Deep Sea Diving

Let's go into the ocean and see what we can find. This game is showing the use of key presses to make fluid movements in your sprites, and using randomisation to release targets to capture. As always, if create your own theme or develop on ours.

The Submarine (Catcher)

One of the first things we want to do is tell the Submarine where we want it to start (use your own x and y co-ordinates to your desire), and how we wish it to rotate later. Otherwise, we may get a Submarine upside down rather than swapping left-right.

Show just allows us to ensure, if the Submarine is ever hidden it will always appear on the start of the game.

You can use the Scratch – When "Up" is pressed – event etc, to program the keys, but it can be quite clunky in its movement, here is a code that allows fluid movement for your sprite.
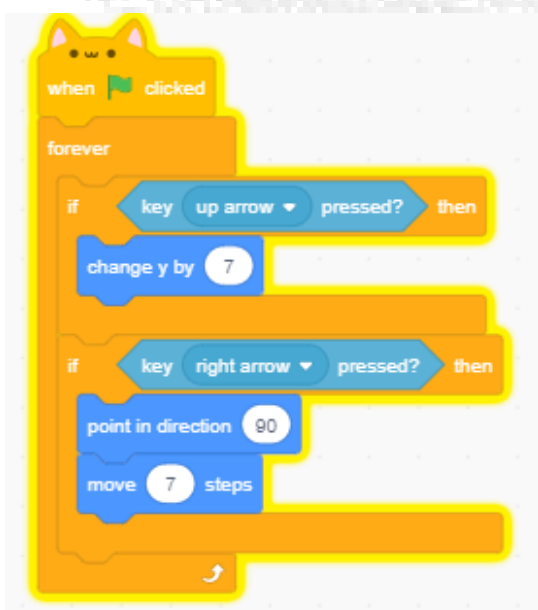
This codes the up and right arrow, can you add the left and down yourself into the forever loop. I will give you and hint. It is all the same except a negative number is used on the -change y by- and -point in direction- motions. i.e -90 and -7

Awesome, now your submarine should be moving around the play area, smoothly. Now to program the bubbles.

The Bubbles (Targets)

The bubbles, will need to appear randomly, rise to the top of the screen and disappear, unless caught by the Submarine. We will use clones to create the bubbles, and set their locations differently each time. To create a clone, add this script into the bubbles coding.

This will hide the sprite, and allow the clones to do the work.

Setting the -pick random- will mean the bubbles will appear and rise randomly in the amount of seconds you choose.

Now for the clone.

Randomising only the X axis will mean the bubbles start along the bottom of the play screen every time.

This means when the bubble rises up to y 200 (which is the top edge of the play screen), it will disappear and delete itself, rather than continuing to rise

Now just to add an "if then, else" statement for when the Submarine touched the bubbles, this is where you can add a score system, using variables, to keep track of how many you catch.

That's the basic mechanics of the game, now for some challenges.

- Add a score system.
- Could you add a levelling system, using broadcasting, so the background changes if you reach a higher score and makes the targets move faster.
- What about adding some dangerous bubbles, that take points away.

All Done?

Once you have finished the project please share it and add to the Home Study studio, this will allow our mentors to see your work and we can work together to build upon it.

Below are the instructions on how to share a Scratch Project and add to studio.

Go To "My Stuff"

Click on the name of you project.

A page for the project should open, this gives you the option to add instructions and notes.

If the project isn't shared, there should be an orange banner at the top of the screen with a button. Click the "share" button.

Once the project it shared, you can click the "add to studio" button at the bottom left, and add to "Home Study".

Now it is shared and on our studio.