General Bearing Service

Team B03

Deliverable B - Needs Identification

Engineering Design - GNG 1103

Team Members

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Abstract

The purpose of this project is to develop an application for General Bearing Service meant for the public that will aid in the sorting of garbage and recycling. The app will utilise AR technology to achieve this goal. The client specified overall needs have been listed and ranked in terms of priority. The problem statement has also been identified as : The client is looking for a user-friendly app which can be easily used on a large scale by the public to help in organizing their household wastes into the appropriate recycling system..

1. Introduction

Recycling is an effective way to reuse materials and resources while limiting the amount of wastes that end up in landfills. At the current time, one of the greatest problems with recycling is that it is often easier for the public to toss wastes into the garbage, rather than making the effort to recycle. In an attempt to solve this problem, the goal of this project will be to develop software in the form of an app which can be used by the public to quickly distinguish which (if any) recycling category their specific wastes are. In the next paragraph, we will discuss the specific needs of this project as well as their importance.

2. Client Needs

The client is searching for a new and innovative way to make it easier for the public to quickly and easily sort their recyclable wastes into the appropriate recycling bins. It was decided that the users of our software would be the general public and that the app would most likely be used for sorting household waste. The app will need to take advantage of AR technology to sort out garbage into three categories, recyclable plastics, recyclable paper materials, and non-recyclable waste materials. The app must be widely accessible, so the goal is to have it available on iOS and Android. Since they must be widely accessible it should also be easy to use so it is not cumbersome to sort out wastes. The application should also be able to take into consideration basic recycling regulations, in this case we will stick to Ottawa's recycling rules. Below the needs are listed in a table and ranked based on importance. (1 star being the least important)

Number	Needs of the Client	Importance
1	Ability to distinguish between recyclable and non-recyclable items.	★★★★★
2	Software compatible with both IOS and ANDROID.	★★★
3	Ability to scan most household items.	★★★★
4	Easy to use.	★★★★
5	Consider basic recycling regulations.	★★★★
6	Software available in different languages	★★

3. Problem Statement

The client is looking for a user-friendly app which can be easily used on a large scale by the public to help in organizing their household wastes into the appropriate recycling system.

4. Conclusion

In conclusion, the client is requesting that we develop a cost-effective and scalable application that can recognize objects and materials to help users manage their waste efficiently.