Project Deliverable B

GNG 1103

Group: 7
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On January 26th, 2021, an initial meeting was held with the client, Mitch Bouchard, to gain a better understanding of the problem that he wishes to resolve. Mr. Bouchard would like to increase the recycling being done by the general public. Multiple different questions were posed to the client to empathize with him and understand his various needs for a potential solution. From this meeting, Mr. Bouchard clarified that he would like a product that can easily and quickly verify and indicate to the user if their waste is recyclable and under what recycling category it falls.

Question	**Client Statement**	**Interpreted Need**
What kind of apps does the client like?	Wants objects to light up in order to assist in finding the right bin. Game like/user friendly rather than industrial looking application.	The product needs to have a simple and understandable UI; while also the UX needs to be addicting and simple to use and understand.
Who is going to use the product?	Regular people.	The product should be easy enough to be used by anyone.
What are the sizes of objects that are going to be recycled?	Anything that would fit in a recycling bin/everyday household items.	The product needs to be able to identify everyday household recyclable items.
What are the design constraints for the app?	No design constraints, as long as the app is user-friendly.	The product needs to be accessible and user-friendly.
What platforms would be ideal for use? (ex. android, computing limitations)	Having the most users is ideal.	The product should be created in a manner that maximizes users without any unnecessary installation steps for users.
Where does the client see the product fitting in their organization?	Used in homes but, if possible, to expand to other applications.	The product should be used by the regular individual anywhere.
Accuracy of prediction?	Higher the better (95% minimum quality of material once processed).	The product should assist in the sorting process and help in improving the quality of recyclables in the end product.

Goal of the product?	Making it easier for people to recycle.	The product needs to make recycling easier for its users.
Importance to differentiate between plastics?	If possible, it would be good.	The product needs to identify the type of plastic that is being recycled.
Units (physical objects)?	Metric or imperial. Could be either, but metric is preferred.	The product needs to be in the metric system.
Complexity of solution	Simple simulation is ideal.	The product needs to be simple for the users.
Food contamination?	Should state if the product can be recycled.	The product needs to identify whether the object, which is being recycled, is food contaminated or not.

Number	**Need**	**Importance (1-5)**
1	User Interface & User Experience	5
2	Recognizing contaminates	4
3	Recognizing a diverse range of objects	4
4	Reliably recognizing an object	5
5	Having Game features	3
6	Locating places to recycle	2

Problem Statement:

The client needs a product that will ensure an increased quality of recycling by providing users with information to properly dispose of their waste products; the product should be able to be used by anyone and should be user friendly in order to ensure there is minimal inconvenience to the recycling process. As a solution, it is proposed to create a mobile application that assists users in determining the recyclability of objects and finding the proper means of recycling.