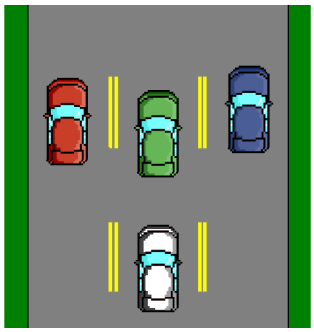
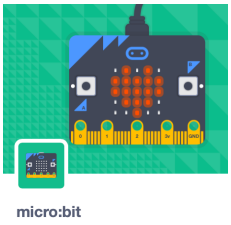
Micro-Racer

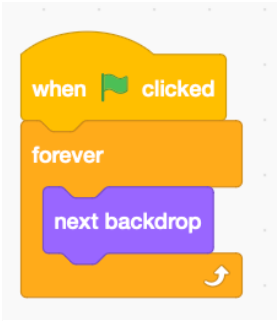


Register/login at https://scratch.mit.edu
Preparation: Requires Scratch Link

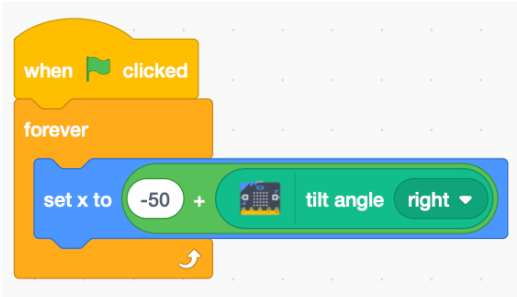
A car racing game using the micro:bit tilt sensor.



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 micro:bit 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 and delete backdrop 1 which is blank.
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 code to the microcar to steer when the micro:bit is **tilted**.
   The -50 offset shifts it to the middle of the road when the micro:bit is held level and the tilt angle is zero.



stage code



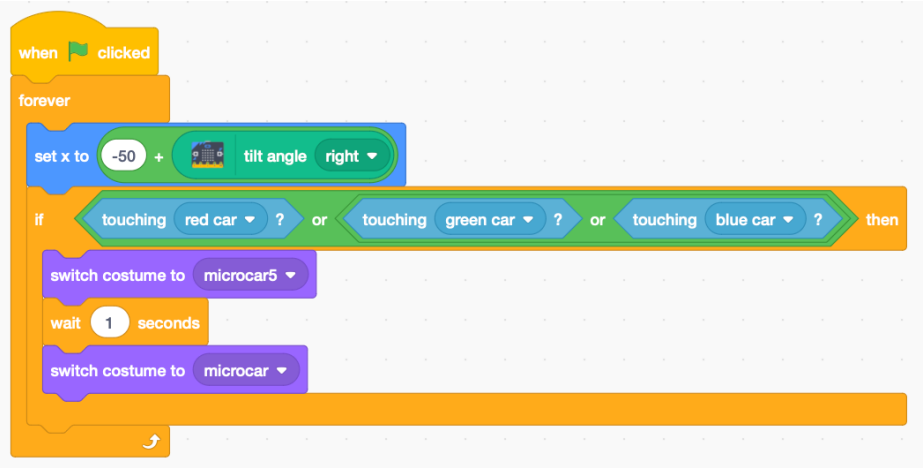
microcar code

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

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

red car code

11. Delete any existing code from the red car and add code (right).
    *x values of **-125** put it in the left lane.*
12. Duplicate the red car 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.



microcar code

*Try adding sound-effects like "**car horn**" and "**car passing**".*

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

File > Save now