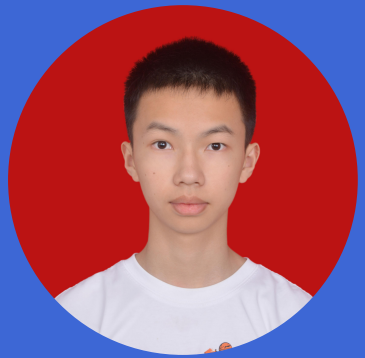
MIT
APP INVENTOR

GARBAGE SROTING ASSISTANT

XiaoYun Wang，XingYan Zuo



SUMMER APPATHON

OVERVIEW

- **App Name:** Garbage Sorting Assistant
- **App Description:** Through the program to achieve the introduction and guidance of garbage classification, improve the correct rate of garbage classification, to contribute to the global environmental protection.**Track：** Youth Team
- **Category:** Garbage sorting is convenient to second classification and is benefit to promote environmental protection.

THEME

In 100 words or less, describe the problem that you chose to address, and why you were interested in solving it. Please note that this portion of your submission will be published if you are selected as a finalist or winner.

Relevant people pointed out that compared with developed countries, China has not formed corresponding supporting regulations on garbage classification, and the mandatory power to promote garbage classification is not enough. At the same time, the whole society has not yet developed the habit of consciously classifying garbage, and it is far from enough to promote garbage classification by means of social propaganda and mobilization. In fact, China has implemented a garbage classification policy in many cities, but many people have just started garbage classification, and can not distinguish the types of garbage, and the phenomenon of wrong delivery often occurs.

INSTRUCTIONS

In this APP, we have realized three main functions, which are: garbage classification knowledge introduction, garbage identification and knowledge competition. In the garbage recognition, I also used the functions of speech recognition and photography, and I also used the screen conversion program between different screens. In the knowledge contest, I had the function of judging whether the choice was correct. The user interface of the APP software is friendly, the layout is beautiful, operability, and the conversion between pages is smooth.

INSTRUCTIONS

Step 1: Use the screen jump program, so that the conversion between the pages smooth.

Step 2: With the function of speech recognition and photo-taking, garbage is recognized.

Step 3: Introduces the knowledge of recyclable garbage.

INSTRUCTIONS

Step 4: Learn about non-recyclable waste.

Step 5: Test your knowledge of waste classification by clicking on the image shown.

Step 6: Learn about hazardous waste.

INSTRUCTIONS

The use of speech recognition, speech synthesizer, so that users can talk with the intelligent garbage sorting software to facilitate users to classify garbage, understand garbage classification, and the recycling of garbage.

LIMITATIONS

At the same time, there are still some shortcomings in this APP. If you can tell people the nearest garbage drop point in the APP in the form of a map, and provide the corresponding nearby garbage drop plan, it will help people better solve the problem of garbage classification and delivery, and further improve the function in the future.

ACKNOWLEDGEMENTS

Please list the names of anyone who helped you with developing your app, and describe what type of help they provided.

- Libing Su:Help me find the relevant information for me to solve technology-related problems when I am in trouble to give me encouragement.

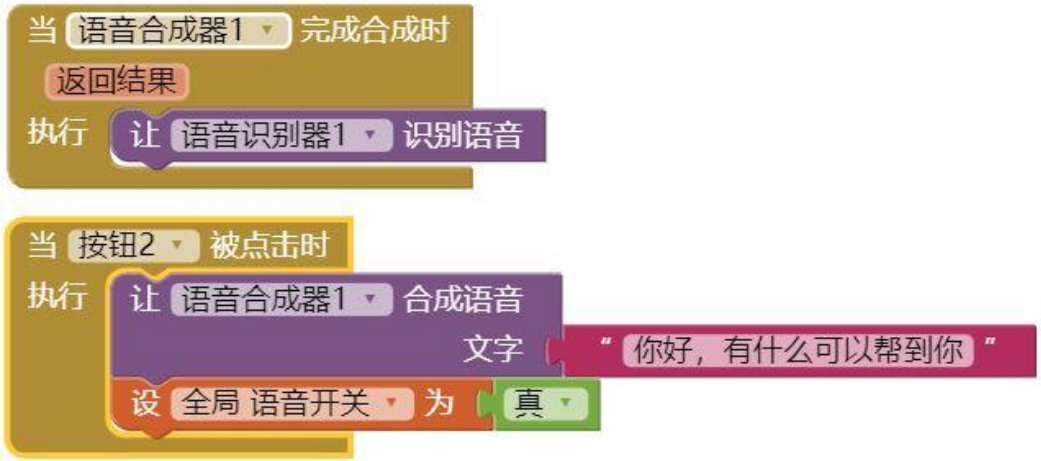
THE IMPLEMENTATION OF THE FUNCTIONS

1. Use: waste classification knowledge introduction system for people to introduce the categories of waste and all kinds of waste disposal methods and disposal points, waste introduction screen pictures and text, so that people have a deeper memory of the types of waste.
2. Design: using a screen saver, when we click on the image of the four trash cans at the top of the screen, the screen will jump to the corresponding interface to introduce the trash, so that people understand the different garbage classification methods.

THE IMPLEMENTATION OF THE FUNCTIONS

Design: add a random list and five different topics to the software. Each question will have different options, and then according to the list, choose a different answer each time. Moreover, we also set a thoughtful“Wrong answer tips” and“Wrong answer after this question increased probability” to deepen users' understanding of waste classification.

THE IMPLEMENTATION OF THE FUNCTIONS



Creative idea:“Speech recognition” utilizes speech recognition technology, which can convert the user's words into text and display it in a text input box. This not only ensures the accuracy of garbage recognition, but also brings great convenience to users.

MIT
APP INVENTOR

APPLICATION VALUE

This case aims to promote garbage classification, and integrates the convenient and flexible features of mobile application APP. Based on APP Inventor development tool, the "garbage classification Assistant" mobile application software in intelligent environment is developed. Multi-screen free conversion technology is used to achieve a variety of functions. And the interface layout is reasonable, the background is fresh and lovely. The results show that the APP has complete basic functions, obvious features, high technical content, excellent interface optimization, and wide application range. It is ready to be used in a short range of the university. At the same time, the APP has promotion value.

MIT
APP INVENTOR

THANK YOU FOR LISTENING!

SUMMER APPATHON