

## **Period One - Project Plan**

### **Goals and Tasks for Botball 2018**

#### **1. Game Goals and Tasks**

- a. Understanding the rules and scoring 2/1/18
  - i. Create a Google folder with important information about the competition 1/14/18
  - ii. Work as a group to understand the rules and scoring 2/1/18
- b. Build practice board 1/24/18
  - i. Teacher will acquire necessary supplies for practice board 1/15/18
  - ii. Teacher and team will finish building practice board 1/24/18
- c. Understand the game board 2/1/18
  - i. Understand where all of the fixed pieces will be 2/1/18
  - ii. Understand where all of the loose pieces will be 2/1/18

#### **2. Robot Building Goals and Tasks**

- a. Have a plan of how our robots will be built 2/7/18
  - i. Complete a labeled diagram of Create robot 2/6/18
  - ii. Complete a labeled diagram of Small robot 2/7/18
- b. Have most of Create robot built and be ready for final testing 3/5/18
  - i. Add programmed motors, servos, and sensors 3/2/18
  - ii. Finish any mechanical adjustments 3/6/18
- c. Have most of the Small robot built and ready for final testing 3/6/18

- i. Add programmed motors, servos, and sensors 3/5/18
- ii. Finish any mechanical adjustments 3/7/18

### **3. Programming Goals and Tasks**

- a. Outline Program for Create and Small robots 2/12/18
  - i. Run and analyze test program for Create robot 2/12/18
  - ii. Run and analyze test program for Small robot 2/12/18
- b. Complete program for Create robot 3/5/18
  - i. Program motors, servos, and sensors 3/1/18
  - ii. Test Create robot programming 3/5/18
- c. Complete program for Small robot 3/7/18
  - i. Program motors, servos, and sensors 3/2/18
  - ii. Test Small robot programming 3/7/18

### **4. Documentation Goals and Tasks**

- a. First Period Documentation complete 1/28/18
  - i. Use class time and outside time (if needed) to discuss Team Organization and Division of Labor 1/28/18
  - ii. Establish goals based on input from team 1/28/18
- b. Second Period Documentation complete 2/20/18
  - i. Gather data from programming team and revise necessary tasks 2/19/18
  - ii. Gather data from building team and revise necessary tasks 2/19/18
- c. Third Period Documentation complete 3/6/18

- i. Get info from team members for lessons learned 3/4/18
- ii. Have whole team take survey 3/5/18

## 5. Schedule Conflicts

- a. One team member will be absent February 4th.
- b. Another team member will be absent February 25th.
- c. After-school sports limit people's ability to meet in smaller groups to work on the project. Other after-school commitments like music or theatre also affect possible meeting times.

## Team Organization

## 6. Schedule of Meeting Times

Regularly scheduled class times shown in **yellow** - whole class meets for approx. 40 minutes on each day shown, and smaller groups might meet outside of class as needed.

### Jan

MON	TUE	WED	THUR	FRI	SAT	SUN
28	29	30	31	1	2	3

### Feb

MON	TUE	WED	THUR	FRI	SAT	SUN
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17

<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>
<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>1</b>	<b>2</b>	<b>3</b>

**March**

<b>MON</b>	<b>TUE</b>	<b>WED</b>	<b>THUR</b>	<b>FRI</b>	<b>SAT</b>	<b>SUN</b>
				<b>1</b>	<b>2</b>	<b>3</b>
<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>

**February/March - additional weekend or evening meetings may be scheduled, as needed, during these months**

**7. Division of Labor**

Adult Team Leader - Teacher

Build Create Robot - Hayden, Mitch

Code Create Robot - Erik, David

Build Small Robot - Antony, Hannah, Chara

Code Small Robot - Connor, Michael

Documentation - Everyone will work together to do documentation.

**8. Conflict Resolution**

The team has agreed that if disagreements happen we will take care of them in the following way:

1. Team members who disagree will first attempt to work out the disagreement together.

Team members agree to allow everyone to express their opinions and thoughts one at a time and attempt to reach a resolution.

2. If a resolution is not reached, it will be brought to the teacher, the adult team leader. The teacher will either decide how to resolve the disagreement or will bring it to the team for discussion and a team vote. The teacher's decision or the team's vote will be final.