Greater DC/Virginia Holton-Arms School #2 19-0702

Period 1-Project Plan

Goals and Tasks For Botball 2019

Game Goals and Tasks

- 1. Year Overview, 12/7/18
 - a. Teach new members basics of techniques and building robots, 10/26/18
 - b. Teach new members basics of coding, 11/16/18
- 2. Brainstorm Strategies, 1/26/19
 - a. Brainstorm ideas and develop a strategy, 1/25/19
 - b. Discuss ideas and come to a consensus, 1/26/19
- 3. Organize Parts, 1/25/19
 - a. Print list of parts to catalog and sort parts, 1/25/19
 - b. Organize parts into tool kit and bins, 1/25/19
- 4. Construct Game Board, 3/9/19
 - a. Build skyscrapers, 1/26/19
 - b. Organize PVC pipes, 3/1/19
 - c. Mark path on board, 3/2/19
- 5. Learn Game Rules, 2/15/19
 - a. Designate a team member to learn rules for future reference, 1/25/19
 - b. Read resources from team Homebase and denote important information, 2/15/19

Robot Building Goals and Tasks

- 1. Design and draw robot prototypes, 2/2/19
 - a. View different sketches on projector to formulate ideas, 2/2/19
 - b. Design arms and hood for Robot A robot, 2/2/19
 - c. Design arms for Robot B, 2/2/19
- 2. Finalize prototype for Robot A, 3/1/19
 - a. Build base of robot, 2/8/19
 - b. Build arm for Robot A that hits firefighters, 2/8/19
 - c. Build "roof" of hood system for Robot A that blocks other firefighters from moving, 2/9/19
- 3. Finalize prototype for Robot B, 2/15/19
 - a. Build first arm that picks up people, 2/1/19
 - b. Build second arm that picks up people, 2/2/19
 - c. Build pen that moves up and down and holds people, 2/8/19

Programming Goals and Tasks

- 1. Write pseudocode for both robots, 2/9/19
 - a. Approximate values to put in code, 2/9/19

- b. Comment in all actions of the robot, 2/9/19
- 2. Complete programming for Robot A and Robot B, 3/16/19
 - a. Complete programming for Robot A, 3/3/19
 - b. Test robots and determine actual values, 3/10/19
 - c. Adjust code values as needed with further testing, 3/16/19
- 3. Find the distances the robots will move on the board, 3/10/19
 - a. Calculate dimensions for test board, 3/3/19
 - b. Determine the pathway of both robots, 3/3/19

Documentation Goals and Tasks

- 1. Complete Period 1 (Project Plan) Documentation, 1/30/19
 - a. Organize division of labor, 1/26/19
 - b. Communicate with building and coding groups to find out goals, 1/26/19
- 2. Complete Period 2 (Mechanical Systems Design/Code Review) Documentation, 2/27/19
 - a. Take pictures of robots, 2/15/19
 - b. Discuss with coding group to understand code, 2/15/19
 - c. Meet with building group to understand the construction of robots, 2/15/19
- 3. Complete Period 3 (Lessons Learned) Documentation, 4/3/19
 - a. Distribute work among documentation members, 3/20/19
 - b. Send survey to team members about season experience, 3/20/19

Schedule Conflicts

- Winter break and Grade-Level Exams: No school for two weeks and no meetings for one month, 12/21/2018 to 1/24/19
- 2. Swim Team ISLs, 1/25/19
- 3. Swim Team WMPSSDLs, 2/2/19
- 4. Swim Team METROS, 2/9/19
- 5. Model UN Conference: NAIMUN, 2/14/19 to 2/16/19
- 6. Winter Play: Performance Dates, 2/22/19 to 2/23/19
- 7. Coffeehouse: Performance Date, 3/16/19
- 8. Spring Break: no school for one week, 3/21/19 through 4/1/19

Team Organization

Schedule of Meetings

2018/2019 Calendar

		00	toh	e		November						
ЭJ	١ħ	-u	me	Ŧ	F-	5a	а,	610		me		
	1	2)	4	5	6					1	
7	1	9	1Ú	.1	12	13	4	5	£	7	З	
14	15	ļŕ	17	۰¢	1 <u>9</u>	20	11	1Z	$^{:3}$	14	ų,	
21	22	27	24	27	25	27	18	19	20	5.	22	ļ
28	29	X	сī,				25	26	27	20	29	ļ

Nús	riter	ibe	I		December							
·	me	·	Fr	\$ə	зJ	0#1	τ,	ılı"e	Th	ī⁼	Sa	
		1	2	3							1	
£	7	w.	9	10	2	2	4	5	3	÷Č.	8	
$^{+3}$	14	16	16	17	э	ľ	11	1°	13	14	15	
20	2.	22	20	24	16	17	18	18	20	21	32	
2^{7}	20	29	æ		23	24	25	Æ.	27	20	3 9	
					30	21			Ι.			

January								February							
s	Μ	т	w	ŕ	F	5		s	М	т	W	Т	F	s	
		1	2	3	4	5							1	2	
6	7	8	9	10	11	12		3	4	5	6	7	8	9	
13	14	15	16	17	18	19		10	11	12	13	14	15	16	
20	21	22	23	24	25	26		17	18	19	20	21	22	23	
~ 7	20	20	20	21				24	25	26	27	28			
27	28	29	50	51				27	20				_		
27	28	_					J	27	20				_		
		_	arc		F	s]	5			pri		F	s	
27 S	28	_			F 1	s 2			M				F 5	s 6	
		_	arc		F 1 8	_			M 1	Д т 2	v w 3	il T		6	
s	м	M T	arc w	сh т	<u> </u>	2		s 7	м 1 8	д т 2 9	w W 3 10	іI т 4 11	12	6 13	
s 3	м 4	М т 5	arc w	:h т 7	8	2 9		s 7 14	м 1 8 15	д т 2 9 16	pri W 3 10 17	il T 4 11	12 19	6 13 20	
S 3 10	M 4 11	M T 5	arc W 6 13	т т 7 14	8 15	2 9 16		s 7	м 1 8 15	д т 2 9 16	pri W 3 10 17	il T 4 11	12	6 13 20	

<u>Key-</u>

- Meeting Dates - Documentation Deadlines -Botball!



*Denotes group leaders

†Denotes team captains

Conflict Resolution:

The team has agreed that if an argument comes up, they will be handled with the following steps:

- 1. Team members who have a disagreement will endeavor to create a solution themselves without involving other members of the team.
- 2. If the team members cannot resolve the problem by talking amongst themselves, the team members involved in the conflict will discuss with the team captains, Elizabeth and Morgan.
- 3. If the team captains cannot resolve the problem, the team members involved and the team captains will go to the club executives: Grace, Lauren, and Raeyan.
- 4. If the club presidents cannot resolve the problem, all involved team members will take the disagreement to Mr. Lee, the club advisor. His resolution is absolute.
 - a. If the team members that are disagreeing are the presidents, then the problem will be taken to Mr. Lee immediately.