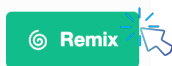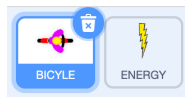We have provided for you in the starter project background, a Bicycle sprite, and an Energy sprite. Once you are done coding the project with the provided items, feel free to change the way they look, replace them with some items of your choice, or draw a new Track.
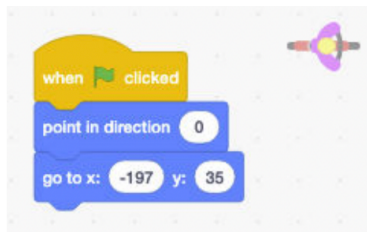
This project is adapted from https://kidscodejeunesse.org/

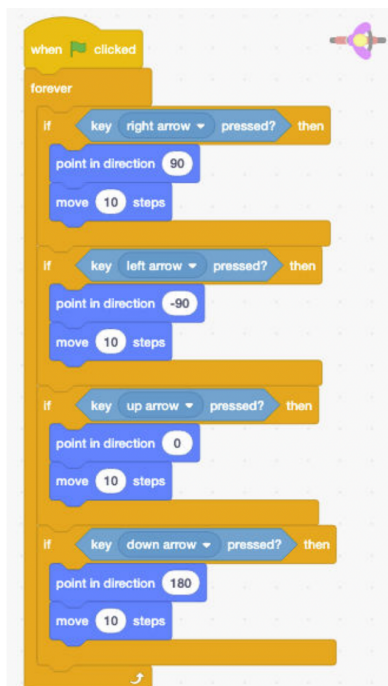⟳ Remix   **Click remix to start your own project.**
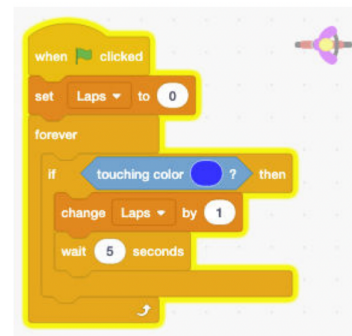
Coding the Bicycle Sprite:

**1** **Set the initial position and direction:**

2 **Add the code that detects arrow keys pressed and move the Bicycle Sprite in that direction:**

3 To keep track of the number of laps we need to create a variable and increase it each time. The bicycle crosses the blue line. Why do you think we added a wait 5 seconds block?


4 The code we have makes the game functional, but we want the bicycle to go faster on the track (green area) and slower outside of it (brown area). We'll do this by creating a Function (My Blocks). A function is a block that groups a set of instructions. Let's do it!
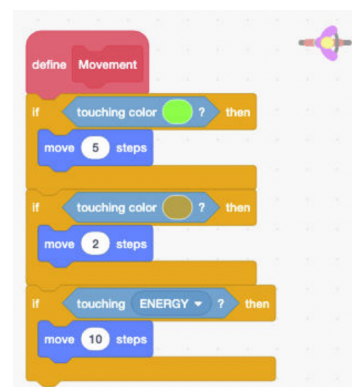
5 Now we can use our new Movement block in our previous code. Change the set of blocks that controls the Bicycle movement to look like this:
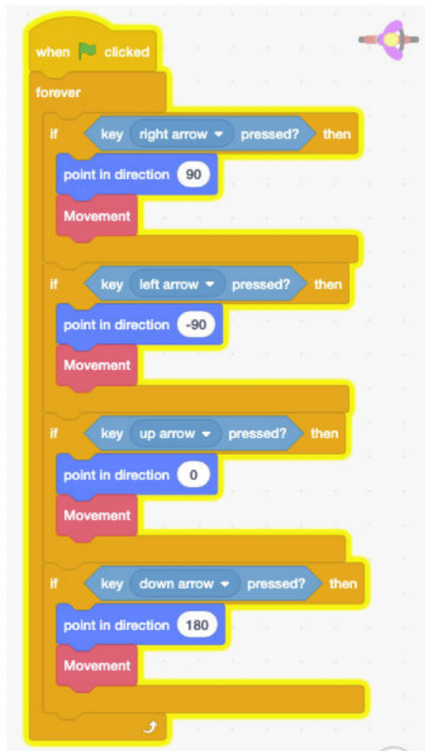
Coding the Energy Sprite:

1 The purpose of the Energy Sprite is to provide a speed boost to the Bicycle Sprite each time they touch. To achieve this result we already added the code that moves the Sprite 10 steps in our Movement function block. All that is left to do is to set the position of the Energy Sprite on the Stage when the game starts.
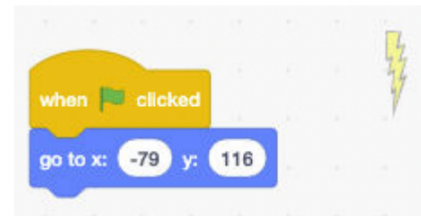
Functions are very important in coding as they help you create code that is easier to read, they can be easily reused in other projects and they help you find problems faster.

👍👍 **Great work! You have created a Bike racing game using Scratch. Try some of these extensions:**

⚡ • **Add multiple Energy Sprites along the track.**

🎚️ • **Use the same idea of the Energy Sprites to create items that will slow down the Bicycle.**

⏳ • **Add a timer that ends the game after 2 minutes.**

🎮 • **How would you have a friend play with you instead of the computer?**

🔲 • **Create new tracks by adding Costumes to the background.**