Bonus Technical Challenge S.2

“Where am I heading to?”

Goal

Try to fix the the issues we face in https://github.com/robocup-junior/rcj-soccersim/pull/140

Description

- During the last year, we organized an “End-of-2022” challenge, where we asked participants to create their own design of omniwheeled robots. Team Reset contributed with a nice solution, additionally adding kicker and dribbler devices.
- Since the soccer world got more complex, meaning the physics computation is more difficult, there are some issues with TIME_STEP. More specifically, IR values robots see are a bit old.

Tasks

- The world is still running in the old R2022 version. Try to create a simple program for one of the teams to seek the ball and score a goal. Check how your robot sees the ball - is there any lag so the robot sees old IR values from the ball? Try to experiment with basicTimeStep (you can find it in the soccer.world file) and TIME_STEP constants (you can find it in rcj_soccer_robot.py, rcj_soccer_ball.py and consts.py files)
- I personally tested it with basicTimeStep = 8 and all the other TIME_STEP = 32 (not sure what is the “delay” in received IR values, but at least this fixed robot’s not shaking)
- Try to update the version to **R2023b**
- Submit your observations to the original pull request located at https://github.com/robocup-junior/rcj-soccersim/pull/140 as a comment.
- If you manage to update the world to the **R2023b** version of Webots, it would be great to open a separate pull request.

Grading

- Every team who participates in this challenge and submits some observations will get extra points.
- This challenge is about pushing the development of SoccerSim forward. If we manage to fix these issues, we can organize an omniwheeled SoccerSim tournament next year for sure!
- Please submit your observations (comments in the pull request or by creating a new pull request **until July 20th 2023**)