

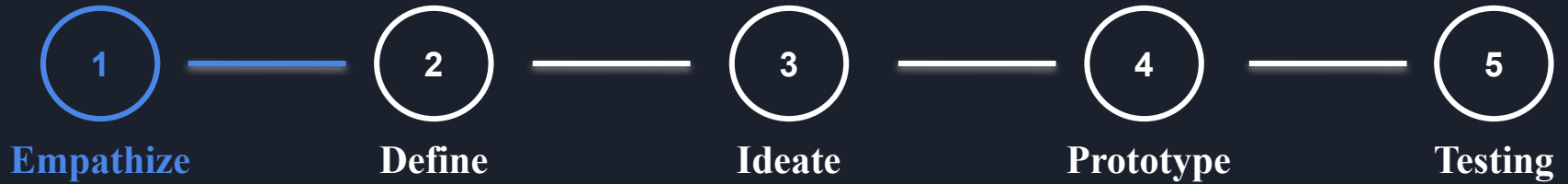


Group 8 - EcoTech

Claire Christensen, Tye Segal-Kawano, Isaiah Philip, Yufei Zhao, Yang Chen



Empathize





Initial Client Meeting

- An application that is able to effectively sort recyclable materials
- Application is easy to manage/use
- Low in cost
- Targets households



Benchmarking

Design Specifications	Region of Waterloo, The Waste Whiz App	Town of Ottawa Waste Management
Cost	Free	Free
System	IOS, Android	Website
Design Layout	Simple, easy to navigate	Simple, easy to navigate
Way of telling which type of waste it is	Allows you to search for different items and then tells what kind of garbage it is	Allows you to search for different items and then tells what kind of garbage it is
Gives locations of waste centres	Yes	Yes
Target Users	Households in the Waterloo region	Households in the Ottawa region
Encourages users to use it	Interactive game	None



Benchmarking (continued)

	Importance	Region of Waterloo, The Waste Whiz App	Town of Ottawa Waste Management
Cost	3	2	2
System	4	2	1
Layout	2	2	2
Indicator	5	1	1
Target Users	2	0	2
Waste Centre Locator	3	1	1
Encouragement Use	2	2	0
Total		30	26



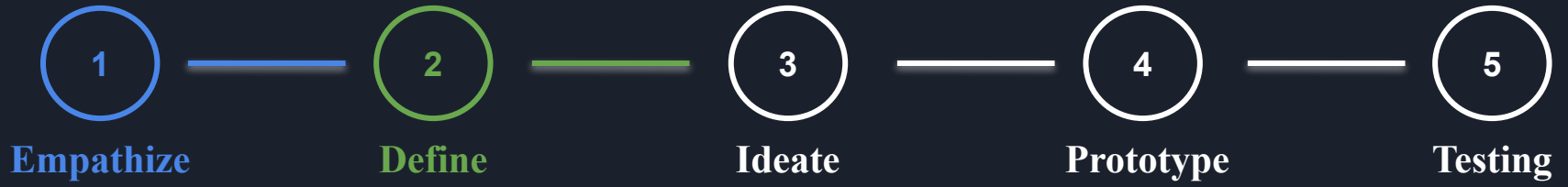
Needs Identification

1 - most important, 7 - least important

Number	Client Need	Importance
1	The application is effectively able to sort recyclable materials (mostly plastic)	1
2	The application is easy to manage	4
3	The application is easy to use	2
4	The application is low cost	6
5	The application is scalable	7
6	The application targets households	5
7	The application is accurate	3



Define





Define - Problem Statement

A need exists for recyclable materials, focusing on plastic, to be sorted more effectively with an application that is user friendly, scaleable, and cost effective for household users.



Design Criteria

Functional Requirements

- Compatible with at least one smartphone operating system
- Simple layout
- Accurate recognition

Non-Functional Requirements

- Aesthetics(colour, etc.)
- Scalability
- Game or encouragement for users to use the app

Constraints

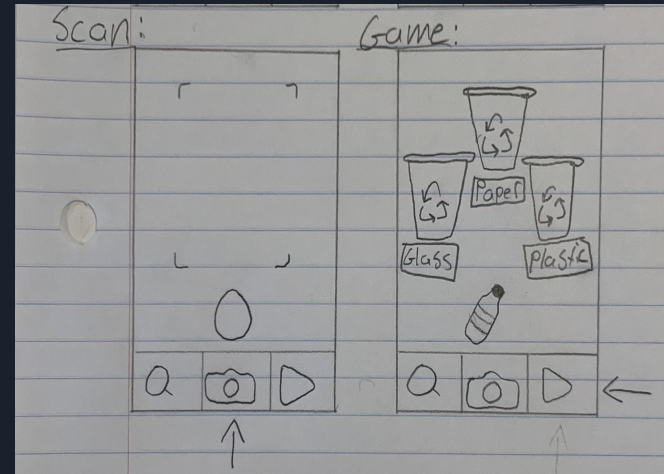
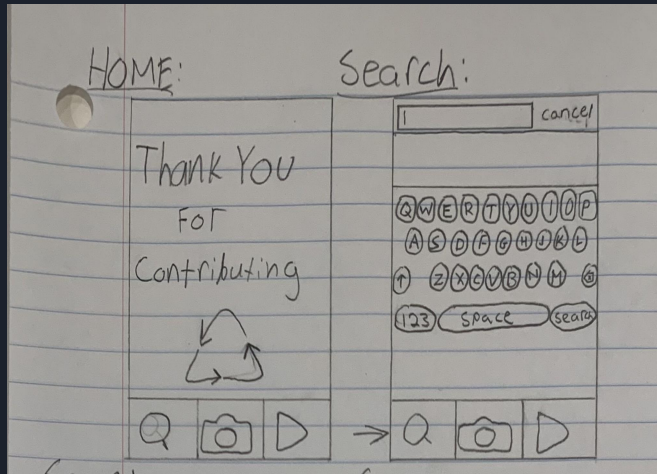
- \$100 budget
- Should be easy for everyone to use



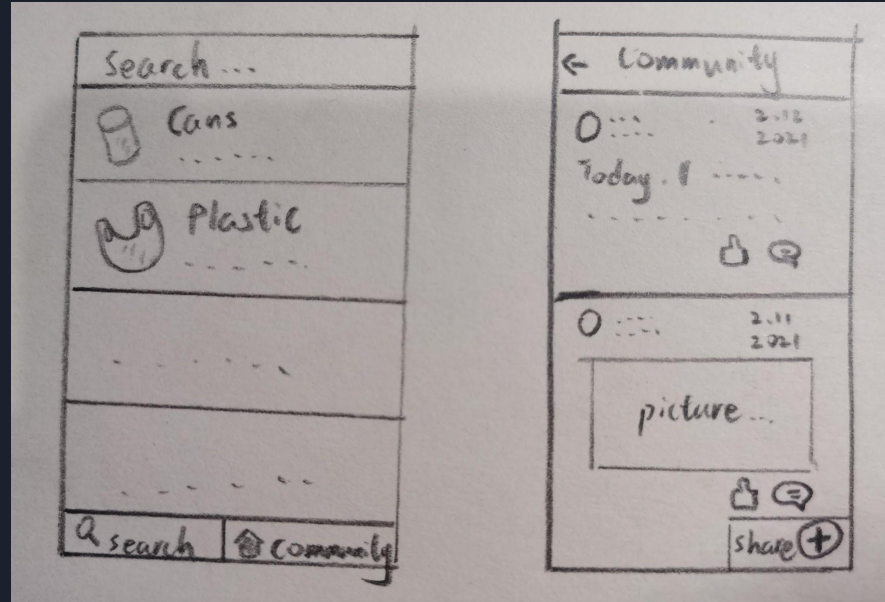
Ideate



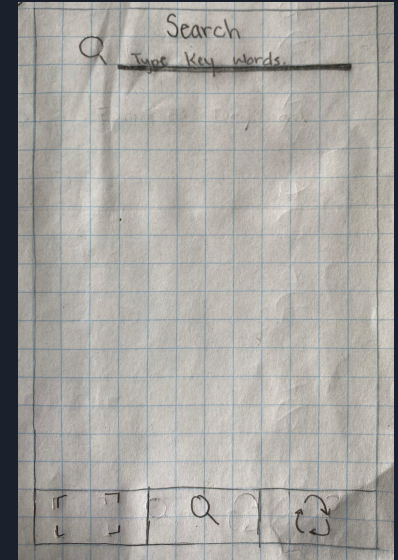
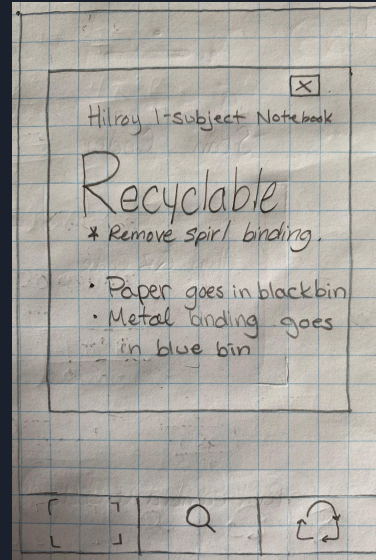
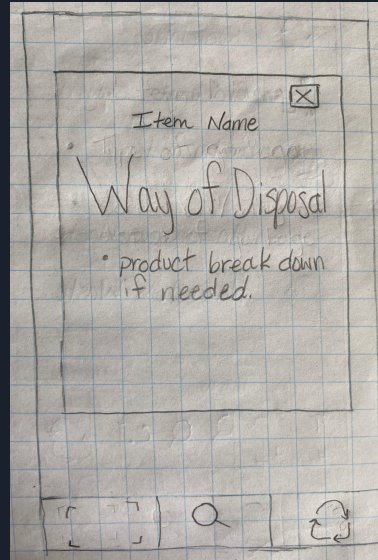
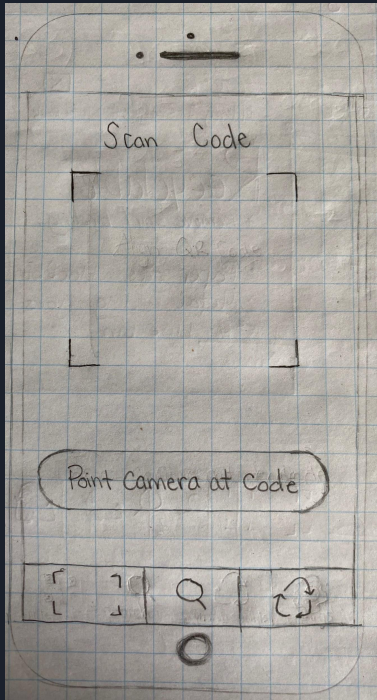
Idea 1



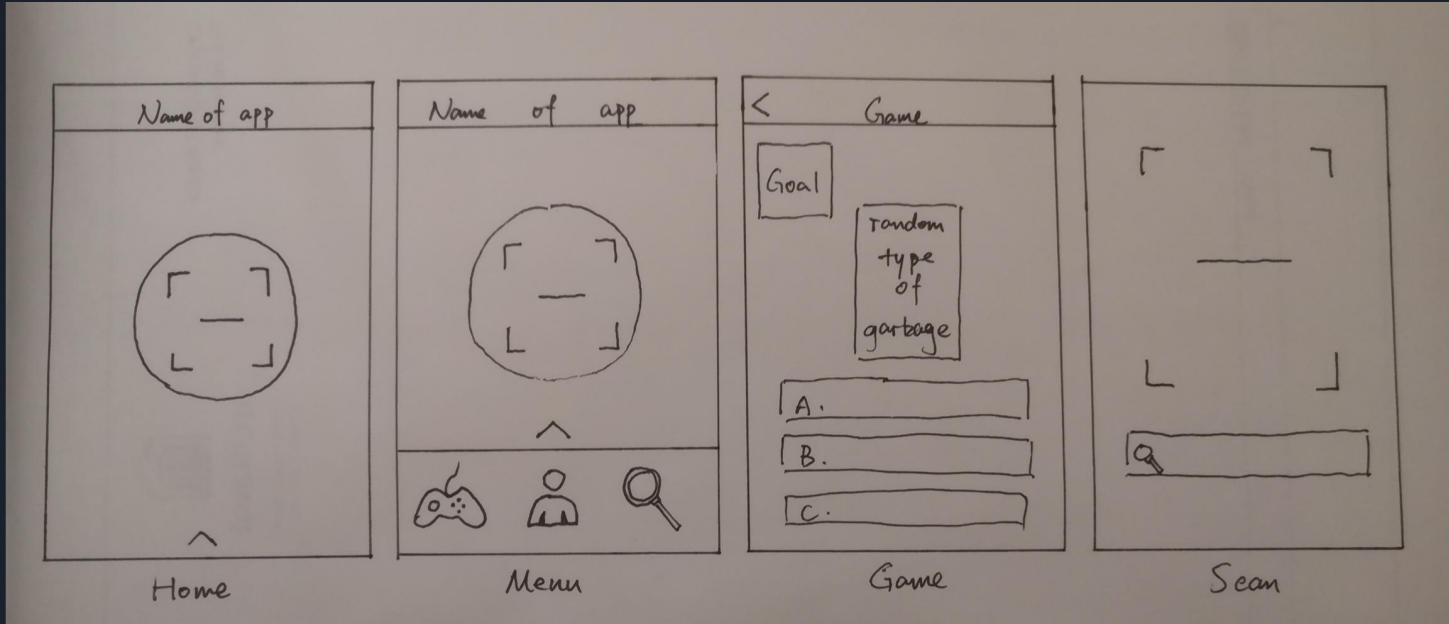
Idea 2



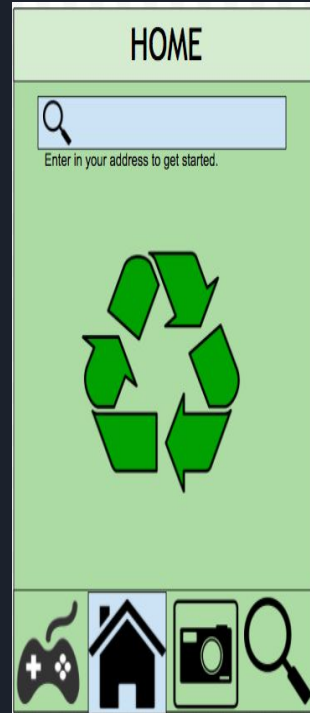
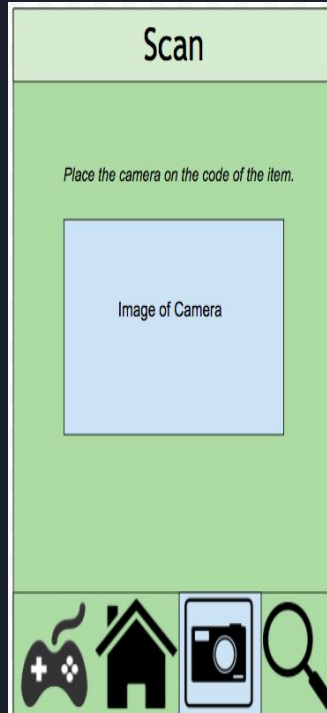
Idea 3



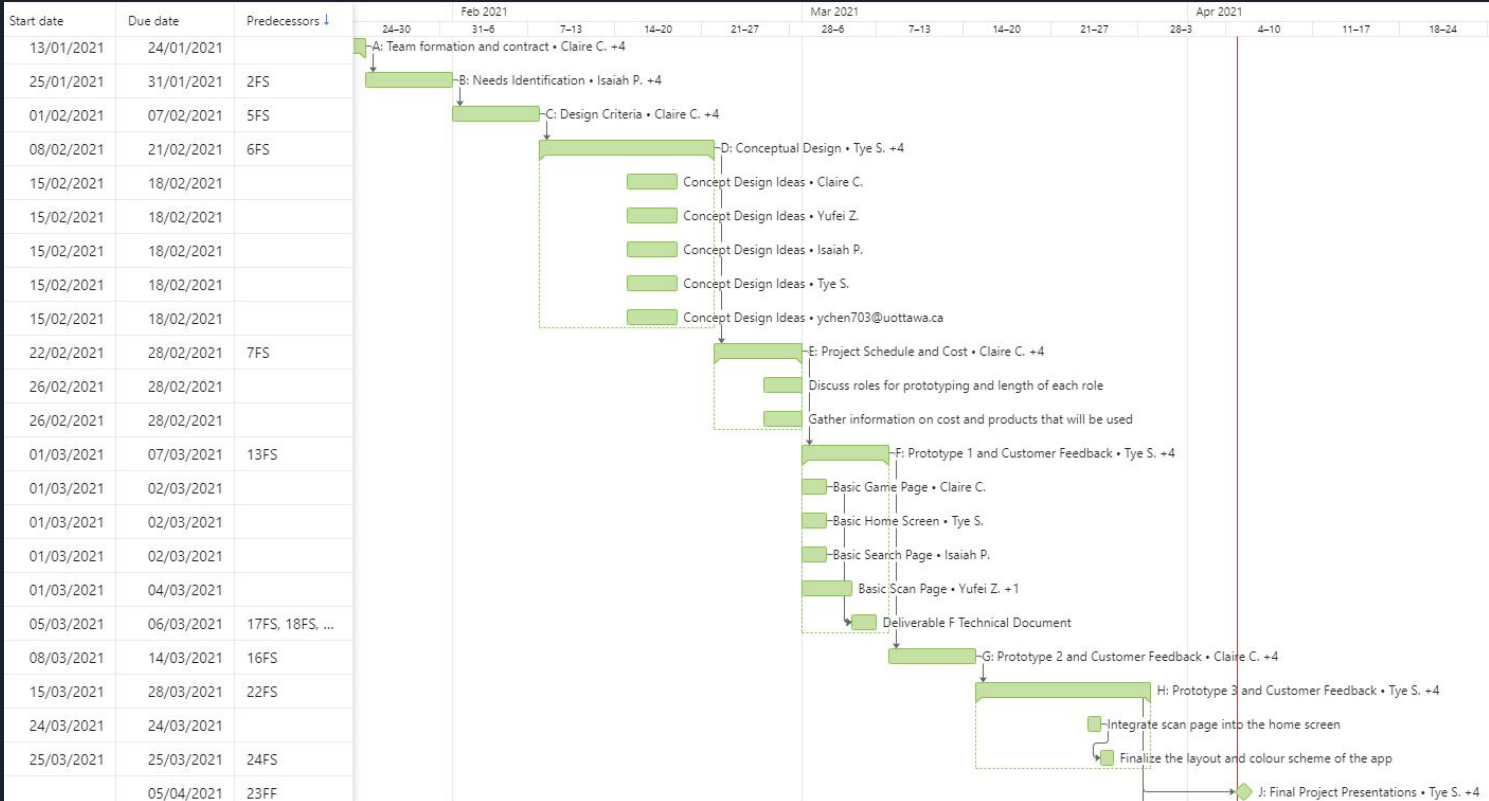
Idea 4



Idea 5



Project Plan - Schedule





Project Plan - Cost

Item	Cost	Justification
Google Console Account	\$25	Will allow us to publish our application to the google play store for users to access it on android devices.

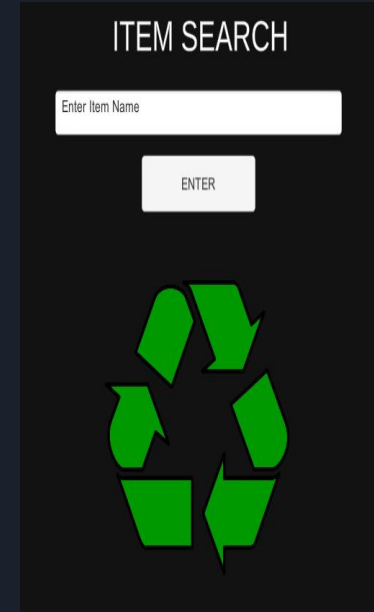
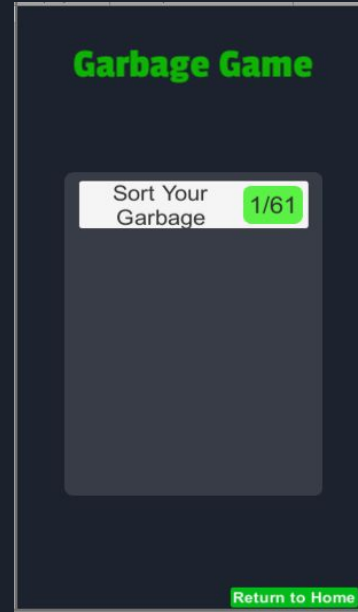
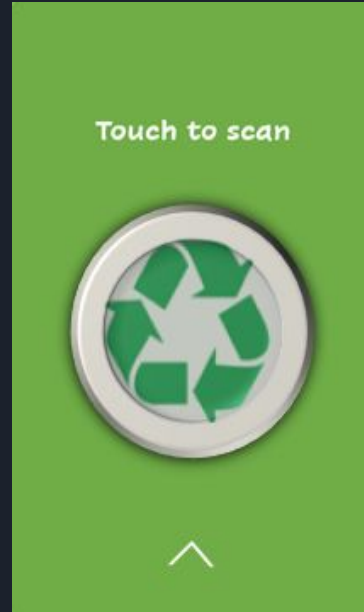
Total Amount: \$25



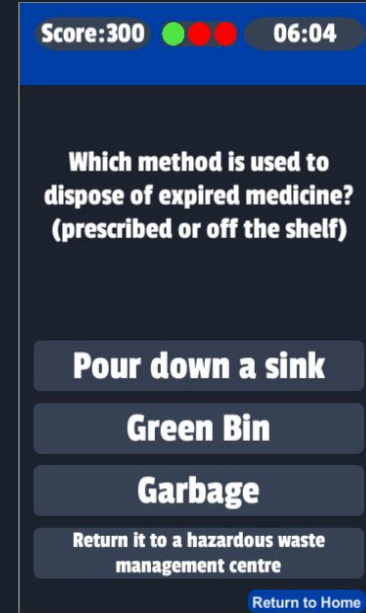
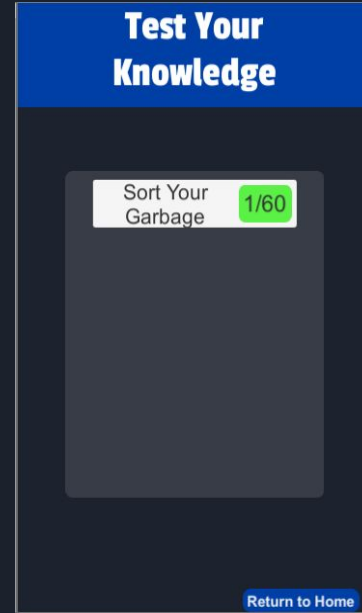
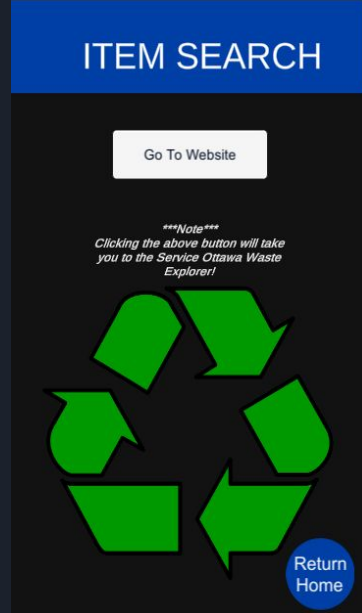
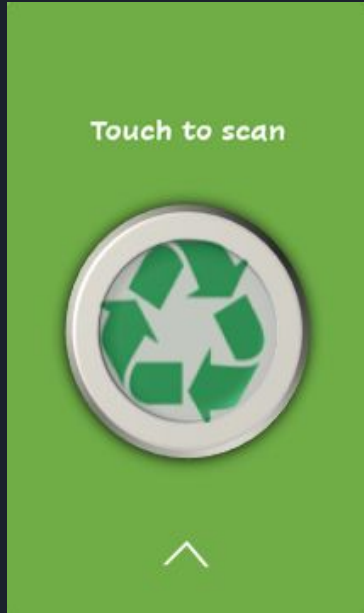
Prototype



Prototype I and User Feedback



Prototype II



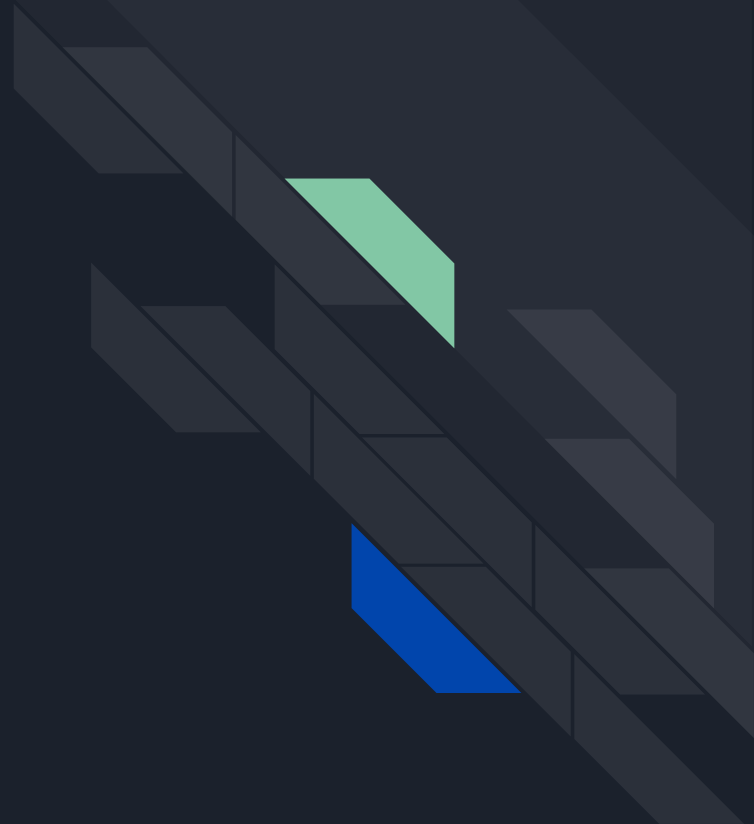


Prototype II - User Feedback

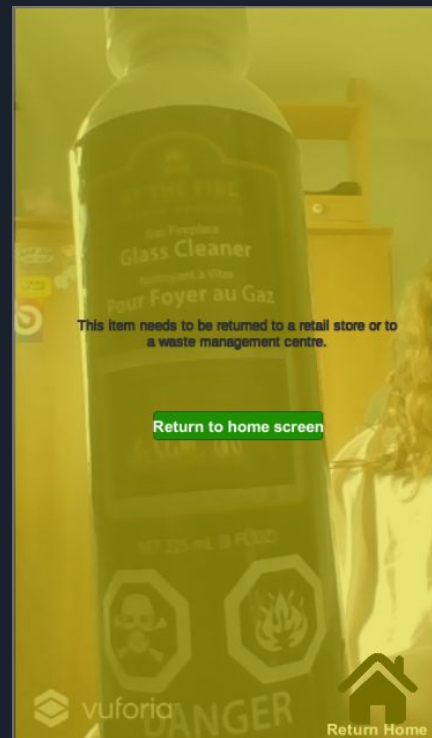
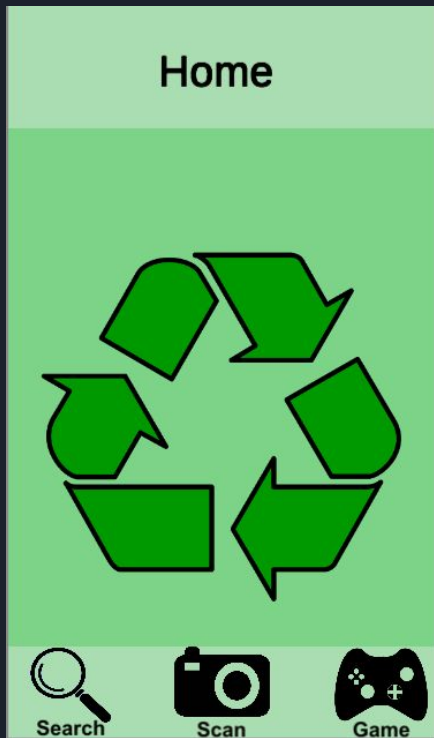
- Colour scheme did not follow through out the app
- All individual components of the app were functional
- The average user did not like the aesthetic of the app
- Users also thought there should be some layout changes
 - Button size and shape

Prototype III

Final Design



Prototype III



Prototype III

Test Your Knowledge

Sort Your Garbage

1/60

[Return to Home](#)

Score:450



06:25

Which method is used to dispose of printer paper?



Black Bin

Green Bin

Blue Bin

Garbage

[Return to Home](#)

Score: 100



06:53

Which method is used to dispose of plastic flower pots?

Blue Bin

Return to a hazardous waste facility

Green Bin

Black Bin

[Return to Home](#)



Prototype III - User Feedback

- Users liked the overall layout of the app
- They likes how the app flows smoothly between the different screens
- The app is functional when using
- As well users found the app colours easy on the eyes



Testing





Testing

- Functionality of buttons and identification of items
- Survey based on layout and colour of the application
- User-friendliness of the application
- The delay between an item being shown and the application recognizing it

*Unfortunately the team was unable to test the final app as we did not have compatible device to run the application.



Thank you

Questions?