



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

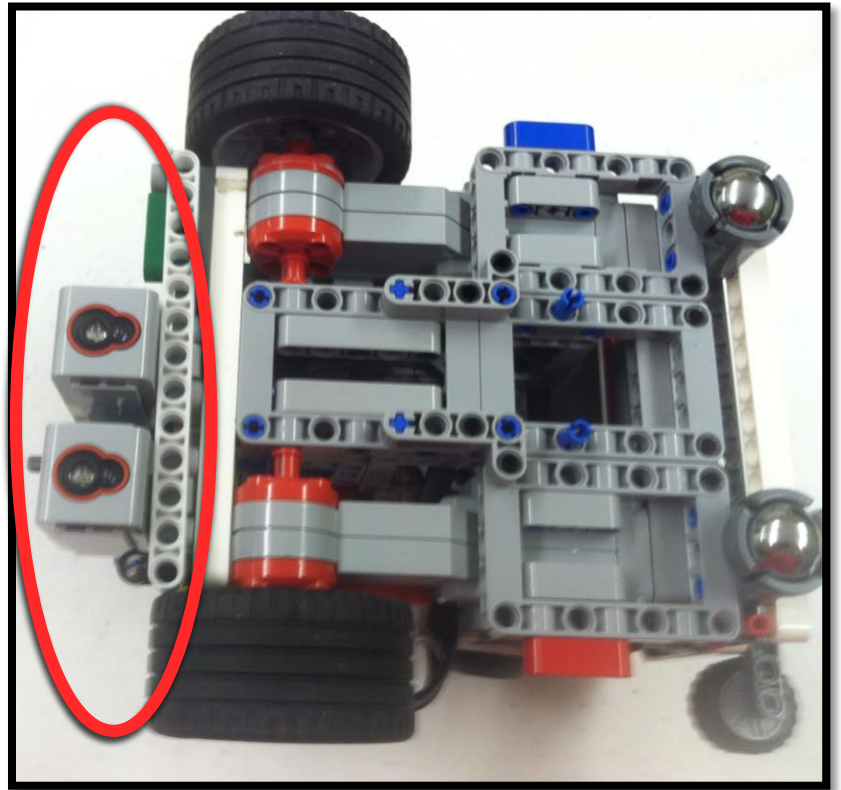
- Advantages:
 - reduces “fish tailing” (the wiggle of the back of the robot)
- Disadvantages:
 - Will be harder to square on a line since the sensors are closer together



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

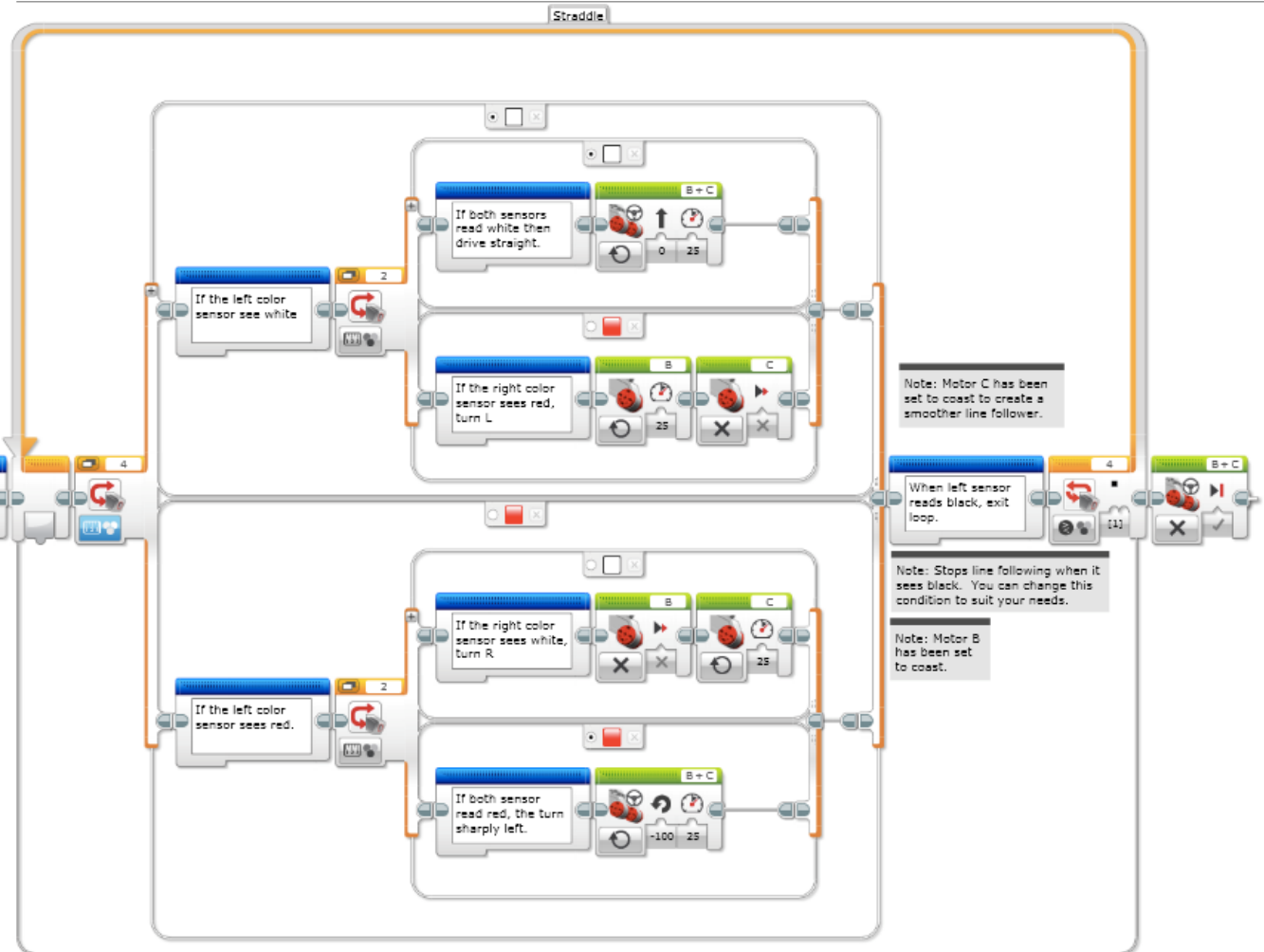
The goal of this program is for the robot to use 2 color sensors to straddle a line.

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

FINDS AND STRADDOLES RED LINE

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/Droids Robotics to fit the format of other lessons.
- The video, photograph and code for Line Straddling were created and shared by FLL Team 1920, Baker's Dozen
- More lessons are available at www.ev3lessons.com

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