

Homework Assignment

20



DP
EDUCATION

Coding School



For project 20 homework, you are making a game. Here...



Dolphins need to catch small fish. Each fish gets 10 points.

If the dolphin touches the jellyfish, 2 points will be

If the dolphin is touched by the shark, you will get Play

Each time the Play Again message is received, a new jellyfish joins

You've got the sprites mentioned above on the splash screen you get (by using Setup1)..



Enter Dolphin by Make new sprite. Place the dolphin around (300,40). Adjust the size of the dolphin to 60.

```
while [up pressed]
  ✓ up
  down
  left
  right
```

Dolphin by arrow keys, arrange it moveable in all four directions

```
+ when [1 fish touches 1 fish]
```

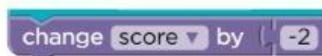
When the dolphin caught the small fish,

- The small fish should go 200 pixels east.
- Also the small fish should go 40 pixels to the right.
- Score should be increased by 10.
- Score should appear on the screen.



When the dolphin touches the jellyfish

- The dolphin must go 20 pixels west.
- Score should be reduced by 2.



When the dolphin is caught by the shark,

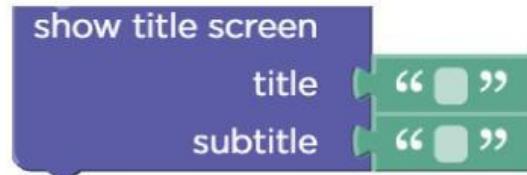
- The shark must leave.
- The small fish should leave.
- The Play Again Button should be displayed at (200,200).
- The size of the Play Again Button should be 150.



When click Play Again Button,

Setup 1 [edit](#)

- Run Setup1 in Functions
- The Play Again Button should be removed.
- Clear the title screen.



// Each time the Play Again Button is clicked, a new Jellyfish is added, making the game harder. What coding would you add to make it a bit easier? //

E.g. - When a jellyfish is touched by a shark, the jellyfish moves away

Answer the following questions to test your knowledge of this project

Click on correct answer.

1) When the dolphin touches the small fish, you get 10 points. What are the blocks used to show the number of points you get on the screen?

show title screen
title
join
“score”
“score”
“10”

show title screen
title
join
“score”
0

show title screen
title
join
“score”
“score”



2) When you click on this, when you start the game again, what blocks should be added to the score you got before to 0 points?

set score to [score]

change score by [0]

set score to [0]



3) Every time you click on this a jellyfish will be added so the game will become difficult. What code should you add to make it a bit easier?

make new [starfish] sprite at [200, 200]

remove [starfish]

make [3] new [starfish] sprites

4) Select the corresponding set of blocks to receive a medal and a sound when your score equals 100.

if [score = 100]
make new [medal] sprite at [350, 350]
set [medal] size to [50]
play sound [sound://category_achievements/lighthearted_bonus_objective_1.mp3]

if [score <= 100]
make new [medal] sprite at [350, 350]
set [medal] size to [50]
play sound [sound://category_achievements/lighthearted_bonus_objective_1.mp3]

if [score = 100]
make new [medal] sprite at [350, 350]
set [medal] size to [50]
play sound [sound://category_achievements/lighthearted_bonus_objective_1.mp3]

5) If the shark were to touch the dolphin, the dolphin was set to move away, when you click on this, in addition to the blocks you have added, what new blocks should you add if the same events occur?

make [3] new [fish] sprites

make new [fish] sprite at [200, 200]

create [burst] effect with [10] [fish] sprites