Period One - Project Plan

Tyngsborough Robotics - Team Number: 0465

Goals and Tasks for Botball 2019

Game Goals and Tasks

I. Find a source of funds by getting sponsors. 1/3/19
   A. Write a letter asking for a company's sponsorship. - 12/1/18
   B. Contact local businesses and see if they could potentially sponsor us. - 12/11/18
   C. Send out the letters by email to robotics and engineering based corporations. - 12/6/18
II. Read and comprehend the 2019 Botball Rules and the hardware. - 01/24/19
   A. Have a sit down with the entire team and read the rules. - 01/22/10
   B. Explain how to use the servos, motors, and wallabies - 01/24/19
III. Build the game board. - 01/29/19
   A. Go through and create a list of the parts needed to assemble the table. - 01/8/19
   B. Measure and cut the PVC piping needed for both halves of the game board. - 01/15/19
   C. Build the outline structure of the game board. - 01/17/19
   D. Measure and tape all of the lines on the game board. - 01/22/19
   E. Place all of the game structures and components on the board. - 01/24/19

Robot Building Goals and Tasks

I. Create two basic bots. - 02/05/19
   A. Create the demo bot. - 01/25/19
   B. Create the demo Create. - 01/25/19
   C. Ensure that the two bots are built to last and don't fall apart. - 02/05/19
II. Have the hardware team and the strategy team create the structures needed for both robots. - 02/12/19
   A. Sketch plans out and discuss each structure's function. - 01/29/19
   B. Begin to build the structure. - 01/31/19
   C. Attach them to the robots. -02/05/19
III. Investigate Hardware. - 01/25/19

    A. Use the wallabie to test the servos, and motors to ensure they still work. - 01/22/19

    B. Find replacements at the workshop for servos and motors that don't work. - 01/25/19

Programming Goals and Tasks

I. Create and organize the programming group. - 01/17/19
    A. Find out who wants to become a programmer. - 01/03/19
    B. Assign one person to be the programming team leader. - 01/08/19
    C. Separate into separate groups for the create and demo bot. - 01/08/19

II. Complete code for the demo bot. - 04/18/19
    A. Complete baseline code for the demo bot. - 04/09/19
    B. Optimize the code for the demo bot. - 04/16/19
    C. Put the final touches on the code. - 04/18/19

III. Complete code for the Create. - 04/18/19
    A. Complete baseline code for the Create. - 04/09/19
    B. Optimize the code for the Create. - 04/16/19
    C. Put the final touches on the code. - 04/18/19

Documentation Goals and Tasks

I. Complete Period 1 Documentation - 02/06/19
    A. Have each group leader assemble a list of goals they want to achieve. - 02/05/19
    B. Create a team schedule and have each member state their conflicts with the presented schedule. - 01/03/19

II. Complete Period 2 Documentation - 03/13/19
    A. Have the programmers familiarize themselves with Github and create a repository. - 02/14/19
    B. Have the hardware team make a statement about their progress on the robot build. - 03/07/19

III. Complete Period 3 Documentation - 04/24/19
    A. Ensure that a pull request has been made on the repository. - 04/18/19
    B. Gather team members and ask them about lessons they have learned over the course of the club. - 04/18/19

Tyngsborough Robotics - New England Region

Team Organization

Meeting Schedule
Normal Meeting: Tuesdays and Thursdays 2:00pm - 3:30pm
Regional Workshop: January 25th and 26th
Regional Tournament: April 27th

Denotes Meeting Day: After School from 2:00pm - 3:30pm

Denotes Vacation/Scheduling Conflict

Denotes Due Date/Tournament

January 2019						
Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
		1 Winter Vacation	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22 Ski Club	23	24	25	26
27	28	29 Ski Club	30	31		

Tyngsborough Robotics - New England Region

February 2019

Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
					1	2
3	4	5 Ski Club	6 Period 1 Doc Due	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
		February Vacation				
24	25	26	27	28		

March 2019

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

April 2019

Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
	1	2	3	4	5	6
		Spring Sports				
7	8	9	10	11	12	13
		Spring Sports				
14	15	16	17	18	19	20
		Spring Sports				
21	22	23	24 Period 3 Doc Due	25	26	27 Tourney. Day
		Spring Sports				
28	29	30				

Scheduling Conflicts

Ski Club: Every Tuesday from 01/22 - 02/05
- Absences would range from 4 to 5 people

Spring Sports: Every Day after 03/04
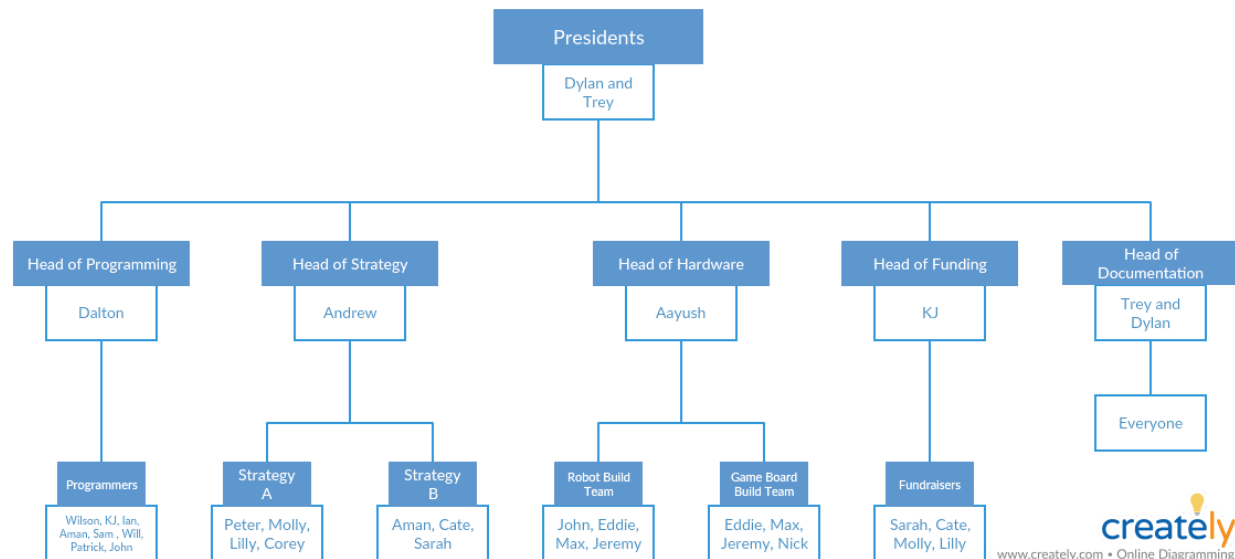- Most attendees would be absent due to the high participation in sports

February Vacation: 02/18 - 02/23
- There would be no school resulting on 100% absent

Winter Vacation: Prevents meeting from occurring 01/01
- There would be no school resulting on 100% absent

Division of Labor

Conflict Resolution

Step 1: Initially members involved in a conflict will attempt to resolve it between themselves by a series of compromises.

Step 2: If members involved in a conflict can't resolve it by themselves they will contact their group leader for a decision.

Step 3: If there is a disagreement involving a team leader, or if the team leader cannot resolve a conflict, the two presidents Trey and Dylan will determine the solution.

Step 4: If the presidents cannot determine a solution, they will contact their adult mentor Mr. Boisvert to determine a solution.

Step 5: If Mr. Boisvert can't determine a solution it will be left to a vote between all members of the team, the side with more votes will win.

Step 6: If the vote is tied and no one has stepped up to make a decision a random 50/50 game of chance will determine the outcome.