## **Shifting Maze Hands Off Challenge**

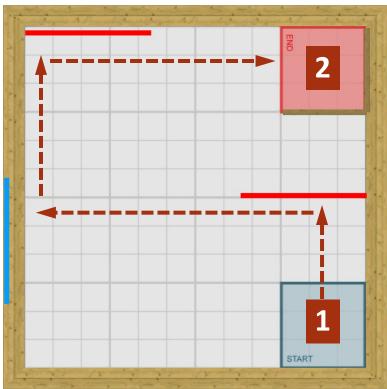
## **Challenge Description**

This challenge asks the user to program the robot to move from its starting area through a maze with tall, vertical walls. The walls in the maze can be adjusted so the robot needs to rely upon sensor input in order to be able to navigate successfully through the maze. With the Hand Off challenge, the robots are <u>not</u> allowed to bump into the walls; the walls must be avoided in order to successfully navigate the maze. The robot should make one pass through the maze. Then, the walls that are designated to be adjusted should be moved. The robot should be able to run the same program and be able to successfully run through the maze a second time. The pattern of the turns that the robot needs to complete does not change when the walls move. Therefore, the programming of the turns does not need to change.

## **Materials Needed**

- Black electrical tape
- Ruler (or straight edge)
- Scissors (or cutting tool)
- Tall objects, such as books or binders, to serve as the adjustable walls

## **Board Specifications**



Robot should start here

2

Robot will end here