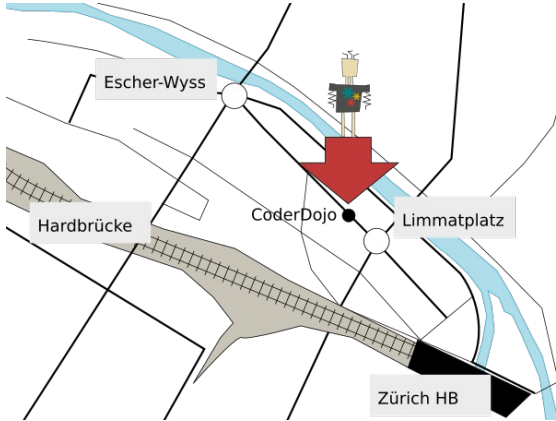


CoderDojo is a free programming club for kids and teenagers between 7 and 17

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



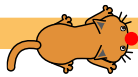
Every Sunday, 15:00 - 17:00 @ Liip

Limmatstrasse 183

8048 Zürich

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

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

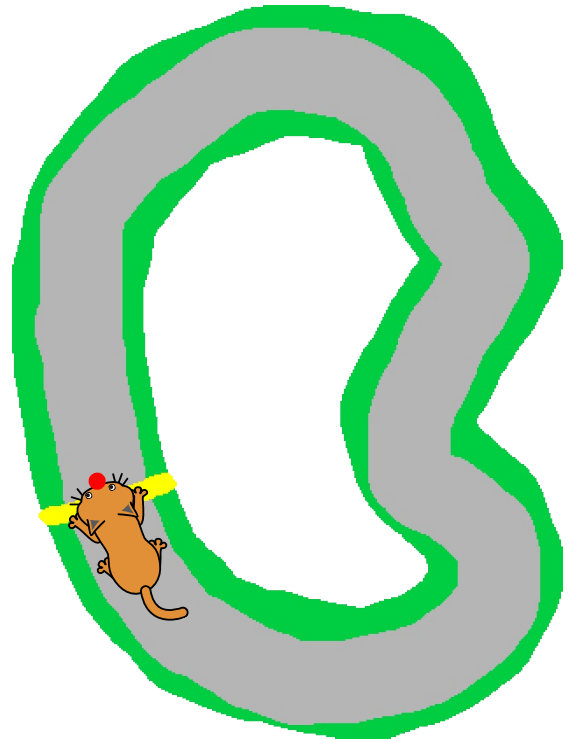
To recognize the end of the lap, the car needs a colour marker. This marker should be in front of the finish line before start of the game.

We drew a red nose to be the marker.

Car race



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



Car race

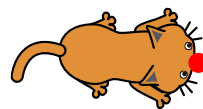


The car rides the track that you draw yourself

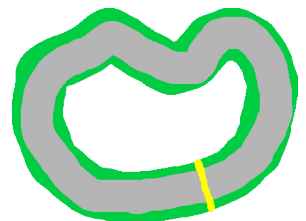
When the crash barrier is touched, you must start over.

Preparations

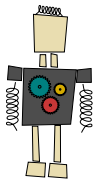
You need a car for the game:



and a track:



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.

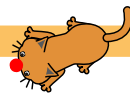
Pay attention to
where x and y
values are

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.