

Evo Demonstrates Social Distancing

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Introduction

With the coronavirus pandemic spreading worldwide, people are being encouraged to practice *social distancing*. The purpose of this is to slow down the spread of the highly contagious coronavirus disease. Doing so will “lower the curve” for those needing hospitalization at any given time, thus reducing strain on hospitals.

What better way is there to demonstrate social distancing than by using Evo? Surely, if Evo can understand social distancing, people should be able to do the same!

In this lesson you will construct an OzoBlockly program that will keep Evo moving at the set speed limit of 50 mm/s. However, when Evo approaches too close to another Evo (which we will call Slowpoke) moving at only 30 mm/s, then Evo will slow down to 15 mm/s. When Evo is at a safe distance from Slowpoke, Evo’s speed will go back to 50 mm/s. Control is maintained by Evo’s front left and right on-board proximity sensors.

The Ozomap for this Lesson

Figure 1 shows the Ozomap that you will use for this lesson. A full-page version of this map, suitable for working with Evo, accompanies this lesson.



Figure 1

The OzoBlockly Social Distancing Program

In OzoBlockly, build the social distancing program shown in Figure 2, and then upload it to Evo. Comments document the program, but to save time you don’t need to enter the comments. In a second Evo, build and upload the SlowPoke program. Place both Evo’s on the Ozomap facing the same direction but on opposite sides of the circle. Then start both programs. Keep objects and your hands away from the two Evos, so their nearness doesn’t affect the motion! You should observe Evo slowing down for a few seconds after getting too close to Slowpoke, as in the accompanying video.

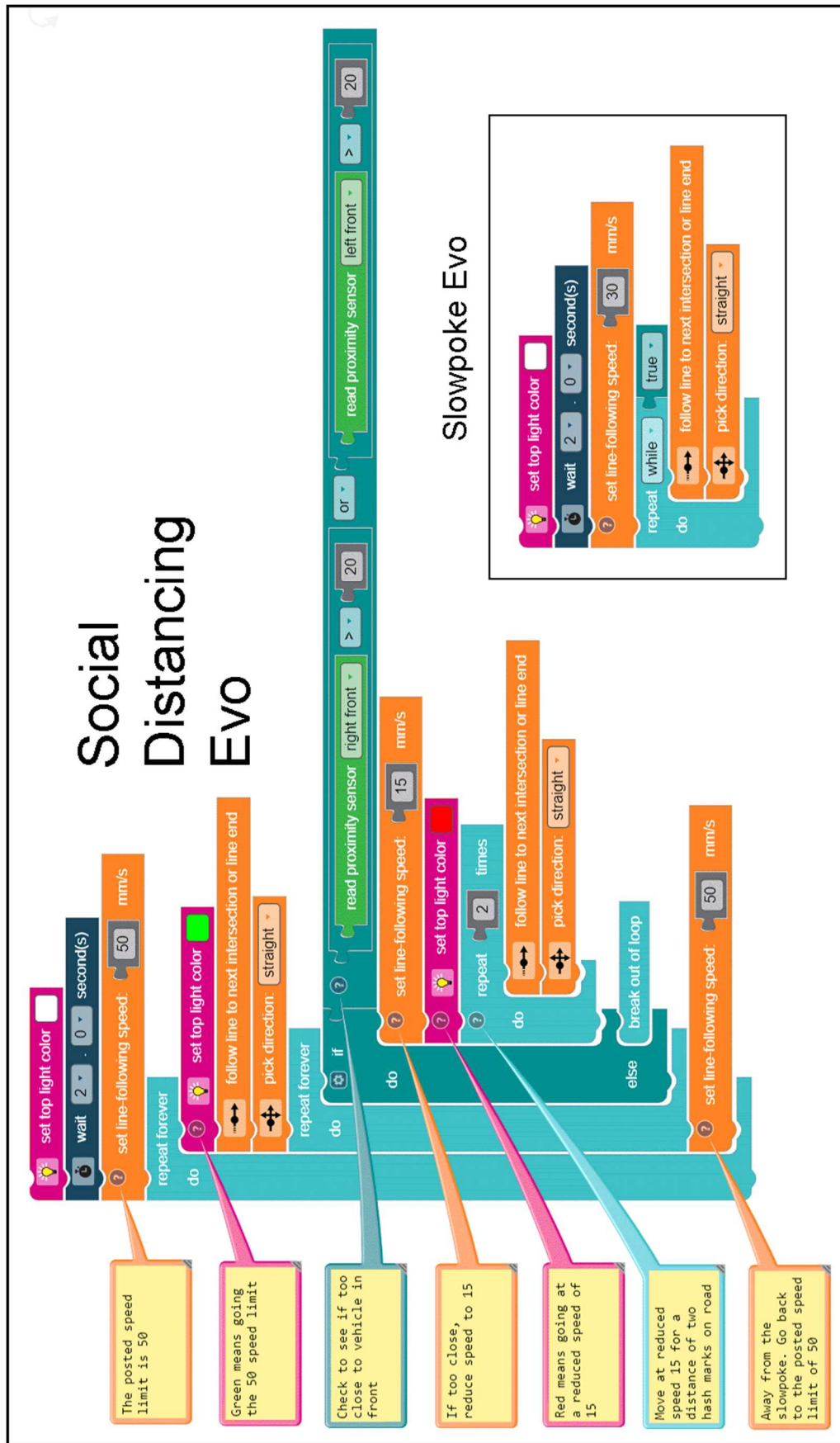


Figure 2