

JBC Challenge 20B

Bump Bump

Setup: Use Surface-A. Place a ream of paper on the long side of the green garage, and another along the end of the Starting Box, (see picture below).

Level: Advanced

Skill: decision-making. Module 8, lesson 8.3

Goal: Robot will drive forward until the touch sensor is pressed on the front of the robot, pauses and then back up until the touch sensor on the rear of the robot is pressed, then pause and drive forward to circle 2.

Completion: Participants will receive a completion award when the robot leaves the starting box, and touches the ream of paper using a touch sensor, pauses, and backs up and touches the other ream of paper, pauses, and drive forward to circle 2. Volunteers must be able to see the stops.

General Rules:

1. All robots must be autonomous (no remote controls, wireless communication, or touching the robot after starting a run).
2. Robots may drive off the mat during a run. Non-Mat surface will be specified (size, carpet, etc.) on the local event page.
3. Only 1 robot is permitted to run at a time. Teams may change parts or robots between runs or challenges, but only 1 robot may be on the challenge surface at a time.
4. Teams will have 5 minutes to complete as many runs as they wish. Time will start after checking in with the judges and will include all setup time.
5. At any point during a run the team may forfeit the score for the run by picking up their robot. Teams are then allowed to start a new run, time permitting.

Challenge Rules:

1. The robot must start completely behind the vertical projection of the inside of the start line. This can be anywhere within the 8' enclosure as long as it is behind the actual and virtual starting line.
2. The robot's drive wheels must completely leave the starting box (crossing over and no longer touching the black line marking the starting box).
3. The robot must use two touch sensors that are visible to the judge.

