



**Prize Winner**

# **Computer Programming, Apps & Robotics Year 5-6**

**Carter Camilleri  
Sethanial Jimenea**

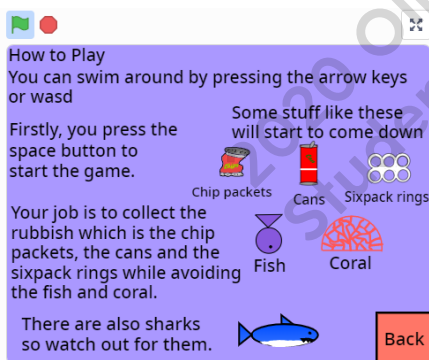
**St Augustine's Parish School**



# Climate Changer

Our Computer Programming, Apps and Robotics entry is a simulation of picking up rubbish in the streets and the ocean. We hope this helps kids understand what rubbish is, what bin you should put it in and how damaging it can be if it ends up in the ocean. The scientific purpose of our game is to teach and inspire future generations to look after the oceans and become better at recycling. The game will be available on Scratch, and we have also taken it around to various classes in our school and showed many students and teachers about the game. We would love for the game to be used in all Primary Schools in Australia and to make a change in the way people see the environment.

The first game is called Ocean Clean-up. In this game, your job is to swim around and collect all the rubbish before it reaches the fish. At the same time, you need to avoid the ocean debris that belongs in the ocean such as other fish and coral. There are also sharks which you will have to watch out for. You use the arrow keys to move around. On the bottom of the Ocean Clean-up game button, there is another button which you can press, and it will take you to the information page. On the information page, you will learn about cans, fish, six pack rings, coral, chip packets, sharks and how they affect the ocean. It will also tell you how to play the game.



The next game is called Rubbish Sorter. Rubbish Sorter is a game where you learn where rubbish goes and what different bins the rubbish or recycling go in. You do this by clicking on the info button in the bottom right of the screen and then selecting one of the circles. For example, you can select the pizza button which tells you information about pizza boxes.

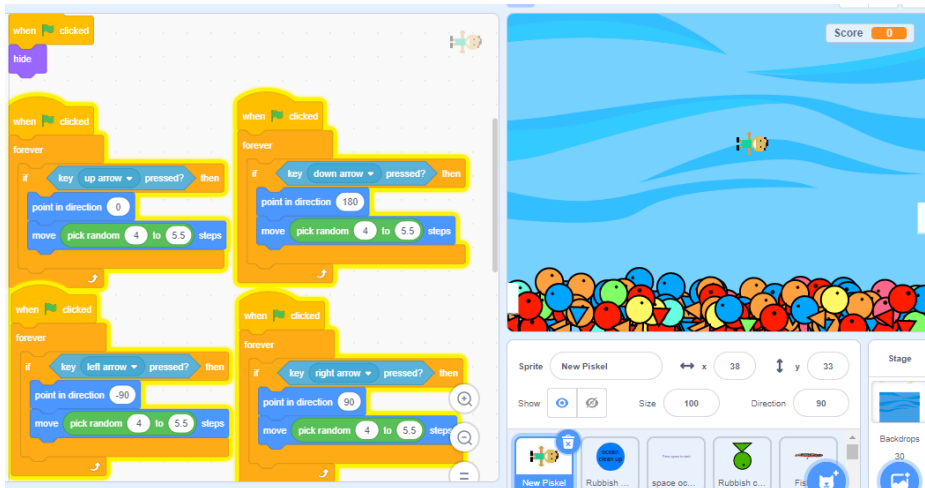
You can also click on the waste, recycle or organic buttons to tell you what goes in each bin. You learn where it goes and what could happen when you choose the correct bin. To play the game, you will have to drag the rubbish and put it in the correct bin. There are also strikes. If you put some rubbish in the wrong bin, you will get a strike. If you get three strikes, it is game over.

### Hard Copy of Program



This is some of the code of the rubbish in the game Rubbish Sorter. What it does is make it, so you get points or strikes when you get it right or wrong. It also makes the rubbish move show and choose a costume to use.

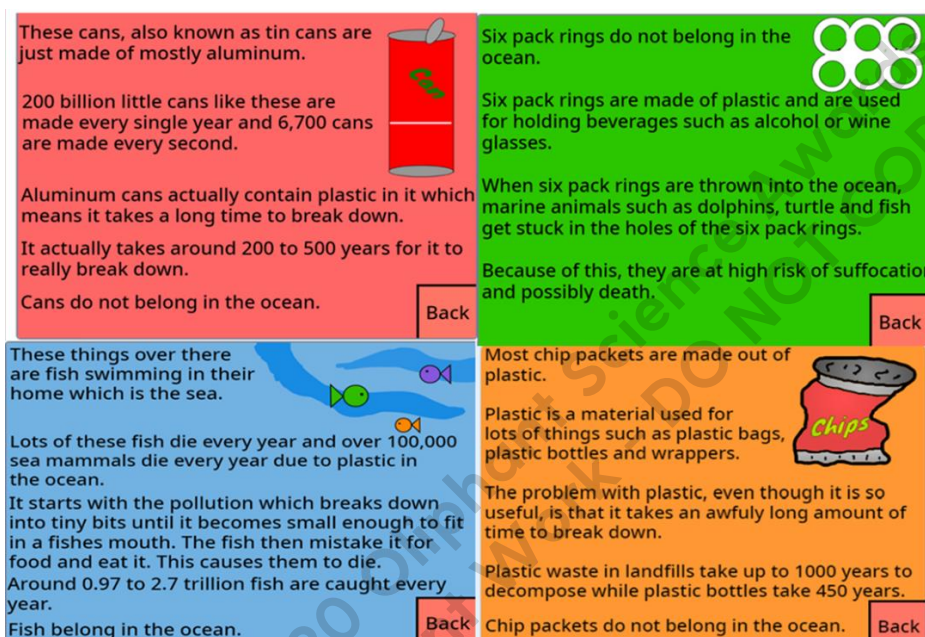
This is some of the code that helps the game run. When the rubbish touches the bins, it will figure out whether or not the rubbish is going in the correct bin. It tells this by reading the costume number and then reading what bin it should go in.



Here is a picture of the code in the game Ocean Clean Up that makes the person move.

The person moves at a random speed of four to five point five.

When one of the arrow keys is pressed, the person points in the direction of whatever key is pressed.



These are some information pages from the game Ocean Clean Up.

When you press the information button, it will take you to a screen where you can learn about cans, six pack rings, fish, chip packets, coral and sharks.

They highlight the problems with the different types of rubbish and it tells you some facts.

Acknowledge any external support

In our first game Ocean Clean Up we used pixel to create a human as a sprite.

To visit this game go to

<https://scratch.mit.edu/projects/369876963/>

# Bibliography

## Ocean Clean Up

Ocean.si.edu

[www.theoceanadventure.com](http://www.theoceanadventure.com)

www.fishcount.org.uk storage.neic.org

www.theworldcounts.com Fish Count

## Rubbish Sorter

BTN

**Designed, created and made by Carter Camilleri and Sethanial Jimenea.**

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