

# WHAT YOU NEED

- A computer/laptop (a tablet doesn't tend to work all that well)
- A web browser (preferably Google Chrome)
- Scratch.mit.edu

**Previous experience:** Try some of our coding projects before attempting the challenge, unless you have used Scratch before

Your challenge is to create a game where your sprite will drive around a circuit on the screen

**STEP 1**: Create a backdrop that has a race track on it:



**STEP 2:** Create a car - either import one, or draw one, or select one from the sprites Add the following code to the car sprite



### **BEGINNERS**

- Amend the code so that your car goes forward as well as turning
- Now, add extra code that will make your car go left and forward
- Add code so that you can't take a shortcut across the track
  HINT: use IF & sensing blocks

## INTERMEDIATE

- Add extra racetracks that are different (levels) HINT: add a start line/finish line and use IF & sensing blocks
- Make your game two player and race each other around the track

### HARD

- Create a variable called speed
- Add into your code acceleration when you press the up arrow
- Add code for brakes when your press the down arrow

### EXTREME

- Keep track of the number of times around the racecourse
- Give your cars a certain amount of gas
- Allow cars to "drive" into gas to collect more
- Time your laps
- Have the car slow down on the grass on the inside of the track

### Share your project with your whānau and with us on our Facebook page







WE WOULD LOVE TO SEE YOUR LEARNING! Be in to win Lego<sup>™</sup> when you tell us about what you did! Click here or visit ⊕ rotoruamuseum.co.nz/share