On the Right Track

Aim

Programme your buggy to find its way around a track by setting up 'line following'.

Why bother?

The simplest way to get a vehicle from A to B is if there is only one way to go. Think of a train on a track - it can't turn off the tracks.

image credit: Wikimedia

We can represent the train tracks with a thick black line. There are sensors on the bottom of the buggies that can detectthe line and drive along it and turn when the line does.

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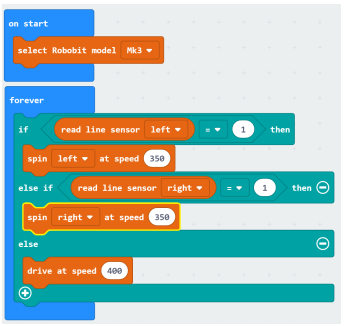
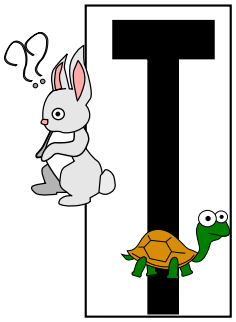
Hints and Tips

There are pre-made libraries for line following.



Getting this right is tough. The example code to the right is for the Robo:Bit. The sensor will have a value of '1' if it is over the black line and '0' if it is over the white page. If the left sensor is on the line, the buggy needs to turn left to get the line back in the centre.

The next problem is the speed of the buggy. If it is going too fast it might miss the line!



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