Code-O-Soccer

Technical setup:-

- Download the API and the Debugger for which links are provided below.
- Download Visual Studio 2012/13.
- Follow "Setting up the project" in website for setting up the environment to code in Visual Studio.
- For API, Click here.
- For Debugger, Click here.
- For Setting up manual, Click here.

Description:

- The description of robot and code architecture is explained in " User Manual " .
- Open "Game.hpp" as described in "User Manual".
- \bullet Three roles are presented as I) Attacker , II) Defender and III) Goalkeeper .
- The working of these roles would be coded in their respective function definition.
- Ex.: Open "Attacker.hpp" and you have to code inside "attacker(state, botID)" function. Same goes for other two roles.
- Main aim is to code in these three above mentioned files for respective roles.
- You can make your own skills or roles , the process is described in "User Manual".
- The code requires state parameters and predicates , which has been discussed in "User Manual".
- For Manual, Click here.

Running code:-

- Follow "Running Simulator" part from "User Manual" or "Setting up the project".
- Go to Simurosot folder, open "Run.bat" in text editor (ex. Notepad++)
- , change line 4 : from " Abhinav" to your " PC name"
- For any further help, visit out <u>Doubts Discussion Forum</u>.

Event Rules:-

- 1. Defending with more than one robot in the goal area(inner D-box) shall be penalized by a penalty-kick. (A robot is considered to be in the goal area if it is more than 50% inside). An exception to this situation is, when the additional robot in the goal area in not there for defense or if it does not directly affect the play of the game.
- 2. Colliding with a robot of the opposite team, either intentionally or otherwise that directly affects the play of the game will be considered a foul.
- 3. It is permitted to push the ball and an opponent player backwards provided the pushing player is always in contact with the ball.
- 4. A goal shall be scored when the whole of the ball passes over the goal line. The winner of a game shall be decided on the basis of the number of goals scored.
- 5. In the event of a tie, the winner will be decided by the sudden death scheme. The game will be continued. The team which scores the first goal will be the winner.
- 6. Goalkeeper can not enter the goal region more than 50% of its size.
- 7. More than 2 attackers can not enter the opponent's goal area(D-box) at once.

GENERAL RULES:-

- 1. Every team has to register online on the official Kshitij website for the competition.
- 2. A Team ID will be allocated to the team on registration which shall be used for future references.
- 3. The idea presented by the teams should be original (not protected by means of patent/copyright/technical publication by anyone else).
- 4. A team can register at any point of time before and can submit final abstract(as mentioned in the structure).
- 5. The decision of the organizers or judges shall be treated as final and binding on all.

- 6. No responsibility will be held by Kshitij, IIT Kharagpur for any late, lost or misdirected entries.
- 7. Note that at any point of time the latest information will be that which is on the website. However, registered participants will be informed through mail about any changes.

Instructions for submission :-

- Create a ".zip" file consisting of Game.hpp, GoalKeeper.hpp, Defender.hpp, Attacker.hpp
- Rename your zip file with your team name in the following format -- teamname.zip
- Login from your team account and submit your code from your Dashboard

Team:

- 1) Participating team size should be limited to a maximum of 4 individuals.
- 2)The students must carry valid student ID cards of their college which they will be required to produce at the time of registration.
- 3)Students from different institutes can be a part of the same team.

Eligibility:

Undergraduate and Postgraduate students of any discipline from emerging Universities/Colleges are eligible to participate in the competition.

Prizes:

Prize money for this event is INR 50,000.

The Winner will have to mail the following information (immediately after the announcement of results in the Official website of <u>Kshitij</u>) to Kshitij team. Subject: Kshitij, team id- your position (example- Kshitij, COS1234 – 1st position)

The body of mail-

- 1. Account Holder's Name
- 2. Account Number
- 3. Bank name and Branch name.
- 4. IFSC Code

Note:

- For tutorial, please click here
- For Sample code, please click here