SAVE PLANET

LET'S BE ENVIRONMENT ADVOCATES

'YES! WE CAN'

Contact Details

School: South View Primary School

Teachers-in-charge

- : Mrs Tan-Fun Pei Fen (9229 1410)
- : Mdm Lee Li Peng (9002 0039)

Team 2

- Erian Ee Tiek Hong (Leader) - 5V
- Tan Xuan Yu, Alexus -5V
- Tang Dongyang -5V
- Lim En Yu -5U
- Wong Guo Yao -5U
- Cecilia Cheong -5T

BACKGROUND OF THE PARTICIPANTS

12 students from the Robotics and Media Club came together to participate in this competition.

They were selected for their competency in the use of technology, interest in sustainability and collaborative skills.

BACKGROUND OF THE PARTICIPANTS

The Applied Learning Programme (ALP) of the school has a focus on sustainability.

This programme also uses Design Thinking as a framework to promote problem-solving skills and a sense of empowerment in students to identify and suggest solutions for issues related to sustainability.

Our Learning Journey

The students went through a modified design thinking process (Feel, Imagine, Do and Share) to understand situations emphatically, imagine solutions and to put their plans into action.

Their interest in sustainability leads them to make observations of their classmates and schoolmates during lesson and recess.

The students recorded their observations on a recording sheet on what problems or issues they observe.

FIDS Framework

The application of FIDS framework and artificial intelligence in solving sustainable issues

FEEL

Identifying our problem statements

Our school's dustbins are filled with waste and recyclables.

Identifying our problem statements

The team observed that the rubbish bins are filled up very rapidly throughout the day.

Recyclables account for more than half of the space occupied in the bins.

The team drew 2 conclusions after interviewing their schoolmates.

: 1) There is a lack of awareness of what should be recycled (especially among the lower primary students).

: 2) Students are not sure where are the recycling bins in school and there is no central area for recycling.

Identifying Our Problem Statements

Team 2

Green Guardians

“How might we increase the awareness and rate of recycling in the classroom.”

IMAGINE

Brainstorming possible solutions

Based on their problem statements, the team focuses on the following aspects in their prototypes and solutions

: 1) Increasing the awareness of the types of materials and objects that can be recycled.

Brainstorming possible solutions

: 2) Increasing the engagement level of students to bring their recyclables to a central recycling area.

: 3) Collection of data of recycling behaviour for more targeted approach in school programmes and events.

Our Learning Journey

As the students in the team have a stronger background and competency in the use of technology, they decided to explore the use of technology to achieve the aims mentioned earlier.

After some rounds of prototyping and testing out the prototypes through internal reviews and feedback from teachers, the teams decided to use artifical intelligence as a tool for their solutions.

DO

Our final prototypes

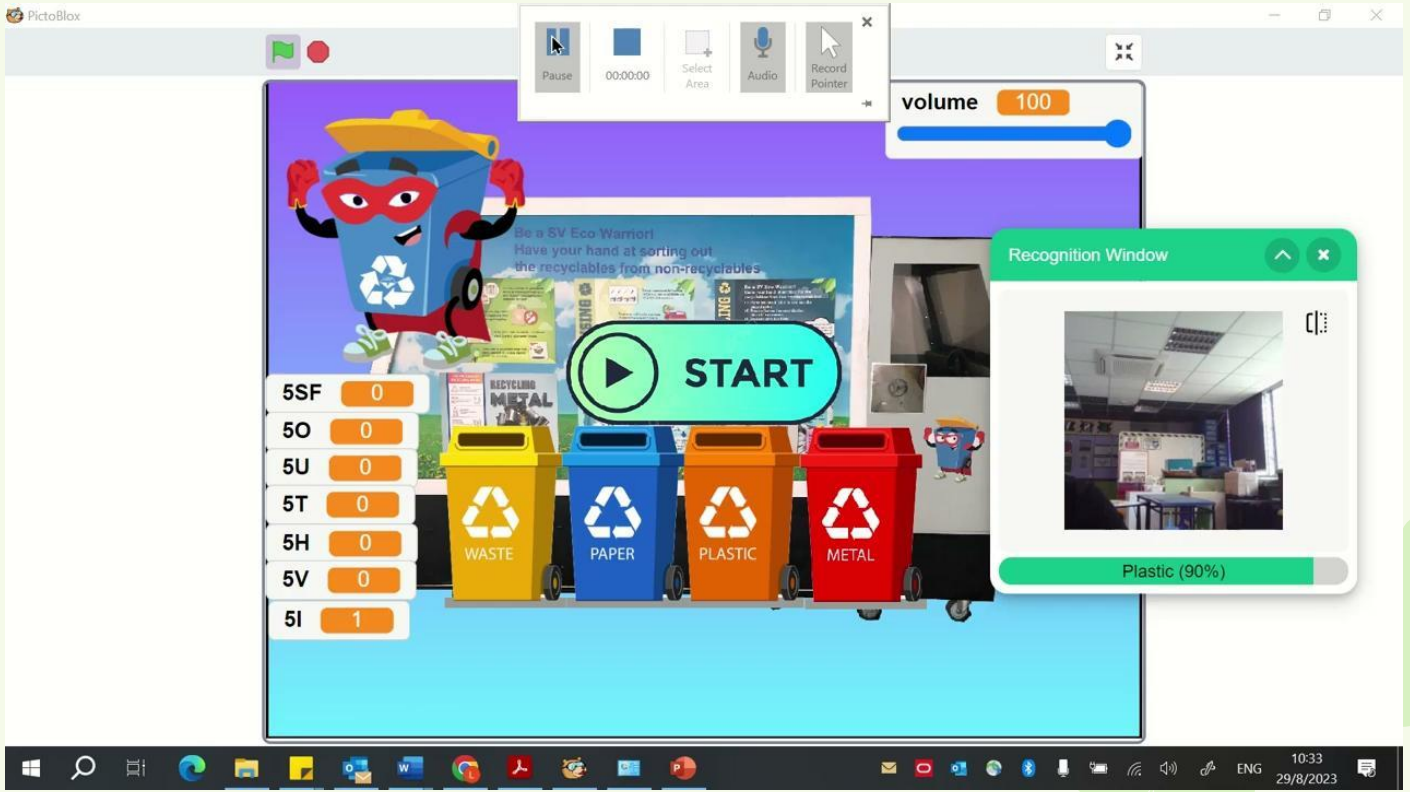
Team 2 : Green Guardians

- The class Green Guardians will bring the recyclables to the SV Eco Truck at level 2.
- They will show the recyclables in front of the camera. The recognition ability of the AI will inform you of the bin to deposit into.
- The data collected from the camera will be used to track the recycling behaviour of classes.
- The real time feedback helps to motivate students to recycle and the data collect helps the school to identify the area to work on to increase awareness of recycling.

Team 2 : Green Guardians

DO

Our final prototypes



DO

Our final prototypes

Team 2 : Green Guardians

- As the school will like to increase the engagement level of the students, it is important that the school is aware of the recycling behaviour from each class/level.
- The chat bot will allow engagement to take place as it initiates a conversation with the students who deposit the recyclables.
- The information and the feedback obtained from the students will help the team to collect data and improve on the accuracy of recognising the material.

SHARE

Collection of Data

TEAM 2 Implementation Term 4 Wk2-5 (Recess)

Students are to use the **staircase near Tink!SV** to go up to second level to deposit your recyclables.

SHARE

Collection of Data

TEAM 2 Implementation Term 4 Wk2-5 (Recess)

SV Eco Truck @ 2nd floor near Science Lab

The class Green Guardians will bring the recyclables from the classrooms during recess.

In this era of rapid technological advancements, we can harness A.I creatively to tackle the issues related to environmental concerns. The teams are convicted that when used with the right ethics, A.I allows us to be more productive and efficient for the betterment of the society and nature.