Greater Chicago

# Period One – Project Plan

Goals and Tasks for Botball 2019

# Game Goals and Tasks Deadlines

- 1. 1. Review the game rules and game theme 1/13/19
  - a. Copy game rules and distribute to team member for review 1/13/19
- 2. 2. Brainstorm Strategies 1/24/19
  - a. a. Discuss game strategies and record them on this document 1/24/19
  - b. Team captain will lead discussion on options and club will vote on the game strategies to use for the season 1/24/19
- 3. 3. Build Practice Board 1/24/19
  - a. Build team will assemble list of supplies for teacher to purchase at Home Depot 1/20/19
  - b. Team leader will help team assemble game board in the classroom 1/24/19

# **Robot Building Goals and Tasks Deadlines**

- 1. 1. Prototype the Create and LEGO Robots 1/31/19
  - a. Complete a labeled drawing of the concept for the Create robot based on the chosen strategy 1/31/19
  - b. Complete a labeled drawing of the concept for the LEGO robot based on the chosen strategy 1/31/19
- 2. 2. Complete Construction of Create Robot 2/12/19
  - a. a. Construct sweeping mechanism. 2/12/19
- 3. 3. Complete Construction of LEGO Robot 2/12/19
  - a. a. Complete construction of chassis 2/3/19
  - b. b. Construct grabbing arm 2/7/19
  - c. c. Add line sensor 2/12/19

# Programming Goals and Tasks Deadlines

- 1. 1. Run Test Programs 1/31/19
  - a. a. Program basic movements using the workshop demobot 1/27/19
  - b. b. Program precision turns using the workshop demobot 1/27/19
  - c. c. Program each sensor using the workshop demobot 1/29/19
- 2. 2. Complete Program for Create Robot 2/28/19
  - a. a. Write pseudocode with building team for Create robot 2/17/19
  - b. b. Program the food, medical supplies and water collection 2/26/19
  - c. e. Test all programming for Create robot with build team 2/28/19

- 3. 3. Complete Program for LEGO Robot 2/28/17
  - a. a. Write pseudocode with building team for LEGO robot 2/17/19
  - b. b. Program precision turns 2/19/19
  - c. c. Program getting to the gas valve 2/24/19
  - d. d. Program line sensor 2/26/19
  - e. e. Test all programming for LEGO robot with build team 2/28/19

# **Documentation Goals and Tasks**

- 1. 1. First Period Documentation Complete 2/3/19
  - a. a. Class meeting to set the overall schedule, assign tasks and decide on conflict resolution 1/15/19
  - b. b. Gather info from building and programming teams to establish goals and tasks for the season 1/27/19
- 2. 2. Second Period Documentation Complete 2/19/19
  - a. a. Gather data from build team for assignment 2/12/19
  - b. b. Gather data from programming team for assignment 2/17/19
- 3. 3. Third Period Documentation Complete 3/5/19
  - a. a. Set up computer for everyone to take survey 3/3/19
  - b. b. Gather info from team members for lessons learned 2/28/19

# Schedule Conflicts

1. Soccer games- several team members absent 2/3/19 - 3/3/19

# Team Organization

Schedule of Meeting Times:

Regional workshop – January - 20th and 21st

Regional tournament – April 7th

Each meeting will run from 1 pm - 4 pm

Schedule for January – 13th, 27th Schedule for February – 3rd, 10th, 17th, 24th, Schedule for March – 3rd, 10th, 17th, 24th, 31st

#### Division of Labor:

Adult Team Leader: Mr. Goldman Building Team for Create robot: Dory and Gabriel and Cara Robot Building Team for Lego robot: Dory and Gabriel and Cara Programmers for Create robot: Yehoshua and Ari Programmers for Lego robot: Yehoshua and Ari Documentation Team: Dory

**Conflict Resolution**: The team has agreed that if disagreements occur we will handle them in the following way:

- 1. 1. Team members who are in disagreement 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 resolution.
- 2. 2. If resolution cannot be reached, the team members will bring their problem to Dory, the student team leader.
- 3. 3. If a resolution is still not reached (or the disagreement involves the student team leader), it will be brought to Mr. Goldman), the adult team leader. Mr. Goldman will either decide how to resolve the conflict or will bring it to the team for discussion and a team vote. Mr. Goldman's decision or the team vote will be final.