Period One- Project Plan

Goals and Tasks for Botball 2019

- ***Game Goals and Tasks***
  - Review the game rules and game documents → 1/22/19
    - Distribute game rules (through google drive) → 1/15/19
    - Share video of game rules → 1/15/19
  - Brainstorm Ideas → 1/19/19-1/20/19
    - Discuss game strategies → 1/19/19
    - Take notes on ideas for strategy & robot assembly →1/20/19
  - Build Practice Board→ 2/14/19
    - Assemble list of supplies that team needs to purchase→ 1/22/19
    - Team assembles game board in the classroom → 1/5/19-1/7/19

- ***Robot Building Goals and Tasks***
  - Prototype the Roomba and LEGO robots→1/22/19
    - Review strategy and discuss ideas → 1/22/19
    - Complete drawing of concept for the Roomba based on strategy→1/19/19
  - Complete Construction of Roomba → 2/26/19
    - Construct camera mount → 2/5/19
    - Construct chain arm → 2/25/19
    - Construct claw → 2/11/19
  - Prototype build LEGO Robot
    - Rebuild chassis and remount wheels → 2/5/19
    - Construct arm and claw → 2/5/19
    - Mount sensors, light, tap, and line → 2/11/19
- ***Programming Goals and Tasks***

- ○ Run test programs→ 2/5/19
  - ■ Create functions to drive varying distances → 2/5/19
  - ■ Program turns and function to return to starting positions → 2/5/19
  - ■ Experiment using sensors to travel until a certain distance from object, or until bumped → 2/5/19
- ○ Complete Program for Roomba →3/4/19
  - ■ Write code with building team for Roomba → 3/4/19
  - ■ Program camera → 2/25/19
  - ■ Program chain arm → 3/4/19
  - ■ Program claw → 2/11/19
  - ■ Test programming for Roomba with build team → 3/11/19
- ○ Complete Program for LEGO Robot→ 3/18/19
  - ■ Write code with building team for LEGO Robot→ 3/11/19
  - ■ Program driving functions → 2/25/19
  - ■ Program arm and claw → 2/25/19
  - ■ Program sensors → 3/4/19
  - ■ Test programming for LEGO Robot→3/18/19
- ● *Documentation Goals and Tasks*
  - ○ First Period Documentation Complete → due 1/30/19
    - ■ Meet to set overall schedule, assign tasks, and discuss conflict resolution→1/15/19
    - ■ Gather information from build team and programming team to establish goals → 1/22/19
  - ○ Second Period Documentation Complete → 2/27/19
    - ■ Gather data from build team for assignment → 2/19/19, 2/21/19
    - ■ Gather data from programming team → 2/19/19, 2/21/19
  - ○ Third Period Documentation Complete → 4/3/19

- ■ Set up computer for everyone to take survey → 3/21/19
- ■ Gather info from team members for lessons learned → 3/28/19

Team Organization

Schedule of Meeting Times:

Workshop: January 19th and 20th
Competition: April 6th

Conflict dates:

January 24-26 → District Band

February 14-16 → District Jazz

March 6-8→ Region Band

Each meeting will run from 3:30pm - 5:45pm
**green is the tentative meeting dates
**blue is the days in which we don't have school

January

M	T	W	T	F
	1	2	3	4
7	8	9	10	11
14	15	16	17	18
21	22	23	24	25
28	29	30	31	

February

M	T	W	T	F
				1
4	5	6	7	8
11	12	13	14	15

M	T	W	T	F
18	19	20	21	22
25	26	27	28	

March

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

April

M	T	W	T	F
1	2	3	4	5
8	9	10	11	12
15	16	17	18	19
22	23	24	25	26
29	30			

Division of Labor:

Adult Team Leaders: Mr. Besong and Ms. Nilson
Robot Building Team: Lorien Farber, Josh Bloom, Nick McClellan, Austin Markle
Programmers: Jeff Fry and Katherine Haagen
Documentation Team: Courtney Metz

Conflict Resolution:

1. Team members with possible conflicts will first attempt to work out the disagreement together with other members. Team agrees to allow everyone to express their opinions and thoughts in attempt to reach a solution.

2. If the team members can't come to an agreement/ solution, then the team members will bring their problem to Mr. Besong, one of the adult team leaders.
3. If team members cannot reach a resolution, then the students will discuss the conflict with Ms. Nilson and they will decide how to resolve the conflict. Their decision will be the final decision made about the issue.