

Intermediate Programming Lesson Alternative Line Following Techniques



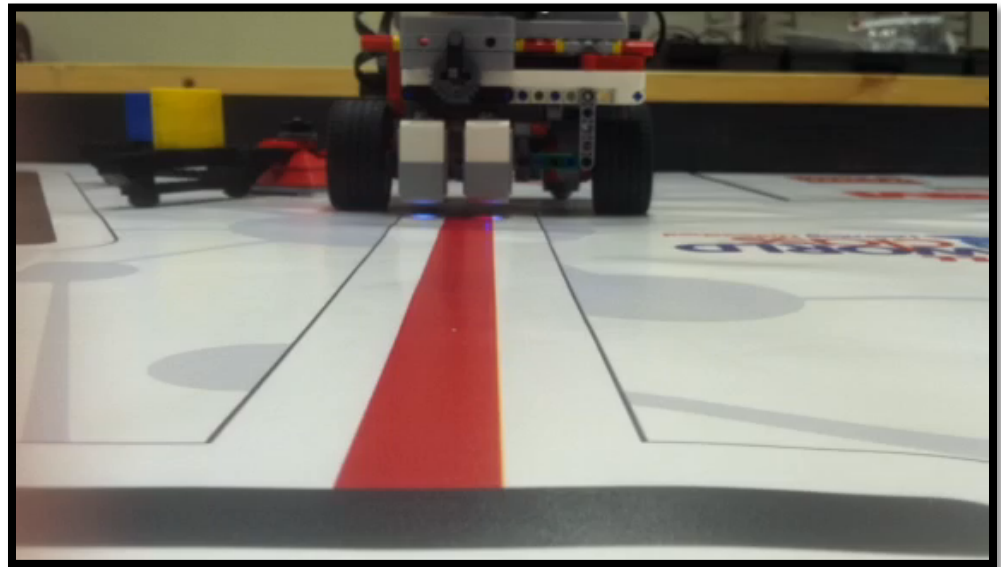
By FLL Team 1920 Baker's Dozen



Technique: Line straddling

Line straddling is when you use two light sensors next to each other to follow a line

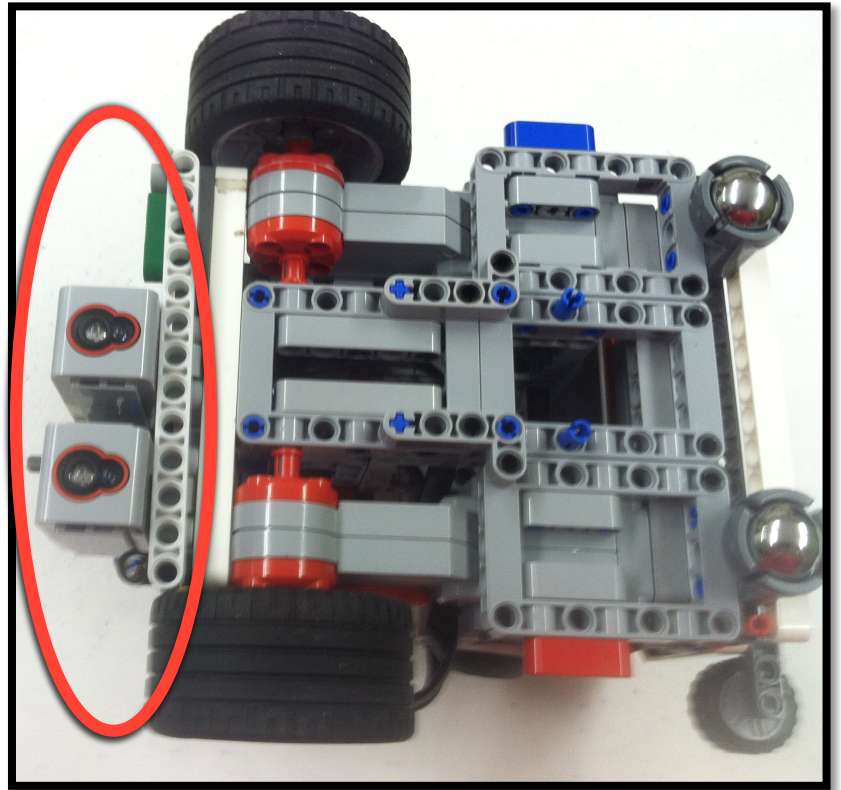
- Advantages:
 - reduces “fish tailing” (the wiggle of the back of the robot)
- Disadvantages:
 - Will be harder to square on a line since the sensors are closer together



Watch video to see line straddling in action

Line Straddling: Tips for success

- Placement of the two color sensors are very important
- In the picture on the right, we have a beam placed so you can see how far apart to place your sensors.



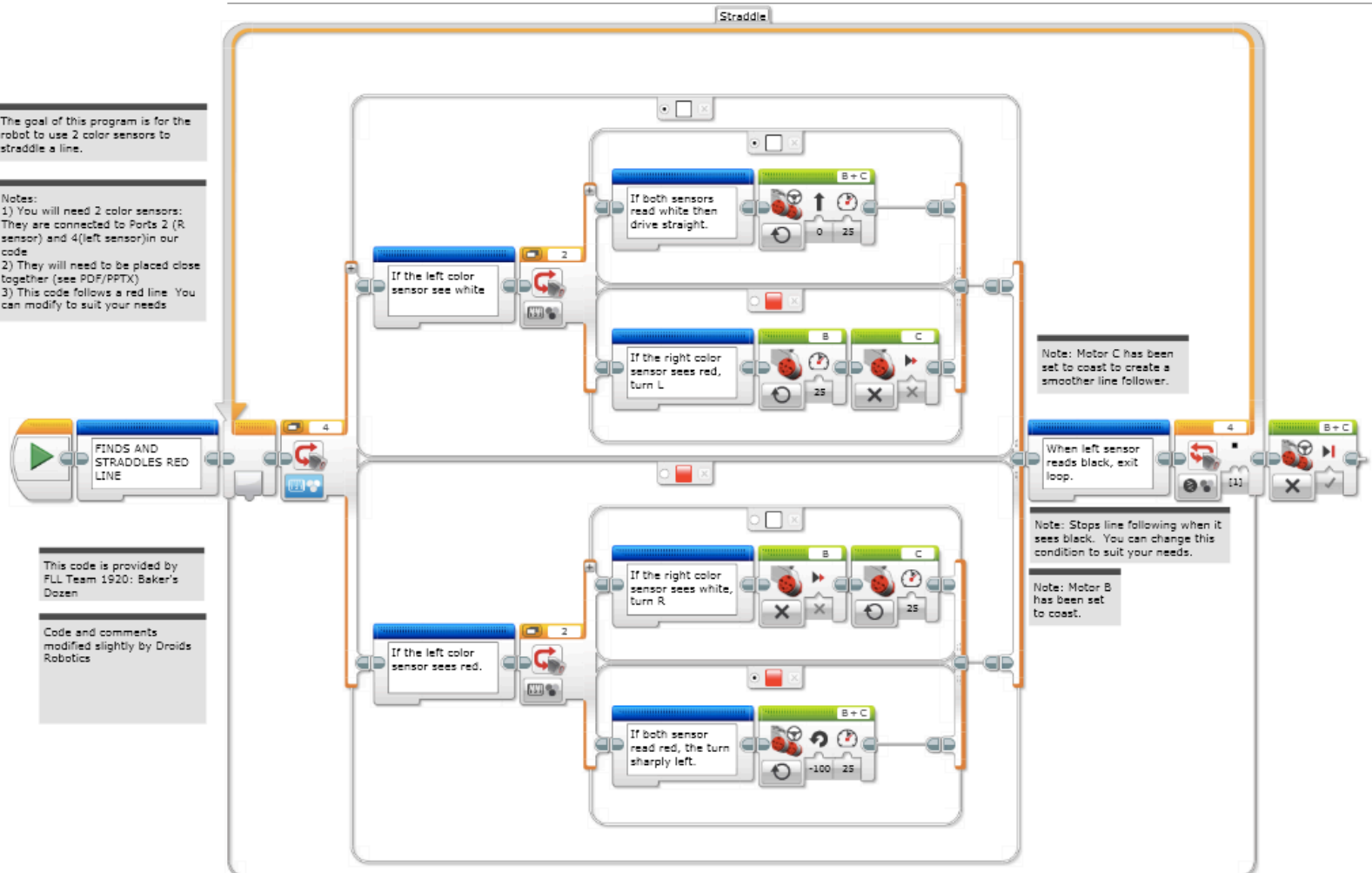
Line Straddling Code

The goal of this program is for the robot to use 2 color sensors to straddle a line.

Notes:
1) You will need 2 color sensors:
They are connected to Ports 2 (R sensor) and 4(left sensor) in our code
2) They will need to be placed close together (see PDF/PPTX)
3) This code follows a red line. You can modify to suit your needs

This code is provided by
FLL Team 1920: Baker's
Dozen

Code and comments
modified slightly by Droids
Robotics



Credits

- This lesson was compiled and slightly modified by EV3Lessons.com
- The video, photograph and code for Line Straddling were created and shared by FLL Team 1920, Baker's Dozen
- All lessons are free to use and adapt. Please credit the original authors for their work.

