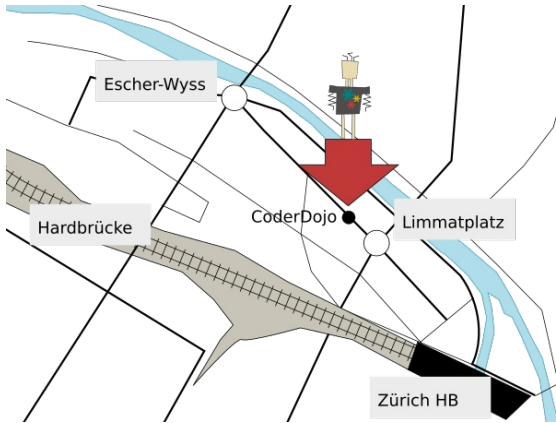


**CoderDojo is a free programming club for kids and teenagers between 7 and 17**

**CoderDojo encourages independent learning through work on projects, mutual assistance and creation of innovative projects.**



Every Sunday, 15:00 - 17:00 @ Liip

Limmatstrasse 183

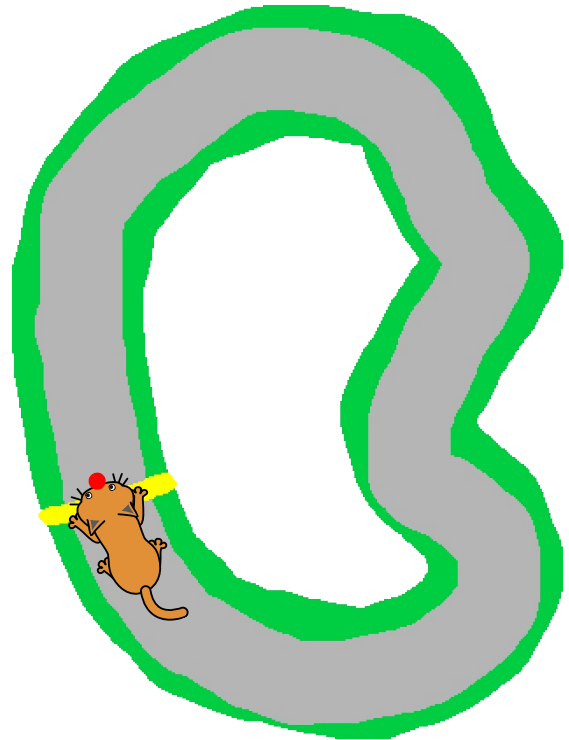
8048 Zürich

<http://coderdojzh.github.io/>

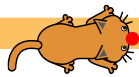
## Car race



Drive the car through the whole track without touching the walls.

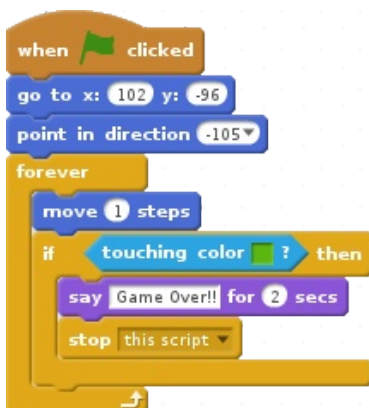


### Programming



The car should not be able to drive outside the road.

So we check if the green crash barriers have been touched by the car:



### Preparation

To recognize the end of the lap, the car needs a colour marker. This marker should be in front of the finish line before start of the game.

We drew a red nose to be the marker.

## Car race

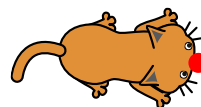


The car rides the track that you draw yourself

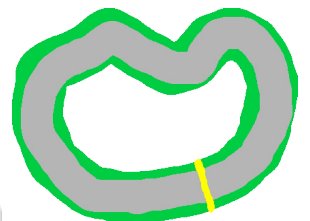
When the crash barrier is touched, you must start over.

### Preparations

You need a car for the game:

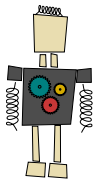


and a track:



New sprite:    

You can pick them from a library or draw yourself



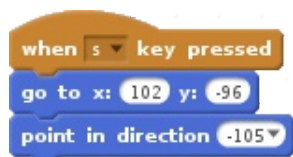
CoderDojo  
Zürich

Creative Commons License CC-BY-SA,  
Coderdojo Zürich, Ale Rimoldi, Gian-Maria  
Daffré.

## Programming

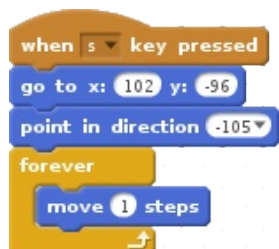


After pressing the S key, the car should go to the start line.



Pay attention to  
where x and y  
values are

Then the car should start moving forward:

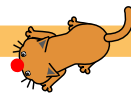


Here we go!



Press the S key and your car should go to the start line and then start to move forward.

## Programming



What is left is to test if the marker has crossed the finish line:



At the end of "Repeat forever" loop, we check if the red nose touched the yellow line.

As soon as it happens, the game is over.

## Next steps

There are many possibilities to extend the game:

- count rounds
- measure the time
- let two cars race each other
- and how can you accelerate the car with one key and break with another?



## Programming

And how can you steer the car? Just program the left and right arrow keys to turn it in proper direction.



Here we go!



Now with the arrow keys you can start driving your car.