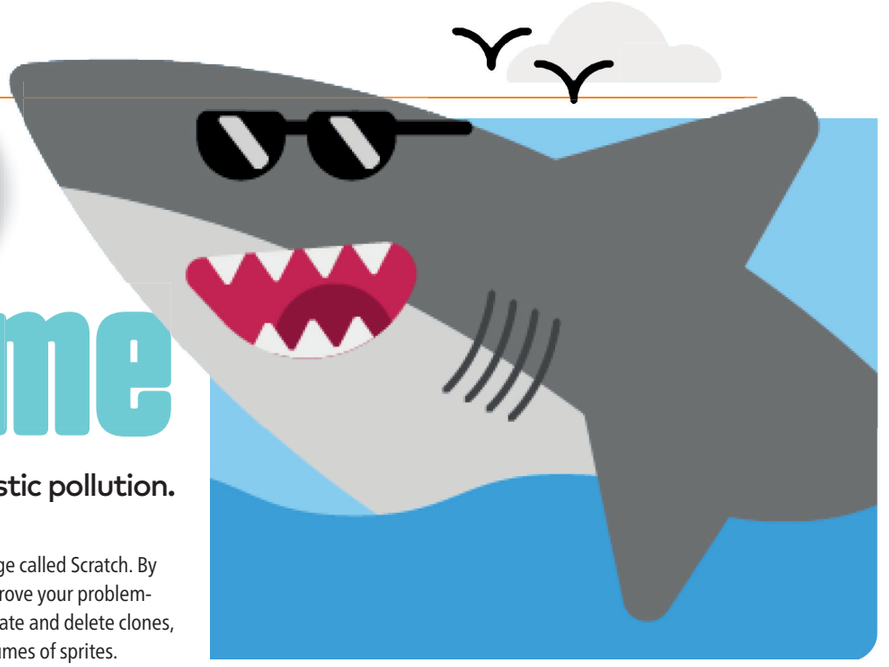
Build a shark game

Coding club



Wow your friends with this game about plastic pollution.

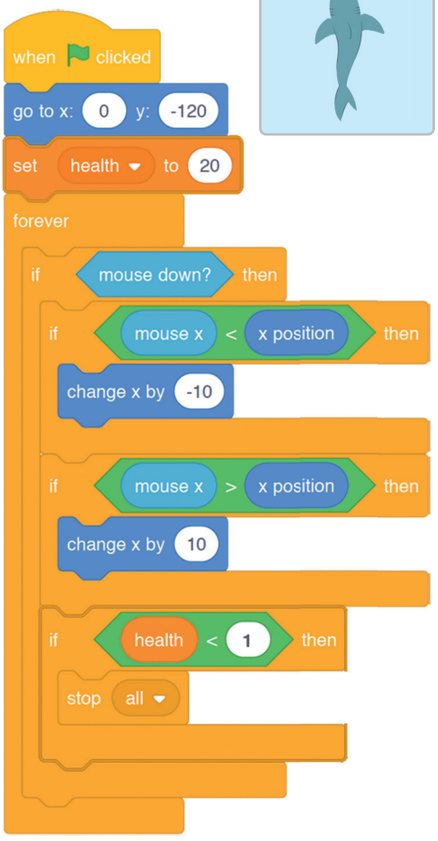
What you will need:

- A computer
- Access to the internet
- Lightning-quick reactions

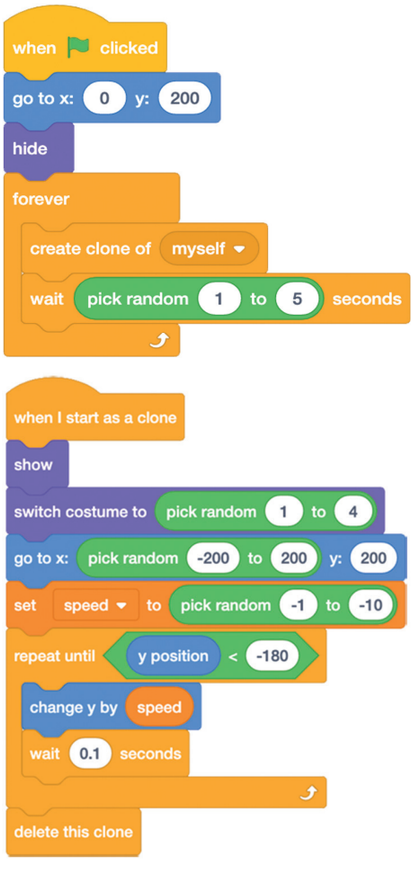
How does it work?

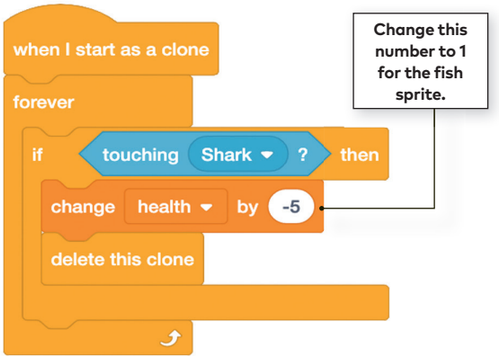
This project uses a free, online coding language called Scratch. By creating programs using Scratch, you can improve your problem-solving skills. This game teaches you to generate and delete clones, and use random numbers to change the costumes of sprites.

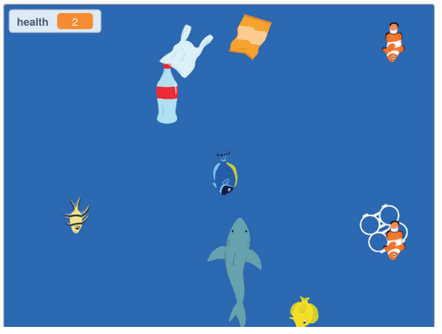
Shark code



Plastic and fish code







Instructions

1 First, go to rpf.io/save-the-shark-on to open the starter project in Scratch.

2 Click on the shark sprite (icon) on the right-hand side of the screen. Build the shark code by selecting the colour-coded blocks from the menu on the left-hand side of the screen. Drag the blocks onto the blank space and snap them together to make the program. Check each line carefully.

3 For the third block, you'll need to use the "Make a Variable" button. Label the variable "health" and select the "For all sprites" option.

4 Now, click on the plastic sprite, and build the code above. You will also need to make a new variable for this, named "speed".

5 Finally, add a new sprite next to your shark and plastic sprite, by clicking the "Choose a Sprite" button and selecting the fish.

6 The code for the fish is almost the same as for the plastic sprite. Drag and drop the blocks into the fish icon to duplicate. On the final set of blocks change the "health" number to 1 instead of -5. The game is ready!

The Raspberry Pi Foundation is a UK-based educational charity working to put the power of computing and digital making into the hands of people all over the world. Discover more step-by-step coding projects at rpf.io/

Raspberry Pi Foundation

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