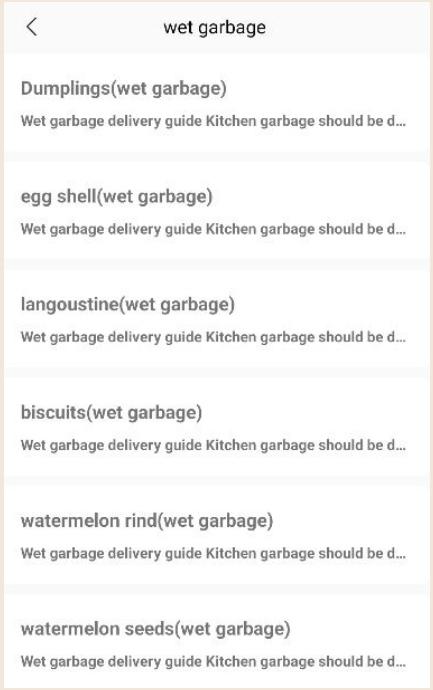

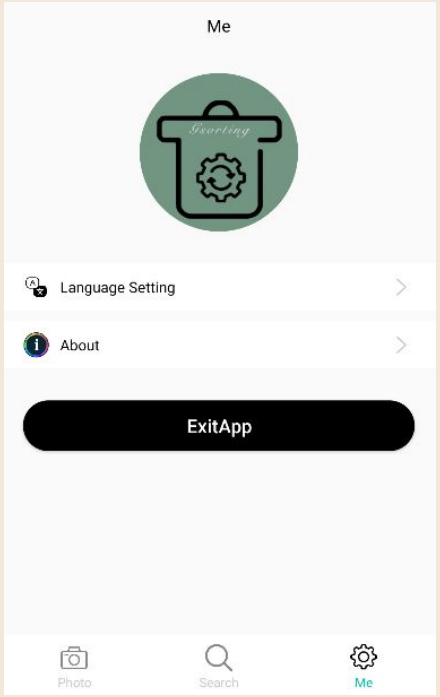

To be continued（Sprint 2）

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US4	Welcome Screen	2023-3-8	As a user, I want the home screen to be simple and easy to navigate through the different calculators so that the app is not difficult to use.
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US16	Register	2023-3-8	As a user, before I have a account, I want to have a nickname and save my personal imformation on the app, so that I won't reveal my real name, and I won't be asked to re-enter my information when I switch devices.
US19	Password Change Function	2023-3-8	As a user, I don't want my current password anymore, so that I can click a button to enter a new one.
US22	Logout Function	2023-3-8	As a user, I want to have logout function so that I can switch to another account.
US23	Machine learning algorithms	2023-3-8	As a user, I want the app to use machine learning algorithms to accurately identify the type of waste I want to dispose of, making it easy for me to properly sort my waste.
US24	Tracking user habits	2023-3-8	As a sustainability advocate, I want Gsorting to use machine learning to track my recycling habits and provide advice on how to reduce my environmental impact.
US25	Provide more information and tips	2023-3-8	As a parent who wants to teach my children responsible waste management, I want Gsorting to use machine learning to provide educational information and tips on how to recycle and dispose of different types of waste.
US26	Analyzing user data	2023-3-8	As a user, I want Gsorting to use machine learning to analyze the type and amount of waste in my household so that I can develop more effective waste management strategies.
US27	Identify potentially hazardous materials	2023-3-8	As a sustainability consultant, I want to use Gsorting to help my clients track their waste management performance and identify opportunities for improvement, using machine learning to provide data-driven insights.
US28	Make recommendations based on user data	2023-3-8	As a waste collection worker, I want Gsorting to improve my job safety and efficiency by using machine learning to identify potentially hazardous waste materials.

Thanks

Live Application Demo:
https://youtube.com/shorts/v-zTi1481Ak?feature=share