Technical Challenge S.1

"Is that alpine skiing?"

Goal

Within two minutes, shoot as many goals as possible to an open goal (i.e. with no opponent) after driving slalom around obstacles.

Description

- Get an updated version of SoccerSim specifically prepared for this challenge which you can locate at <u>https://github.com/RoboCupJuniorTC/rcj-soccer-sim/tree/TC1</u> (please note it is in branch TC1)
- You are controlling (that is, programming) the yellow team robot (code should be located in the "slalom" controller)
- The robot starts at a random location in the yellow goal penalty area.
- Other robots (obstacles) are arranged like slalom poles with some random noise added.
- The first task of your robot is to drive slalom around obstacles it does not matter if your robot starts the slalom from left or right hand side see Figure 1 for clarification.
- After completing the slalom, there's the ball randomly located in the blue penalty area your robot must shoot a goal to the blue goal.
- If your robot touches any of the obstacles, the robot, obstacles and the ball are reset.
- Once the goal is scored, the robot, obstacles and the ball are reset.
- The timer stops after 120 seconds (two minutes).

Grading

- For each goal scored to the blue goal **after completing the slalom** you get +1 point - we will review your submissions since the referee is not capable of judging whether the slalom was performed well.
- For each goal scored to the yellow goal you get -1 point.

General Guidelines

- Please use the webots video export function ("Make Movie") and export to MP4/AVI.
- The video must be one take without cuts.
- The video must be uploaded to youtube.com or vimeo.com.
- Please send in your video submission until July 15th 2022 here: <u>https://forms.gle/Na2VxsLKzy96SbEG6</u>

Figure 1: Example of how the slalom can be performed (you can choose either red or blue path).

