

RECYCLING AI

AI MASTERS
GOUTHAM AND ISHAN

Summary of ideas to present

01

**RECYCLING
SORTING AI**



INTRODUCTION

Recycling Sorting AI

Trash is sorted at an astounding rate and we have trained our AI with a myriad of training data. This includes data such a wide variety of recyclables made from numerous material:glass , plastic , polyester, styrofoam etc. The AI will perceive the world through a camera and once it takes a look at the object presented to it, it will then sort them into one of 2 categories.Recyclables and trash

Once there category is determined it will announce it to the user which permits the user to have greater knowledge of the item.





CHAPTER 1: GATHERING DATA

Description of Data

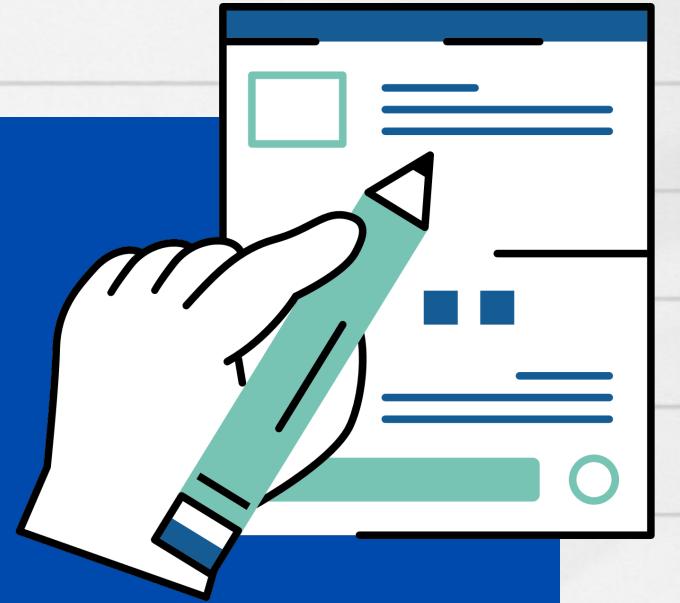
- We gathered pictures online of different types of materials used and sorted in there. We made Sure to gather as many different angles possible and as many uniques types of packaging that we found. This is necessary so as to properly get the most accurate results from our data.



CHAPTER 2: PREPARING DATA

Eg of data we gave





CHAPTER 3: CHOOSING A MODEL

TEACHABLE MACHINE

We used TEACHABLE MACHINE image project which teaches based on images from the files or the webcam. We uploaded many pictures to this model which improved its reliability and innate ability to sort recyclables

The screenshot shows the Teachable Machine web interface. At the top left is a navigation bar with three horizontal dots and the text "Teachable Machine". Below this is a large button labeled "New Project". Underneath are four project categories: "Image Project" (with three thumbnail images of a person holding a dog), "Audio Project" (with three thumbnail images of abstract audio波forms), and "Pose Project" (with three thumbnail images of a blue stick figure in various poses). Each category has a sub-label and a descriptive text below it.

- New Project**
- Image Project**
Teach based on images, from files or your webcam.
- Audio Project**
Teach based on one-second-long sounds, from files or your microphone.
- Pose Project**
Teach based on images, from files or your webcam.

We then used this with PICTOBLOX

EVALUATION





Preview [Export Model](#)

Input ON Webcam ▾



Output ↓

Plastic	1%
Metal	90%
glass	0%

We put various trash in front of the model and saw that the Machine was Able To properly identify the trash to a large extent





CONCLUSION: HOW WOULD YOU DEPLOY THE MODEL

Model Deployed to....

This can be deployed at the incineration area for trash in singapore. This will prevent any potential recyclables from being incinerated and will help to reduce the trash problem in Singapore. This refers to the overcrowding of trash in Singapore's one and only landfill.

Conclusion

- We overcame many struggles in creating and implementing our proposed model. In the grand finale we overcame such minute with the power of friendship and our intelligence
- There's lots of recyclables being sorted as trash in Singapore and they should learn more about their trash
- They were achieved with the highest degree of efficiency and accuracy

Thank You!

By yours truly,
Goutham and Ishan