

## **Prize Winner**

# Programming, Apps & Robotics

## Year 7-8

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Department of Defence





#### COMBATTING OCEAN POLLUTION - COMPUTER PROGRAMMING

Saheli Dissanayake – Seymour College, Year 8

#### **AIM OF ENTRY**

Ocean pollution is a prevalent issue in today's world. Every year, over 8 tons of plastic is dumped into the ocean and by 2025, this number is expected to double. While studies show that one million seabirds and 100,000 marine mammals die every year from plastic ingestion, even the food we eat contain microplastic which is having significant impacts on people's health. With the problem of plastic pollution at an all-time high, with much of it ending up in our oceans, marine life is facing detrimental effects from microplastics in the ocean.

The aim of the entry is to raise awareness of this problem and long term effects of plastic pollution, maximize interventions and provide an interactive way to encourage everyone to play their part to reduce the impact of plastic pollution.

#### SCIENTIFIC PURPOSE

The scientific purpose of my entry is to explain the scientific process of what happens to plastics and modelling ways to end plastic pollution.

#### **POTENTIAL APPLICATIONS**

Potential applications for this program are to use as a gamification tool to build awareness and to encourage action to prevent ocean pollution.

#### TYPE OF DEVICE REQUIRED TO RUN THE PROGRAM

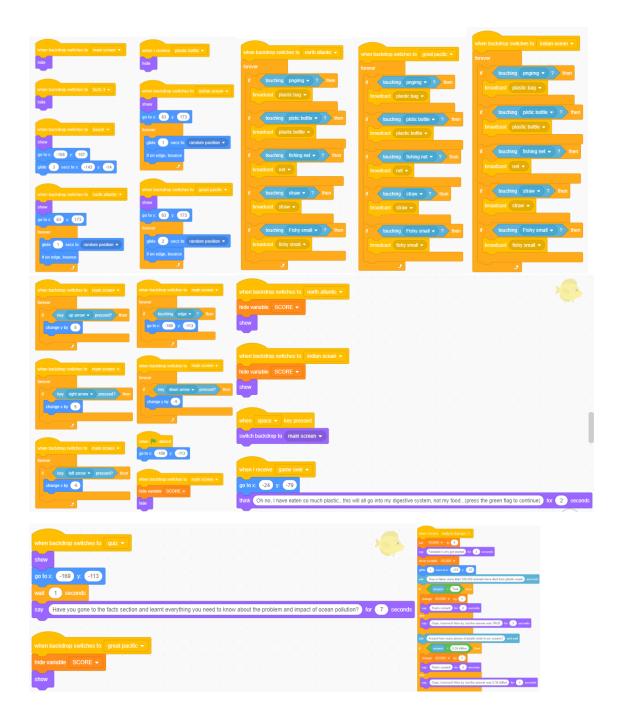
To run the program all that is needed is to follow this link on a browser connected to the internet –

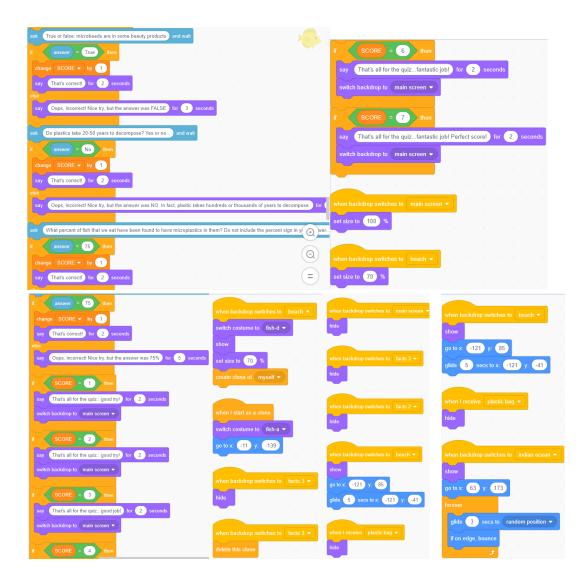
#### **INSTRUCTIONS TO USE THE PROGRAM**

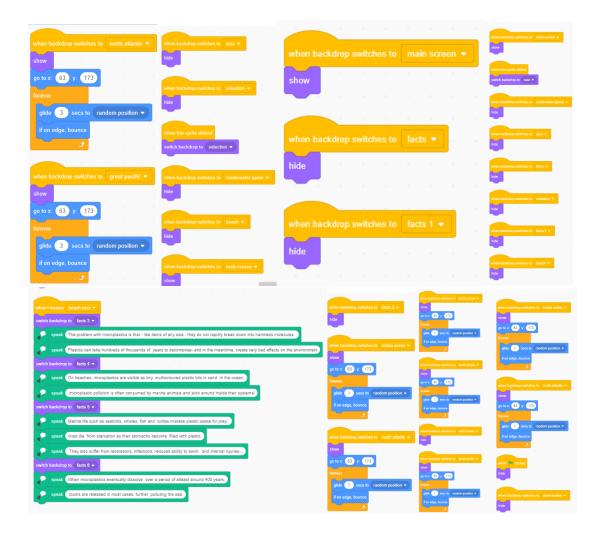
- 1. Follow the link- https://scratch.mit.edu/projects/861015564
- 2. Press the green flag to start the program
- 3. Follow the instructions in the description

#### **PROGRAM EXPLANATION**

The program was created using Scratch SP3.







#### ACKNOWLEDGEMENTS

My mum helped me with testing the program to ensure it was robust and handles incorrect input as appropiate.

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