FISH GAME - Tutorial

From http://kata.coderDojo.com : Created by Pam O'Brien - Drogheda CoderDojo

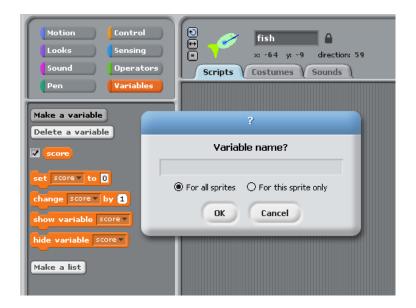
02/06/2012 - Modified to include some basic step-by-step instructions for Clonakilty CoderDojo - **Margaret Deegan**.

This project is a game with 2 characters, a shark and a fish. The aim of the game is to move the shark so that he can eat the fish. When the shark is touching the fish, the fish disappears and the score goes up by 1. We use hide to get the fish to disappear. The fish will reappear at a different part of the screen.

1. Open a new Scratch Program

2. Variables

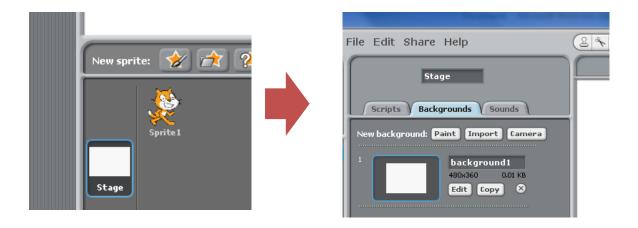
A new feature in this project is the score variable. This variable is created in the variables block. Once the variable is created you can set the value, change the value etc. Click on make a variable and then put score in the variable name.



3. Background

We have 2 backgrounds - the first is the standard aquarium and the second is a copy with 'Game Over' text.

- Click on **STAGE**.
- Select the Backgrounds Tab then Import.
- Select the **Underwater** Background in the **Nature** Folder.

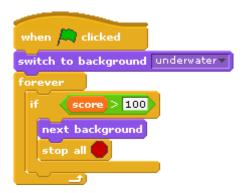


- You may need to delete the plain white background. (Click on the x beside it).
- To create the **GAME OVER** background **Copy** the underwater Background. Then **Edit** underwater1.
- Select the **FILL TOOL** "tin of paint" icon Click on the red square colour and then click on the Blue colour on the background. It should all turn red.
- Now add some Text click on the T "text" icon. Type "Game Over". Enlarge the Font Size and position the text to the centre of the Background. See image below.
- Click OK.



4. Script for background

- Now add the following Script for the background.
- You will need to use the ">" operator and the "score" variable your created.

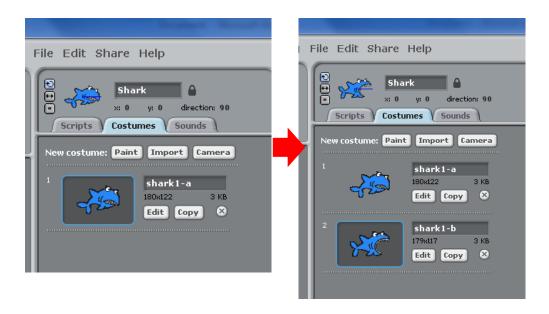


5. Shark

- Now you will firstly need to delete the Cat Sprite. Right click on the Cat and select "delete".
- Then Choose new sprite from file.



- The shark has 2 costumes to make it look like he is opening and closing his mouth. You will find these in the "Animals" folder.
- Select "shark1-a" then give it the name "Shark".
- To add the second shark costume click on "Import" then select "shark1-b".



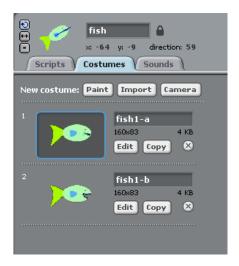
6. Script for Shark

Now add the following script to the Shark.



7. **Fish**

- The fish has 2 costumes to make it look like he is opening and closing his mouth. He moves randomly which is achieved by the 'turn pick random ... degrees'. the 'go to x pick random ... y pick random ...' makes him reappear in a different part of the screen.
- As for the shark you need to add a new sprite "fish1-a" then Import the second costume "fish1-b".



8. Script for fish

```
when clicked

show

forever

move 20 steps

turn pick random 1 to 10 degrees

next costume

wait 0.5 secs

if on edge, bounce

turn pick random 1 to 10 degrees

if touching shark ?

change score by 10

hide

wait 3 secs

go to x: pick random -240 to 240 y: pick random -180 to 180

show
```

9. SUGGESTIONS FOR FURTHER WORK

- See if you can add some sound for when the shark gobbles the fish.
- Add some more fish to the screen maybe allow them to be eaten by the shark also but with more points!! Get them to appear at different times.