



Robotic activities in Technovision

Early Mastery - Playful Coding

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1 ACTIVITY # 1 - FIRST STEPS

Summary of the Activity

Total duration: 30 minutes The required equipment for this activities should be:

- 1 robot POB,
- 1 computer with Risbee software installed,
- 1 mini-USB cable,
- 2 objects/targets,
- the booklet "Quick Start Risbee".

Motion - 5 minutes

Objective: To be able to move forward the robot.

I am learning:

- To order the icons in order to make a simple program,
- To move the robot forward,
- The concept of trajectory.

Stroll - 10 minutes

Objectives: To move the robot until a landmark "A" and stop it for few seconds. Then, move the robot forward to a landmark "B" and stop it for few seconds again. See Fig. 1 for details.

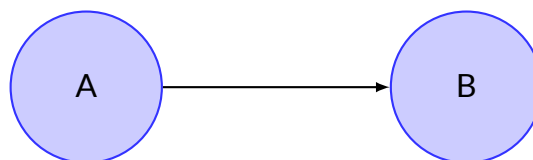


FIGURE 1: LANDMARKS POSITIONING.

I am learning:

- To discover some additional icons,
- To move the robot forward until a given landmark,
- To stop the robot,
- The concept of trajectory.

Obstacle Avoidance - 10 minutes

Objectives: To reach the landmark "B" from landmark "A" by moving the robot only in straight line and turning at 90° . The two landmarks should be placed as depicted in Fig. 2. The player can choose in which side to start moving the robot.

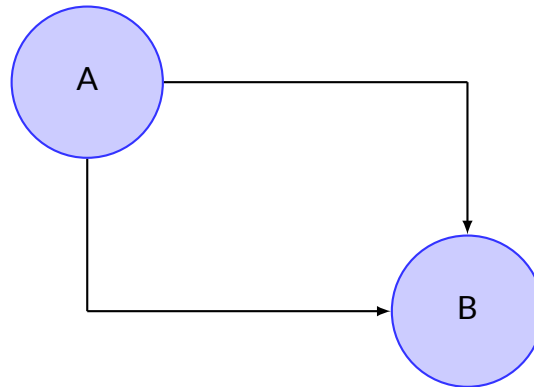


FIGURE 2: LANDMARKS POSITIONING.

I am learning:

- The concept of angle.

Race - 5 minutes

Objective: To make a race between two robots. Move the position of the landmark "B" which will have to be reached by the players.

I am learning:

- To discover some additional icons,
- To control the speed of the engines,
- To challenge other players.

2 ACTIVITY # 2 - LIKE IN SKI

Summary of the Activity

Total duration: 30 minutes The required equipment for this activities should be:

- 1 robot POB,
- 1 computer with Risbee software installed,
- 1 mini-USB cable,
- 2 objects/targets,
- the booklet "Quick Start Risbee".

Motion - 5 minutes

Objective: To be able to move forward the robot.

I am learning:

- To order the icons in order to make a simple program,
- To move the robot forward,
- The concept of trajectory.

Slalom - 20 minutes

Objectives: To move the robot from a landmark "A" to a landmark "C" passing by a landmark "B" by bending as depicted in Fig. 3. The player can choose either to stop at each landmark after each bend or to travel in one shot.

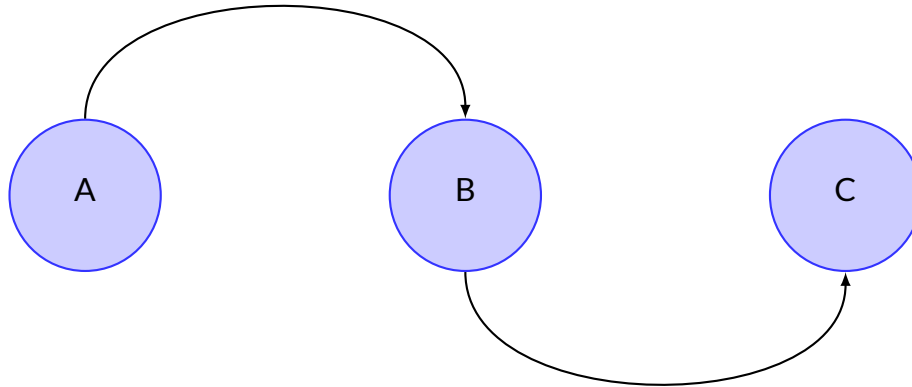


FIGURE 3: LANDMARKS POSITIONING.

I am learning:

- To discover some additional icons,
- To move the robot until a given landmark,
- The concept of trajectory,
- The concept of angle,
- The change of direction.

Race - 5 minutes

Objective: To make a race between two robots. Move the position of the landmark "B" and "C" which will have to be reached by the players.

I am learning:

- To discover some additional icons,
- To control the speed of the engines,
- To challenge other players.