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 I

- Neo Zhiyi, Kleon (Leader)-5H
- Kum Jia Jun, Justin -5T
- Mason Weng Chaoyu -5T
- Gladys Seah Xue Lin -5H
- Raylen Lim Kai Xuan -5I
- Nur Qistina Mohd Rozlee -5SF

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.

Team 1 drew the following conclusion 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 1

R^2 - RoboRecycle

"How might we increase the awareness and rate of recycling in the canteen."

IMAGINE

Brainstorming possible solutions

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.

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

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.

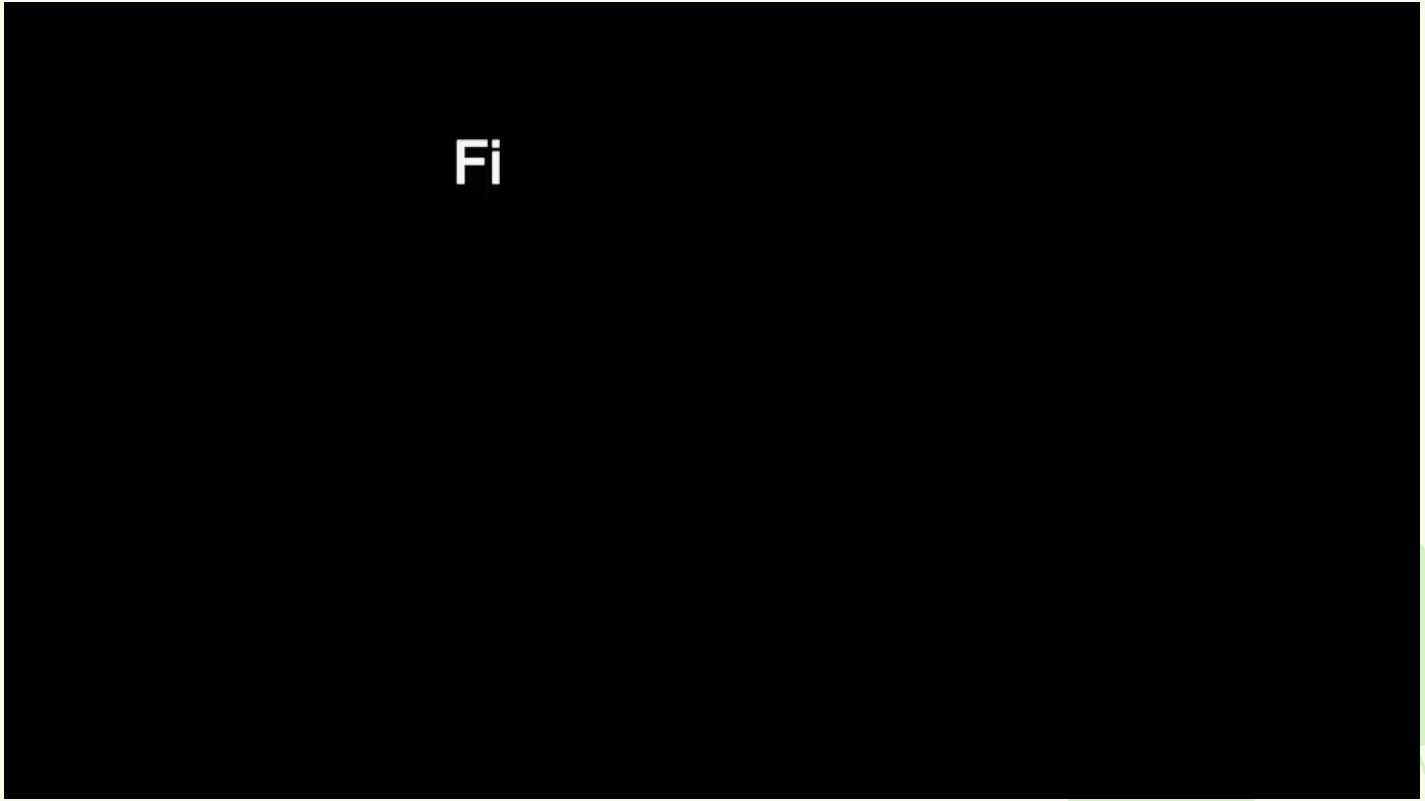
Our final prototypes

Team I : R^2 - RoboRecycle

- Making use of AI to help increase awareness among students of what materials are suitable to be recycled and how to recycle right.
- A Quarky robot will be programmed to engage students on recycling.

Our final prototypes

Team I : R^2 - RoboRecycle



Our final prototypes

Team I : R^2 - RoboRecycle

- This is aimed to increase awareness of the materials that can be recycled.
- It will also serve as a conversation starter on objects that are made of composite materials or the different types of plastics that can be recycled.

SHARE

Collection of Data

TEAM I Implementation Term 4 Wk2-5 (Recess)

RoboRecycle team will be having a booth in the canteen (infront of TV).

You can take a look at how the quarkybot can identify and encourage you to play a part in recycling!

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.