Competition

There will be a championship with your programs at the end.
More details are described below (and may be adapted later).

A RoboNewbie soccer team can consist of up to 4 players
(e.g. goalie, defender, attacker, …).

The sample program **Agent_SoccerTeam** was provided
which has already some basic skills for walk, turn, kick.

You can modify and extend it with new/better skills, better
perception, more intelligent behavior. Or write own programs.

Agent_SoccerTeam

Is contained in project RoboNewbie_1.0_T

The project is organized similar project RoboNewbie_1.0

It has some additional features
which makes it easier to play with teams of robots.

Changes concern
- new package examples.agentSoccerTeam
- new class util.BeamPoses
- extensions in class AgentIO.ServerCommunication

Start SimSpark

… as usual

- start agents (see next page)

- start the match as usual by pressing „k" and „b"

- if playmode is not „playon" (e.g. cornerkick or after a goal):
  continue the match by pressing „b"

There are two versions of SimSpark by different configuration files **naosoccersim.rb** (download from the WebSite):

• For the Matches with a smaller field (6x5m) .
• For the Penalty Kick Outs with a larger field (10x7m) .
Please include the related file accordingly in SimSpark, directory rcssserver3d-0.6.7-win32-release3.

Start a Team using Agent_SoccerTeam

Go to **package exampleles.agentSoccerTeam**:

Open **Agent_SoccerTeam** and specify

final String team = "<name of team>";

Run **Agent_SoccerTeam** for each player you want to have.

The initial positions (beam-poses) depend on the number,

they can be changed in **class util.BeamPoses .**

The roles can depend also on the number,

they can be programmed in **SoccerTeamThinking .**

For a <u>second team</u> you only change in **Agent_SoccerTeam:**

final String team = "<name of second team>";

Competition

- Competition between teams of student groups.
- 3 members per group.
- Groups constituted on Wednesday, October 15th.

Each student sends an overview about her/his individual trials and results by mail until Thursday 9 a.m.

Finals will be on Thursday, October 23rd.

- Each group gives 3-minutes explanation on trials and achievements.

Prepare zipped project **RoboNewbie_1.0_<TeamName>** with

- **Agent_SoccerTeam + …(further programs)**
- **Agent_PenaltyStriker + …(further programs)**
- **Agent_PenaltyGoalkeeper + …(further programs)**

Rules of regular matches

Each team plays against each other 2 times.

Sides are changed at the second match.

A match lasts 5 minutes.

The winner of a match gets 3 points.

At start, the players must keep a distance of 1m to the ball.

Rules of penalty kick outs

In case of a draw, there will be a penalty kick out.

During penalty shots, each team has a single player in the field:

    Striker from the attacking team, goalkeeper from the defending team.

    The striker must start with 1m distance to the ball.

    The goalkeeper must start in its goal area.

Each penalty shot starts with a kickoff ("k" and "b").

The attacking team gets 60 seconds to attempt to score.

Each team has 2 trials (1 from each side).

The winner is the team which scores more often.

The winner of the penalty kick out gets 2 points, the looser 1 pt.

If the penalty remains draw, both teams get 1 point.

Ranking of the competion

According to the total amount of points.

For equal points by goal difference of matches.

Further Rules of the matches

The following rules are still under discussion.
Note that some of them are realized automatically by the Server.

Obstructing the ball: Obstructing the ball involves use of a player's body, arms or legs to prevent progress of the game, which includes covering the ball, carrying the ball, holding the ball between arms or legs and lying in front of the goal in an attacking situation. Deliberately obstructing the ball, as judged by the referee, for longer than 10 seconds is penalized with a free kick to the opposing team. Unintentional obstruction of the ball for longer than 10 seconds is ended by a drop ball by the referee.

Illegal defense: At any time during the match, no more than 3 players of a team may be inside of their own penalty area. If a 4th player enters the penalty area, it will be placed outside of the field. When the last to enter is the goalkeeper, the player furthest away from the own goal of the three that were already in the penalty area will be placed outside of the field instead.

Further Rules of the matches

Crowding the ball: is only sometimes penalized automatically. A drop ball ("b") can be given if the game becomes stuck.

Immobility: Players that have been immobile or fail to stand up for too long will be repositioned. The goalkeeper will be repositioned after 30 seconds of immobility, or after failing to stand up for 60 seconds; other players will be repositioned after 15 seconds of immobility, or after failing to stand up for 30 seconds.

Colliding with other players: Players must avoid touching other players. If three or more players get in touch with each other, a player from the team with the most players in this situation or a random player will be repositioned outside the field.

Intentional fouls are penalized with a free kick for the opponent side.

Team TMS

    Toni Butković

    Matko Abramović

    Kristian Skender.

Team Atom

    Xiao

    Barbara Slivar

    Vlatka Kraljevic

Team Potatoes

    Domagoj Margan

    Dario Lakošeljac

    Irena Hartmann