

Verbal Introduction to Project

We are Leap of mankind. We have developed an entertaining car racing game utilizing ScratchX, a programming language that uses building blocks of code to make program design fun and easy. Along with ScratchX, we implemented LeapMotion, a controller device that will sense your hand motions and control the car.

Initially, when you click on the green flag or press the space bar, the racing game will start. But before you start, you will have the option to customize your experience by picking a 'sprite' or costume, the vehicle that best fits your taste!

As you start the racing game, you will notice that the code will help instruct the program what to do in certain situations, for instance, using the forever loop, the car will keep moving unless a condition is true. As you see, the condition is that the car will keep moving, until the car touches green or blue. The green on the track is the grass and the blue is the obstacle. Moreover, if the car touches the pink, you will see that in the code, the vehicle is set to move double the steps that the car would normally move at the regular speed. Because of this, touching the pink area would speed up the car!

As you can see, there are many ways you can condition your game to do whatever you ask it to do and however many conditions you want to add to make it more fun, colorful or challenging.

If you touch blue, or green you will also see a change in the appearance of the vehicle, it will turn to be a 'sprite' that has a crashed appearance to show that the car has touched an area where it shouldn't and therefore the car stops. Meaning, the loop also stops because the condition that you put on the code, was true!

You can also position the vehicle wherever you would like it to be. For this, the x and y axis position your vehicle where the start position is. The backdrop or landscape you design for your game will be set in this part of the code. And you can set the timer to wait until the gamer is ready to position their hands and control the vehicle.

Finally, if you touch the color white, which in this racing game is the finish line, then you are put into the next level and also score has been added to your total score which you can use to play and compete with others! But additional to this, you can set a timer to show the next level in a few seconds or even show a message after you have passed the game!

As you could notice this code uses loops and conditions to instruct the program on what the car should do in certain situations. This is why this code is fun, because you can condition the car to do anything according to the environment you create! The loop will create a path that will continue 'forever' and the if-statements will be in between this path just as life goes on and different situations come up. For this car, for example, it keeps going, its life keeps going, its appearance keeps going, its speed keeps going the same pace, UNTIL certain things in the environment happen and anything about the car itself changes!