
DAY 1

TASK A: Navigation

Weighting (points out of total): 40 / 100

The robots will be tested on their ability to navigate through the rooms. Teams will be told which room they will start in and will be given an end destination.

There will be challenges in some of the rooms:

- One way system – When entering rooms within a one way system, the robot must be facing in the direction shown by the arrow. A -3 point penalty may be given if judges deem it was intentionally programmed to go in the wrong direction.
- No entry – some doorways may be blocked.
- Obstacle – some rooms may have an obstacle placed somewhere within. The robot must not hit the obstacle. If it does the team will be issued with a warning, if the robot hits the obstacle again a -3 point penalty will occur.

Before lunch teams need to tell the judges their strategy.

Competitors will have the AM to program and test their robots on the table area. There will be unlimited access to the table at this time.

The judged runs will take place in the afternoon. Each team will be assigned a time slot where they will be given sole access to the table for 10 minutes. During this time it is up to the teams to tell the judges that they are ready to be judged. The judged run needs to be done within the allotted 10 minutes. If the robot is still running the course after the time has run out, the team will be asked to stop their robot and they will be judged up to where they ran out of time. There will be a total of two runs.

Scoring

4 points - Leaving the start room*

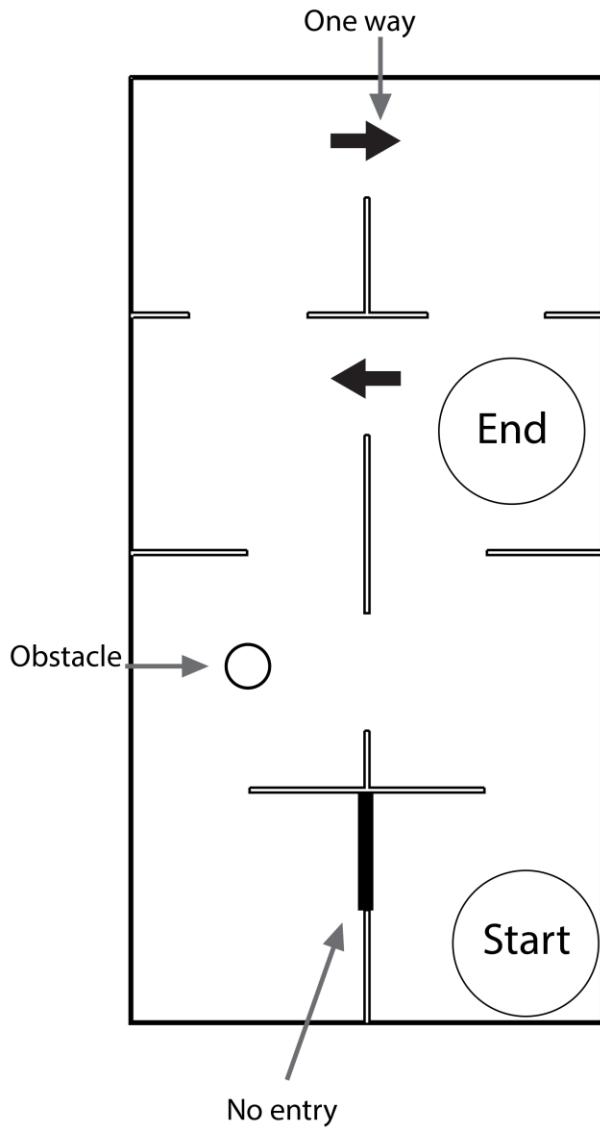
3 points - Entering room (Maximum of 12 points)*

4 - Entering the end room*

* Robot must fully enter or exit the room to gain the points.

Total of 20 points per run

Example of run:



2015 UK NATIONALS
Mobile Robotics Demonstration Competition
Task Descriptions

