

Period One - Project Plan

Goals and Tasks for Botball 2019

1 Game Goals and Tasks

1. Check the game rules of 2019 \oplus 01/25/19
 - (a) Create a Telegram group (messenger) for the communication in the team
 \oplus 01/18/19
 - (b) Share the game rules with all team members via Telegram
 \oplus 01/19/19
 - (c) Every team members has to read the document and mark misunderstandings
 \oplus 01/22/19
 - (d) Discuss potential issues together and ask in the KIPR-Homepage \oplus 01/25/19
2. Choose a game strategy \oplus 02/10/19
 - (a) Create a automatically calculating scoring sheet in Excel to sum up possible points
 \oplus 01/25/19
 - (b) Brainstorm all ideas and write them down by using Post-It.
 \oplus 02/02/19
 - (c) Calculate the scores of ideas on the Post-Its
 \oplus 02/02/19
 - (d) Choose the best strategy together and define it in a clear way
 \oplus 02/10/19
3. Set up a training area \oplus 02/10/19
 - (a) Transport all materials to our flat in Vienna
 \oplus 02/05/19
 - (b) Build the game table
 \oplus 02/10/19
 - (c) Provide chairs, desks and attendance lists for time management
 \oplus 02/10/19

2 Robot Building Goals and Tasks

1. Build prototypes of parts of the robots \oplus 02/20/19
 - (a) Build a prototype of the gripper arm of the Create robot
 \oplus 02/09/19
 - (b) Build a prototype of the Create robot to check if the planned strategy is feasible
 \oplus 02/20/19
 - (c) Build a prototype of the small robot to check if the planned strategy is feasible
 \oplus 02/20/19
2. Construct the Create robot \oplus 03/15/19
 - (a) Build a bumping and aligning mechanism
 \oplus 02/05/19
 - (b) Build a gripper arm and attach it on the robot
 \oplus 02/09/19
 - (c) Add sensors to the robot
 \oplus 02/15/19

- (d) Finetuning and small amendments of the construction
 \oplus 03/15/19
- 3. Construct the small robot \oplus 03/15/19
 - (a) Build the chassis of the robot
 \oplus 02/05/19
 - (b) Adjust the driving mechanism
 \oplus 02/09/19
 - (c) Add sensors to the robot
 \oplus 02/15/19
 - (d) Finetuning an small amendments of the construction
 \oplus 03/15/19

3 Programming Goals and Tasks

- 1. Provide basic functions \oplus 02/15/19
 - (a) Program straight driving functions for both robots
 \oplus 02/10/19
 - (b) Program a line following algorithm
 \oplus 02/12/19
 - (c) Program a wall following algorithm
 \oplus 02/15/19
- 2. Program the Create robot \oplus 03/26/19
 - (a) Think about the program flow
 \oplus 03/12/19
 - (b) Program the movement functions of the robot
 \oplus 03/12/19
 - (c) Program the sensors functions of the robot
 \oplus 03/19/19
 - (d) Program the gripper arm of the robot
 \oplus 03/19/19
 - (e) Test all programming units and write testing protocols
 \oplus 03/22/19
 - (f) Fix appearing bugs
 \oplus 03/26/19
- 3. Program the small robot \oplus 03/26/19
 - (a) Think about the program flow
 \oplus 03/12/19
 - (b) Program the movement functions of the robot
 \oplus 03/12/19
 - (c) Program the sensors functions of the robot
 \oplus 03/19/19
 - (d) Program the actor functions of the robot
 \oplus 03/19/19
 - (e) Test all programming units and write testing protocols
 \oplus 03/22/19
 - (f) Fix appearing bugs
 \oplus 03/26/19

4 Documentation Goals and Tasks

1. Complete Documentation Period 1 \oplus 02/20/19
 - (a) Create a doodle for deciding on a meeting schedule together
 \oplus 02/08/19
 - (b) Define clearly identified goals for Programming and Construction
 \oplus 02/10/19
 - (c) Submit the document 'P1_ProjectPlan.pdf'.
 \oplus 02/20/19
2. Complete Documentation Period 2 \oplus 03/13/19
 - (a) Evaluate construction data to fulfill the assignment.
 \oplus 03/02/19
 - (b) Evaluate programming data to fulfill the assignment.
 \oplus 03/02/19
 - (c) Submit both documents 'P2_Software.pdf' and 'P2_Mechanical.pdf'.
 \oplus 03/13/19
3. Complete Documentation Period 3 \oplus 04/03/19
 - (a) Share the link to the survey in the Telegram group so that every member can complete it
 \oplus 03/15/19
 - (b) Schedule a team meeting for discussing the lessons learned.
 \oplus 03/20/19
 - (c) Submit the document 'P3_Lessons_Learned.pdf'.
 \oplus 04/03/19

5 Schedule Conflicts

1. Flat viewing. No meeting. 02/10/19
2. Military medical examination. Some team members are absent. 03/14/19
3. Catalysts Coding Contest. Some team members are absent. 03/22/19

Team Organization

Schedule of Meeting Times

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			

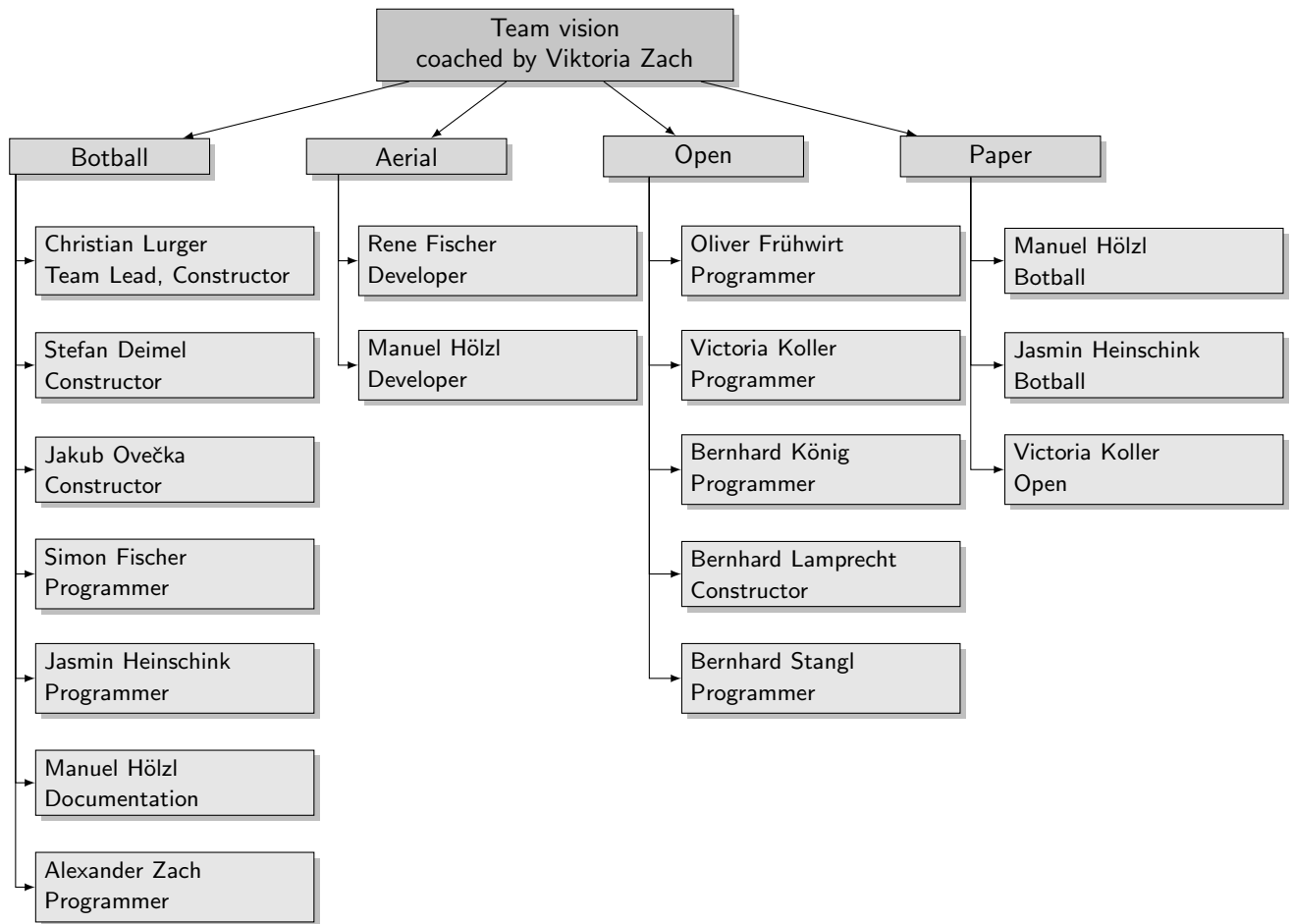
February						
Mon	Tues	Wed	Thur	Fri	Sat	Sun
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28			

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					

	Kick-Off-Workshop
	Team Meeting
	Botball Tournament

Division of Labor



Conflict Resolution

We will solve any occurring problems and disagreements in the following way:

1. If there are troubles, the first attempt to solve it should be a conversation between the concerning people. They should evaluate alternatives and develop the best solution together.
2. If this way is not possible, the team members should talk together with the student team leader and find a compromise which is accepted from both.
3. If there still is no solution, the team members have to talk with the adult team leader. The adult team leader tries to understand both positions and put them together to a new one.
4. The last way is a poll, where every team member can choose one possibility. The option that gets more votes will be chosen.