

Engineering Lab

Sentry Simulation Level Two

Challenge Description

Your company's level one Sentry Simulation was a big success. In the level two simulation the robot must recognize obstacles in its path and stop until the obstacle is removed. When the obstacle is removed, the robot needs to continue to patrol around the area.

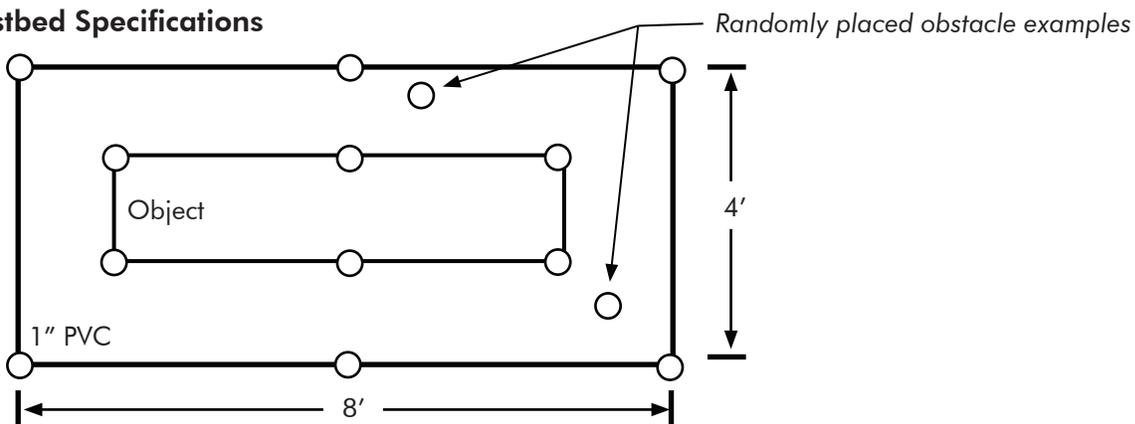
Guidelines:

1. The robot will patrol around the perimeter until an obstacle appears in its path.
2. It must stop when it sees the obstacle and then resume when the obstacle is removed.
3. The testbed will have 1" diameter PVC posts at the corners of the center object and the 4'x 8' testbed; if you bump a piece of PVC or leave the testbed your robot is disqualified. (see the diagram below)

Materials Needed

- Twelve pieces of 1" diameter PVC
- Three objects

Testbed Specifications



Note: Diagrams are not drawn to scale

Describe how you solved the problem. Be specific. Use another sheet of paper to describe your solution. Place this in your Engineering Journal when finished.