

Period 1 Project Plan

Goals and Tasks for Botball 2019

Game Goals and Tasks

1. Finish Lego design and programming (4/5/19)
 - a. Complete Lego construction (3/1/19)
 - b. Complete Lego programming (3/22/19)
2. Finish Create design and programming (4/5/19)
 - a. Complete Create construction (3/1/19)
 - b. Complete Create programming (3/22/19)
3. Make sure both robots work simultaneously as intended (4/5/19)
 - a. Successful combined run on game field (3/29/19)
 - b. Program wait for light and shutdown timer (4/4/19)

Robot Building Goals and Tasks

1. Design of Create and Lego Robots (2/1/19)
 - a. Complete drawings of Create robot design based on the chosen strategy (2/4/19)
 - b. Complete drawings of Lego robot design based on chosen strategy (2/4/19)
2. Complete Construction of Create Robot (2/28/19)
 - a. Build basic prototype of Create robot (2/8/19)
 - b. Create Igus chain and claw mechanisms to grab food, supply, and water clusters (2/15/19)
3. Complete Construction of Lego Robot (2/28/19)
 - a. Build basic prototype of Lego Robot (2/8/19)
 - b. Create double claw system to grab people and ambulance (2/15/19)
 - c. Create a plow to collect water (2/18/19)

Programming Goals and Tasks

1. Review Programming (2/2/19)
 - a. Review create commands and sensors (2/2/19)
 - b. Review lego commands and sensors (2/2/19)
2. Finish Create Code (4/4/19)
 - a. Locate and hook up electrical lines (2/11/19)
 - b. Follow black line while collecting food, supply, and water clusters (2/18/19)
 - c. Locate non-burning medical center, placing supplies on top (3/8/19)
 - d. Move firetruck to burning medical center (3/15/19)
 - e. Move people to non-burning medical center (3/22/19)

- f. Ensure program consistency (4/4/19)
3. Finish Lego Code (4/4/19)
 - a. Move ambulance to either medical center (2/11/19)
 - b. Follow blue line to collect water poms (2/18/19)
 - c. Follow blue line and grab people (3/8/19)
 - d. Place water poms in water reclamation unit, move to utility zone (3/20/19)
 - e. Follow blue line to move people near medical centers (3/22/19)
 - f. Ensure program consistency (4/4/19)

Documentation Goals and Tasks

1. Period 1 Document Submission (1/30/19)
 - a. Assign document roles to teammates (1/27/19)
 - b. Complete draft of document (1/28/19)
 - c. Review and edit completed document draft as needed (1/30/19)
2. Period 2 Document Submission (2/27/19)
 - a. Assign document roles to teammates (2/18/19)
 - b. Collect all data/pictures/code needed for the documents (2/22/19)
 - c. Complete drafts of documents (2/25/19)
 - d. Review and edit completed document drafts as needed (2/27/19)
3. Period 3 Document Submission (4/3/19)
 - a. Assign document roles to teammates (3/25/19)
 - b. Submit all student surveys (3/29/19)
 - c. Complete draft of document (4/1/19)
 - d. Review and edit completed document draft as needed (4/3/19)
4. Onsite Presentation (4/6/19)
 - a. Assign presentation roles to teammates (3/22/19)
 - b. Create outline of presentation (3/27/19)
 - c. Complete draft of presentation (4/1/19)
 - d. Review and edit presentation draft as needed (4/3/19)

Schedule Conflicts

- February 1st and 22nd: StellarXplorers Quarter-Final and Semi-Final rounds- A majority of the team will be competing in this competition, and unable to attend the meetings on those days
- February 9th: End of swim team season- Up until then, three team members won't be able to attend the after-school meetings
- March 18th-22nd: STEM Capstone Presentation Week- A majority of the team's focus will be on preparing to deliver these presentations

Team Organization*Schedule of Meeting Times*

January

Mon	Tues	Wed	Thur	Fri
	1	2	3	4
7	8	9	10	11
14	15	16	17	18
21	22	23	24	25
28	29	30	31	

February

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

March

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

April

Mon	Tues	Wed	Thur	Fri
1	2	3	4	5
8	9	10	11	12
15	16	17	18	19
22	23	24	25	26
29	30			



Indicates day of team meeting

Meeting Times: Wednesdays- 12:05-1:05 PM, Thursdays- 2:45-4:30 PM, Fridays- 12:05-1:05 PM and 2:45-4:30 PM

Tournament - Saturday, April 6th

Division of Labor

Create

- Bradley Wohlfarth (Lead)
- Joshua Hoffman (Documentation Specialist)
- Finnegan O'Neill (Programmer)
- Thomas Jamison (Builder)

Lego

- Jay Lee (Lead)
- Tahsin Rahman (Documentation Specialist)
- Nicholas Zhou (Programmer)
- Clayton Crownover (Builder)

Conflict Resolution

1. Team members in disagreement will attempt to resolve issues between themselves by finding common ground and listening to each other's thoughts and ideas.
2. If a solution cannot be found, the leader of that robot team will either resolve the issue himself or put it to a vote with the rest of the team.
3. As a last resort, the adult team leader will be consulted for a final resolution.