Region: European Conference on Educational Robotics (Austria)

Period One - Project Plan

Team name: BotHunters

Team number: 0640

Goals and Tasks for Botball 2019

- 1) GAME GOALS AND TASKS
 - a) Review the game rules and game documents and watch the review movie, 1/20/19
 - I. Print game rules, 1/18/19
 - II. Equip the workshop with a projector, 1/20/19
 - III. Watch the game rules movie on the projector, 1/20/19
 - IV. Discuss the most important game rules and write them on a white board, 1/20/19
 - b) Thinking about game relevant tasks, 1/20/19
 - I. Brainstorming to determine the best concepts, 1/20/19
 - II. Select the best ideas and discuss how to implement them, 1/20/19
 - c) Build Practise Board, 1/29/19
 - I. Assemble list of supplies, 1/24/19
 - II. Order the needed supplies at a local company, 1/25/19
 - III. Build the Practise Board, 1/29/19
- 2) ROBOT BUILDING GOALS AND TASKS
 - a) Prototype the Create and LEGO Robot, 2/04/19
 - I. Generate a drawing of the concept for the LEGO robot under consideration of the chosen strategy, 2/04/19
 - II. Generate a drawing of the concept for the Create robot under consideration of the chosen strategy, 2/04/19
 - b) Construction of the Create robot, 2/26/19
 - I. Construction of a gripper, 2/11/19
 - II. Construction of a lifting arm, 2/15/19
 - III. Construction of a mounting on the Create robot, 2/15/19
 - IV. Find solutions about the lifting mechanism, 2/19/19
 - V. Finalize the construction of the Create Robot, 2/26/19

- c) Construction of the LEGO robot, 2/26/19
 - I. Construction of a gripper to sort the citizens with different colors, 2/10/19
 - II. Construction of a chassis with a lifting arm, 2/10/19
 - III. Find solutions about the lifting mechanism, 2/15/19
 - IV. Finalize the construction of the LEGO Robot, 2/26/19
- 3) PROGRAMMING GOALS AND TASKS
 - a) Run test programs, 1/30/19
 - I. Connect the demobot (Create robot) with the microcontroller (Wallaby), 1/30/19
 - II. Getting used to the basic movements of the bot, 1/30/19
 - III. Check the functionality of each sensor and motor, 1/30/19
 - b) Programming the Create robot, 3/12/19
 - I. Generate the program for lifting and gripping mechanism, 2/26/19
 - II. Generate the program for general movements, 3/5/19
 - III. Generate the program for the used sensors, 3/11/19
 - IV. Test all programming with the build team, 3/12/19
 - c) Programming the LEGO robot, 3/12/19
 - I. Generate the program for sorting gripping mechanism, 2/26/19
 - II. Generate the program for general movements, 3/5/19
 - III. Generate the program for the used sensors, 3/11/19
 - IV.Test all programming with the build team, 3/12/19
- 4) DOCUMENTATION GOALS AND TASKS
 - a) Period 1 Documentation complete, 2/19/19
 - I. Allocation of responsibilities to the team members, 20/1/19
 - II. Establish the meeting days, 1/20/19
 - III. Amalgamate the information of the programming and the building team, 2/19/19
 - b) Period 2 Documentation complete, 3/10/19
 - I. Collect information from the building team for the assignment, 3/08/19
 - II. Collect information from the programming team for the assignment, 3/08/19

- c) Period 3 Documentation complete, 4/02/19
 - I. Gather the learned lessons from the team, 4/02/19
 - II. Make an Excel spreadsheet with the learned lessons, 4/01/19

All the dates above represent deadlines.

5) SCHEDULE CONFLICTS

- a) Semester holidays, 2/11/19 2/15/19
- b) Soccer Tournament, 2/04/19 2/06/19

Team Organization

Schedule of Meeting Times:

Legend

Botball-kit delivered Meeting Days Botball

January

Mon	Tues	Wed	Thur	Fri	Sat	Sun
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

February

Mon	Tues	Wed	Thur	Fri	Sat	Sun
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28			

March

Mon	Tues	Wed	Thur	Fri	Sat	Sun
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

April

Mon	Tues	Wed	Thur	Fri	Sat	Sun
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

These tables mark the expected meeting days.

Division of Labor:



Conflict Resolution

The team has agreed that if disagreements occur, we will handle them in the following way:

- 1. If disagreements appear during the work on our project, we will try to handle them on our own. All the members with different opinions discuss in an objective way to generate a solution.
- 2. If no solution is found the team members will present the problem to Timo Herr, the student team leader.
- 3. If there's still no agreement according to the solution, the problem will be presented to M. Rohm, the adult team leader. His advice will be discussed in the team and finally an alternative solution will be generated with him.