

Deliverable C

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Introduction

After meeting with our client Mitch Bouchard, we were able to discuss the development of an effective waste management system. We were able to determine his needs for the solution and we were able to create a problem statement, these are stated in the previous deliverable B. The following deliverable contains benchmarking current waste management systems, functional and non-functional requirements, and constraints that will be used to help create a solution.

Empathize

Define

Problem Statement

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

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

	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

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

Conclusion

In summary, the solution should be able to run on at least one operating system, with a simple layout, and accurate detection skills. As well the solution should have a way to encourage users and look eye-catching when using. A good product to compare the solution to is the region of Waterloo app called The Waste Whiz which has many of the design criteria we need to meet. Some issues that have come up now are: how will our solution tell the different types of waste apart, and how similar do we want our solution to be to the Waste Whiz app. To

solve these problems we are going to hold a meeting to discuss possible solutions and further look into the possibility of creating a complex app like Waste Whiz.