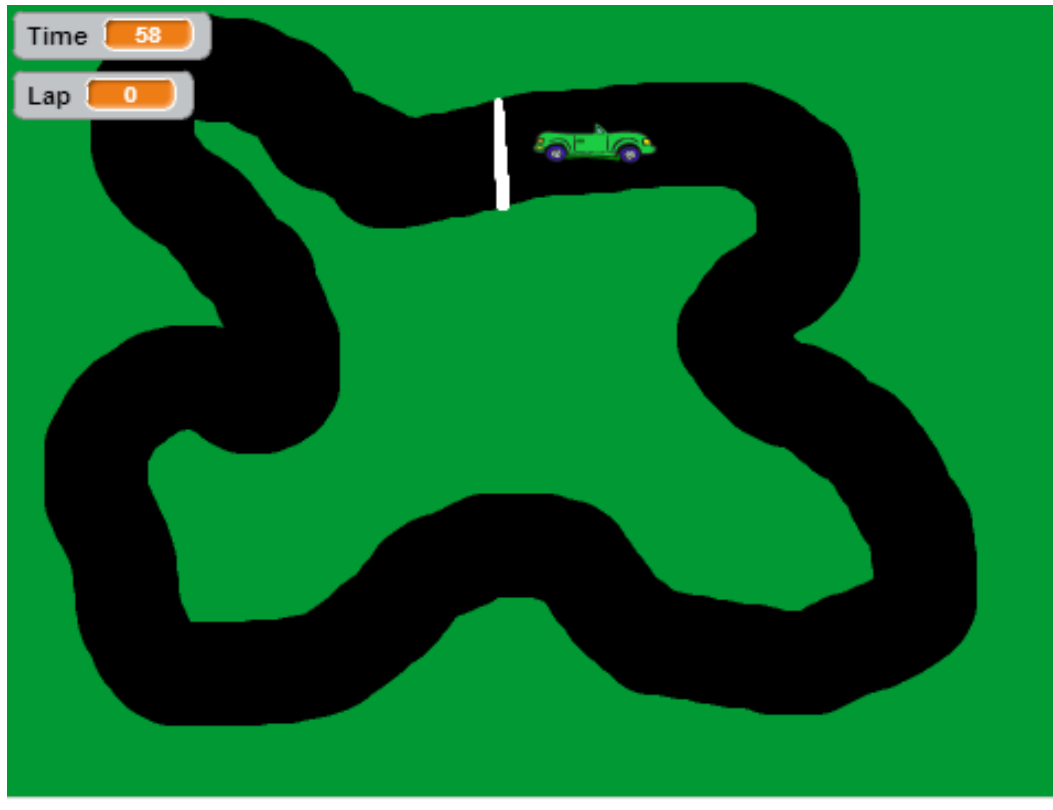


# 5

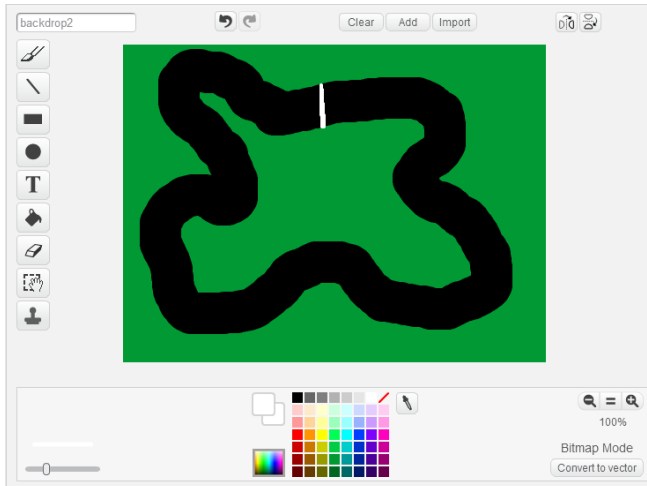
## MAKE A RACING CAR GAME



The idea of this exercise is to create a racing game, where the player has to finish a certain number of laps within a certain amount of time.

1. Right-click on the Cat sprite and select 'delete'.
2. Select the **'Stage'** and click on the **'Backgrounds'** tab.
3. Create your own racing track. Be sure to include a finishing line. The more bends in your track, the more interesting your game will be!

# 5



4. Select 'Choose new sprite from library. In this example, I have chosen one of the cars from the **Transportation** folder.
5. Make the car smaller by selecting the '**shrink**' icon at the top of the page beside the question mark



## PROGRAMMING THE GAME

1. Give the following code to your car. These instructions will make the car move. If the 'up' key is or the 'down' key is pressed, the car will turn. If the 'left' or 'right' keys are pressed, the car will speed up!



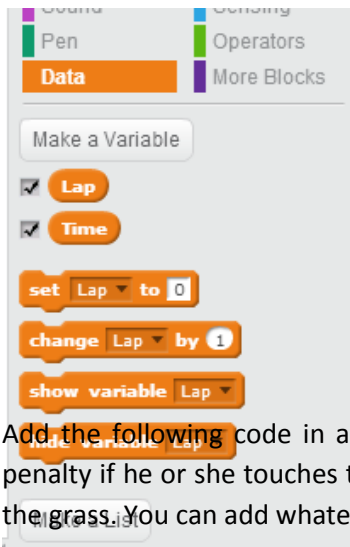
# 5

2. The **'go to x and y'** block will return the car to its starting point at the beginning of each new game. The starting point will depend on where you have put your finishing line.

## SET A RULE IF THE CAR TOUCHES THE GRASS

1. If the car touches the grass, we want to add a 5 second penalty to the player's time.

Firstly we need to create 2 variables – 'Time' and 'Lap'. 'Time' will keep track of the time that has passed, and 'Lap' will count how many laps the player has driven. Click on the **'Data'** section and select **'Make a Variable'**. Name it 'Time'. Repeat this process for the 'Lap' variable.

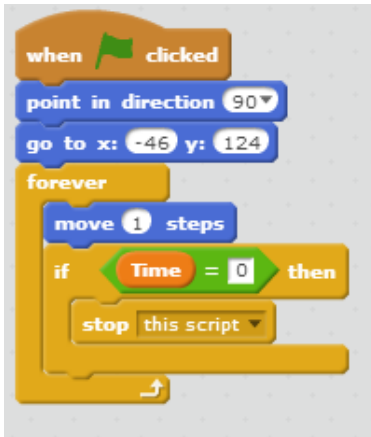


2. Add the following code in a separate block. This block of code will give the driver a 5 second penalty if he or she touches the grass. It will also display a message telling the driver he/she is on the grass. You can add whatever message you like!



3. Now, in the script for your car, add the following code.

# 5



4. Next, add the following script to your car. This code will set the Time to 60 at the start of every game, and will decrease the time by 1 after every second. If the time reaches 0, the game will stop. This is how you create a time for the player to race against. I have set the time to begin at 60, but you can set it to whatever time you like.




5. Now add the following code to your car script. This code sets the number of laps to 0 at the start of every game. If the player crosses the finish line, the 'Lap' variable will increase by 1. If the player completes a certain number of laps before the time is up, the player wins! You can set the target number of laps to whatever number you like. I have set the number of required laps to 2.

**Note:** The colour in the 'touching colour' block will depend on what you colour your finishing line is!

# 5



Now we will create 2 new sprites that are simply messages that will appear on the screen if the player wins or loses the game.

1. Select '**Paint new sprite**'. Now using the '**Text**' option,  write a message that will tell the player if he or she wins the game. In my example, I said "You win!!!" Click **OK** when you are finished, and repeat the process for the second new sprite, but this time write a message that tells the player he/she lost the game. My message says "Time's up!!!" Click **OK** when you are finished.
2. Now in the script for the 'You win!' sprite, add the following code. This code will make the sprite appear if the player completes the required number of laps before the time is up.



3. Now add the following code to the 'Time's up!' sprite. This code will appear if the time reaches 0 before the player has completed the required number of laps.

# 5



**WELL DONE!!! You've now made a racing game!!**

**Challenge** - Why not try turn your game into a 2 player game? Or maybe add some obstacles on to the track and add code that will do something if the car crashes into one of the obstacles!