

Period One – Project Plan

Goals and Tasks for Botball 2019

Game Goals and Tasks

1. Review the game board design, rules, movies and game documents
 - a) Watch the movies on Smartboard and review rules. 1/17/19
 - b) Load software on computers in the classroom. 1/29/19
 - c) Hand out point sheets and board design to all members. 1/29/19
 - d) Divide group into primary assignments based on two robots. 1/31/19
2. Review point values and develop strategy for two robots
 - a) Design pathway for different point totals 2/5/19
 - b) Decide to work towards using sensor to find burning building 2/7/19
 - c) Start to decide on tasks for each robot, how to gain points. 2/5/19
3. Build Practice Board
 - a) Write up parts list for one-half table. 1/29/19
 - b) Have Mrs. Schroeder buy the needed parts. 1/29/19
 - c) Have the one-half table built to specifications by 1/31/19

Robot Building Goals and Tasks

1. Design small robot needs; arms, motors, sensors, etc. 2/14/19
 - a) Strong and stable small robot built 2/14/19
 - b) Design for maximum point collection 2/12/19
 - c) Design collection basket to be removable 2/14/19
 - d) Sensor to detect yellow and red square 2/28/19
 - e) Accurate turns of 90° and 180° 2/14/19
2. Design 'claw' for Create with ability to reach 24+ inches from within starting box. 2/14/19
 - a) Keeping it level during lifting 2/14/19
 - b) Multifunctional, two sided claw, for grabbing Botguy, people and supplies 2/12/19
3. Working sensor for yellow and red square 2/28/19
 - a) How far away is accurate 2/28/19
 - b) How 'off center' is accurate 2/28/19
 - c) Decide if this sensor a viable option to maximize points 3/5/19

Programming Goals and Tasks

1. Teach newcomers basics of programming 2/14/19
 - a) Teach them compiling and changing of commands 2/14/19
 - b) Teach them sensor setups on the brain 2/14/19
2. Program simple motor functions 2/26/19
 - a) Using sensors 2/26/19
 - b) Follow the line 2/26/19

Arlington Middle and High School
19-0537
New England Region

3. Program claw effectively 2/28/19
 - a) Turn 90° 2/28/19
 - b) Open each side of claw independently 2/28/19

Documentation Goals and Tasks

1. First Period Documentation Finished 2/5/19, Due 2/6/19
 - a) Mrs. Schroeder will print out documentation rubric and sample plans by 1/31/19
 - b) Katie will collect and write up all documentation for first period 2/6/19
 - c) All members contribute ideas and suggestions for documentation. 2/5/19
 - d) Include schedule for meetings, conflicts and all conflict resolution 2/5/19
2. Second Period Documentation Finished by 3/7/19, Due 3/13/19
 - a) Must include Mechanical Design 3/7/19
 - b) Must include a software design that will be included 3/7/19
- C. Third Period Documentation Finished 4/11/19, Due 4/24/19
 - a) Must include lesson learned 4/11/19
 - b) Survey done by 4/11/19

Schedule Conflicts

- a) Winter Holiday: No school 2/18-22/19
- b) Spain Trip: Robotics may take place but many will be absent 4/8 - 12/19
- c) Spring Break: No school 4/15-19/19

Team Organization

Schedule of Meeting Times

January

7	8	9	10	11
14	15	16	17	18
21	22	23	24	25
28	29	30	31	

February

				1
4	5	6	7	8
11	12	13	14	15
18	19	20	21	22
25	26	27	28	

March

				1
4	5	6	7	8
11	12	13	14	15
18	19	20	21	22
25	26	27	28	29

April

1	2	3	4	5
8	9	10	11	12
15	16	17	18	19
22	23	24	25	26



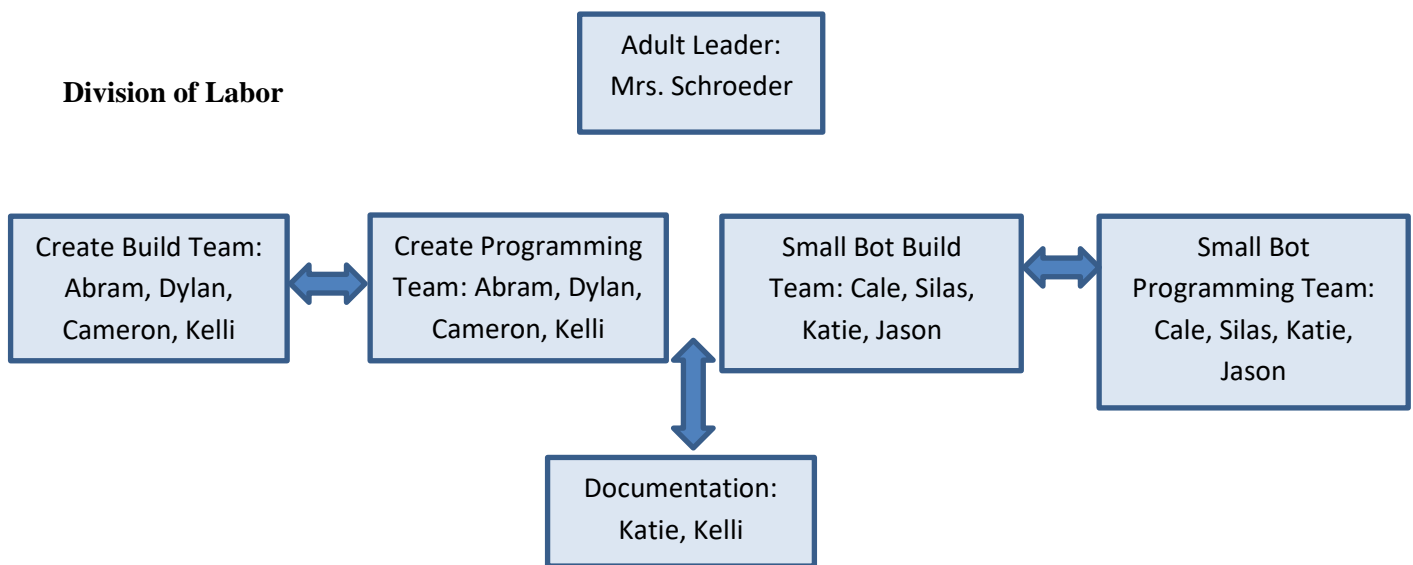
Indicates meeting days.

Indicates possible meeting days.

Arlington Middle and High School
19-0537
New England Region

- a) Regional conference - January 25 - 26
- b) Robotics team will meet Tuesdays through Thursdays every week when school is open
 - a. Tuesdays, 2:45–4:00: January 15, 29, February 5, 12, 26, March 5, 19, 26, April 2, 9, 23.
 - b. Thursdays, 2:45–4:00: January 17, 31, February 7, 14, 28, March 7, 21, 28, April 4, 11, 25.
- c) New England Botball Tournament April 27, Lowell, MA

Division of Labor



Conflict Resolution

- a) Each team has agreed to handle disagreements as soon as they come up. All members have agreed not to dismantle any robot part build by another team member without prior permission. Members agree to break down unwanted robot parts and not to hoard parts.
- b) Team members will attempt to work out disagreements within their team first. If team members cannot resolve a conflict, the other team will be asked to help with the conflict.
- c) If the conflict remains the team and Mrs. Schroeder will make a final decision on the conflict. This decision will be final.