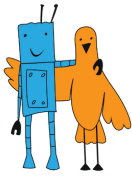


«JOURNEY: JUNIOR» CONTEST RULES

Version 2.0 dated August 2, 2019

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1. General Provisions

1.1. Task Description

Within one run, the robot must successively complete the tasks of:

- the “Line Follower with Fixed Obstacle” section;
- the “Labyrinth” section;
- the “Line Follower with Slide” section;
- “Kegelring” section

and stop at the finish area of the last section.

2. Requirements for the Robot

See the “Journey” General Contest Rules.

3. Specifications of the Field

The general view of the field is shown in Fig. 1.

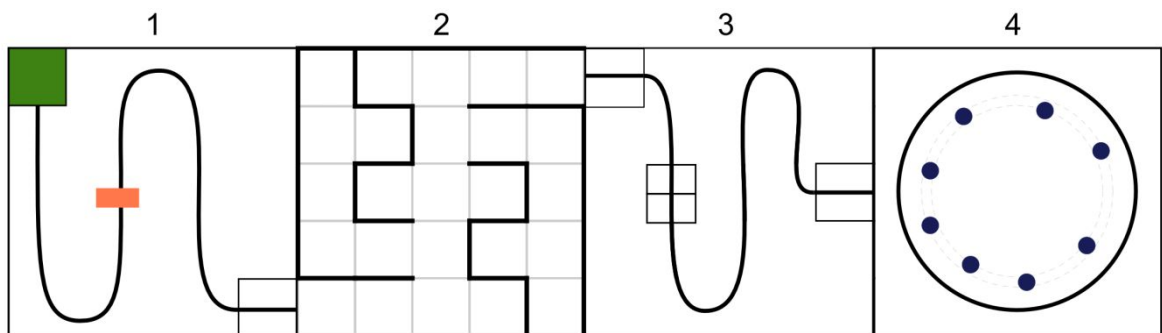


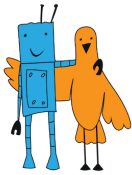
Figure 1. “Journey: Junior” Scheme of Fields.

1 - “Line Follower with Fixed Obstacle”, 2 - “Labyrinth”, 3 - “Line Follower with Slide”,
4 - “Kegelring”.

3.1. Line Follower with Fixed Obstacle

For the general Field Specifications see the “Journey” General Contest Rules.

In a straight line section, no closer than 100 mm to the rounded sections, a fixed obstacle is placed by long side across the line. The obstacle has the form of a



rectangular parallelepiped with the dimensions $(250\pm 5)\times(120\pm 5)\times(65\pm 5)$ mm (WxHxD). As an obstacle, a single-sized brick compliant with the National State Standard can be used.

3.2. Labyrinth

For the Labyrinth Field Specifications see the “Journey” General Contest Rules.

3.3. Line Follower with Slide

For the general Field Specifications see the “Journey” General Contest Rules.

In a straight line section, no closer than 100 mm to the rounded sections, a “Slide” obstacle is fixed to the field and placed so that the axis is perpendicular to the line. The slide is a triangular prism with the following dimensions: length $l = 600$ mm, width $w = 300$ mm, height $h = 100$ mm (see Fig. 2). The slide has a black line which is similar to that used on the field. The surface of the slide is white.

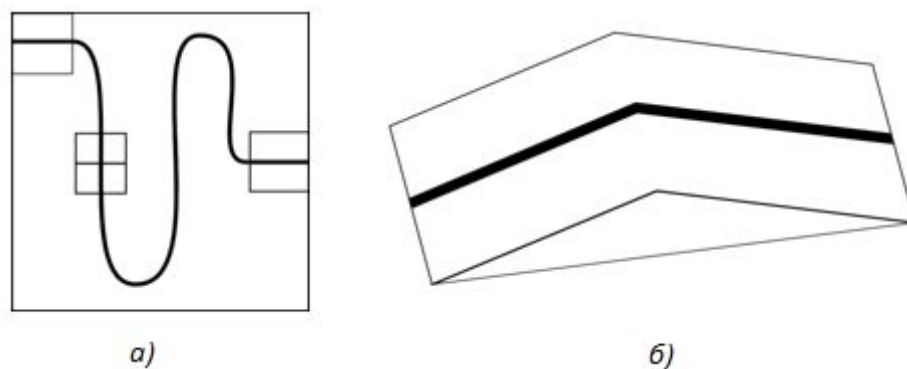
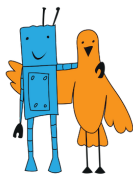


Figure. 2. Line Follower with Slide field: a) general layout; b) slide

3.4. Kegelring

For the Kegelring Field Specifications see the “Journey” General Contest Rules.



4. Contest procedure

The robot must successively complete the sections' tasks and stop inside the ring of the "Kegelring" field.

The time allotted for the run is 3 minutes.

The time is fixed at the moment of the final stop of the robot inside the ring.

Each field has its own starting and finish areas. These areas are shown in Table 1 and in Figure 2.

Table 1. The starting and finish areas

Nº	Section	Starting Area	Finish Area
1.	Line Follower	A	B
2.	Labyrinth	B	C
3.	Line Follower	C	D
4.	Kegelring	D	D

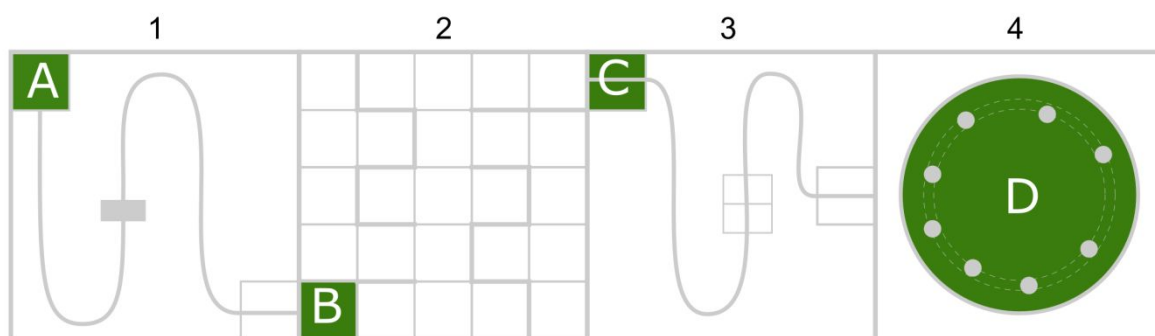
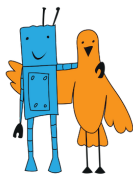


Figure 3. "Journey: Junior" starting and finish areas

4.1. Line Follower with Fixed Obstacle

For "Line Follower with Fixed Obstacle" Contest Procedure see the "Journey" General Contest Rules.



4.2. Labyrinth

For “Labyrinth” Contest Procedure see the “Journey” General Contest Rules.

4.3. Line Follower with Slide

For “Line Follower with Slide” Contest Procedure see the “Journey” General Contest Rules.

4.4. Kegelring

For “Kegelring” Contest Procedure see the “Journey” General Contest Rules.
At any time the participant him/herself can remove the pushed-out skittles from the ring.

5. Disqualification

For the conditions of disqualification see the “Journey” General Contest Rules.

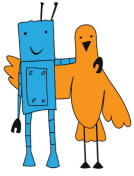
6. Scoring

The robot scores points for completing each section task according to the Table 2:

Table 2. Scoring

Action	Points
The section 1 task is complete	40
The section 2 task is complete	80
The section 3 task is complete	40
The section 4 task is complete	5 (for each of 8 skittles)
Total maximum	200

Half of the points will be awarded for the section task rerun.



7. Procedure for Determining the Winner

See the “Journey” General Contest Rules.