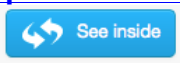
CodeClub activity checklist 06/07/2015

REMEMBER TO SAVE YOUR PROJECT IN YOUR HOME FOLDER!

You are going to learn how to make a game, in which you'll use the mouse to navigate a boat/car to a desert island/finish lane.

Preparation

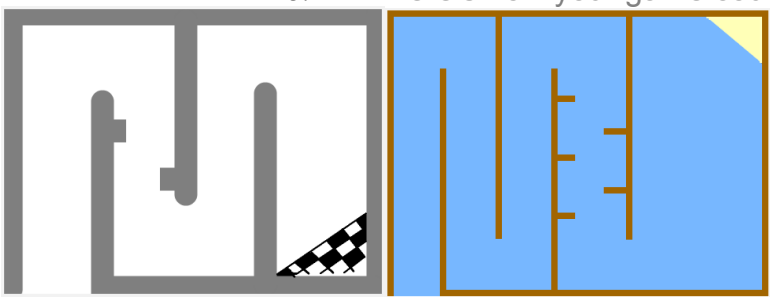
1. Take your laptop
2. Log in
3. Check the battery. If remaining time is lower than 1 hour, change laptop.
4. Start Scratch (go to Computer->Student Share folder->Code Club and double click on the link to Scratch website)
5. Upload the project saved from last Monday (check in your home folder or in Code Club folder)
6. If you were not here last Monday or you can't find your saved game:
   a. Go to **https://scratch.mit.edu/projects/69539208/**
   b. Click on 

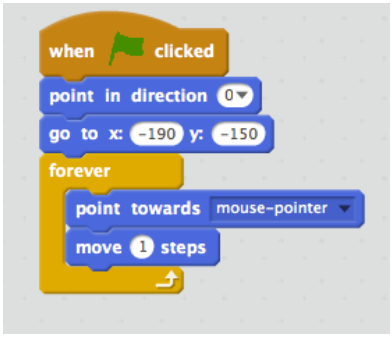
   c. Now you are ready!

Boat (or car)

Step 1: Planning your game

1. Start a new Scratch project, and delete the cat sprite so that your project is empty.
2. Click on your stage backdrop and plan out your level. You should add:
   1. Wood/barriers that your boat/car has to avoid;
   2. A desert island/finish line that your boat/car has to get to.
   3. Here's how your game could look:

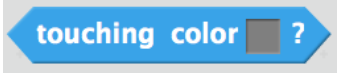




Step 2: Controlling the boat/car

1. Click 'Upload sprite from file' and add the 'boat.sprite2' image. You should shrink the sprite and put it in its starting position.
2. You are going to control the boat with your mouse.
3. What happens if the boat reaches the mouse pointer?

Step 3: Crashing!

1. You'll need 2 costumes for your boat/car, one normal costume, and one for when the boat/car crashes. Duplicate your boat costume, and name them 'normal' and 'hit'. Choose the 'Select' tool to grab bits of the boat and move and rotate them around. Make your boat look as if it's crashed.
2. Add an **if** statement to your boat/car, inside a forever loop, so that it crashes when it touches any brown wooden bits/gray barrier. (Use the **Sensing** operator 

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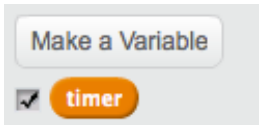
3. Can you add another if statement to your boat's code, so that the player wins when they get to the desert island/finish lane?
4. Can you add sound effects to your game, for when the boat/car crashes, or reaches the island/finish lane at the end? You could even add background music

Step 4: Time Trial



1. Let's add a **timer** to your game, so that the player has to get to the desert island as fast as possible.

Step 5: Obstacles and power-ups

1. First let's add some 'boosts' to your game, which will speed up the boat/car. Edit your stage backdrop and add in some booster arrows.
2. You can now add some code to your boat/car's forever loop, so that it moves 2 *extra* steps when touching a booster.
3. You can also add in a spinning gate, which your boat/car has to avoid.
    a. Add in a new sprite called 'gate'.
    b. Add code to your gate, to make it spin slowly forever.

Can you add more obstacles to your game?

- You could add green slime to your backdrop, which slows the player down when they touch it. You can use a wait block to do this.
- You could add a moving object, like a log or a shark!

Can you turn your game into a race between 2 players?

Can you create additional backdrops, and allow the player to choose between levels?