

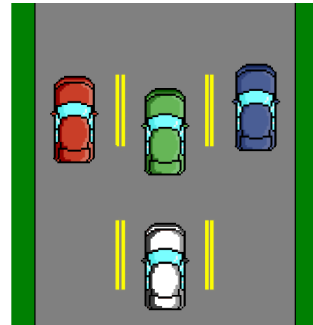


# Micro-Racer

Register/login at <https://scratch.mit.edu>



Preparation: Requires Scratch Link

*A car racing game using the micro:bit tilt sensor.*



1. Create a new Scratch project and add the **micro:bit** extension.

2. Plug the micro:bit into the PC with the USB.

3. Click on the  blocks section. If you see  at the top then connect the micro:bit.

4. Download road highway graphics from:  
<https://codeclub67.github.io/images/highway.gif>

5. Upload **highway.gif** to the stage.

6. Add stage code to cycle through the images.

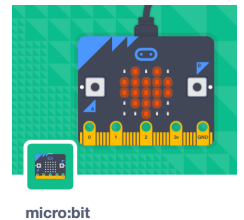
7. Download car graphics from:

<https://codeclub67.github.io/images/microcar.gif>

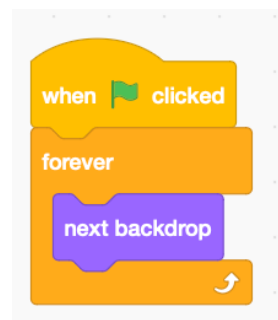
8. Create a new sprite from **microcar.gif**, set size to 35% and drag it near to the bottom of the screen.

9. Add the code to the microcar to make it move left and right when the micro:bit is **tilted**.

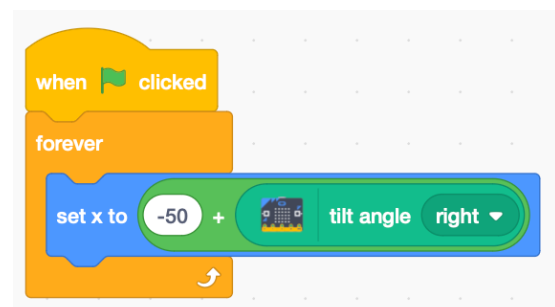
*The offset of -50 shifts the car to the middle of the road when the micro:bit is held level and the tilt angle is zero.*



micro:bit



stage code



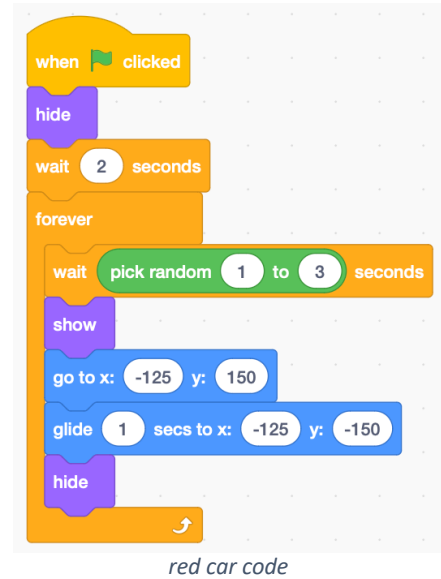
microcar code

10. Duplicate the sprite, choose the red car costume, and rename it “red car”.

*The red, green, and blue cars will glide down from the top of the screen, as though you’re overtaking them.*

11. Delete any existing code and add the code (right) to the red car,

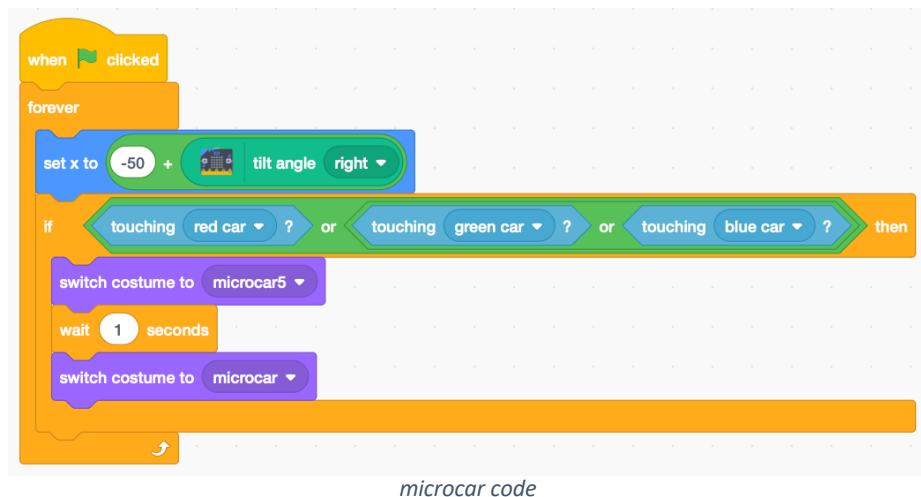
x values of -125 put it in the left lane.



12. Duplicate the red sprite, to make green and blue cars.

13. Change x values of the green car to -50 for the middle lane, and to 25 for the blue car in the right-hand lane.

14. Finally, extend the microcar sprite to detect car crashes and switch briefly to the explosion costume.



**Save** your code with a good name.

**File > Save now**