

## **Period One - Project Plan**

### **Goals and Tasks for Botball 2019**

#### **Game Goals and Tasks:**

1. Review the game board and scoring, 1/29/19
  - A. Project the game board onto the whiteboard and talk about the different aspects of this year's competition, 1/29/19
  - B. Give out physical copies of the scoring sheet, 1/29/19
2. Brainstorm strategies, 2/1/19
  - A. Have a group discussion and debate possible strategies, 1/31/19
  - B. Decide on four different robot strategies, 2/1/19
3. Build practice board, 2/6/19
  - A. Disassemble the practice board from last year, 1/31/19
  - B. Coach and students assemble the board, 2/6/19

#### **Robot Building Goals and Tasks:**

1. Construct a claw, 3/8/19
  - A. Create a sketch for a claw prototype, 2/15
  - B. Build a claw in order to grab Botguy and the mayor, 3/1/19
  - C. Create a stable mount for the claw, 3/8/19
2. Build a system to elevate the claw to the top of buildings, 3/8/19
  - A. Sketch different ideas about an elevation system, 2/15/19
  - B. Construct most reliable form of system, 3/1/19
  - C. Mount claw to elevation system, 3/8/19
3. Build a mount for a camera to identify the burning building, 3/1/19
  - A. Create a base on the create for the camera, 2/15/19
  - B. Mount camera to create, 2/22/19
  - C. Confirm camera placement through testing, 3/1/19

#### **Programming Goals and Tasks:**

1. Create a general function library for use with both the Create and the Wallaby, 2/22/19
  - A. Program driving functions for the Create and Wallaby, 2/15/19
  - B. Program turning functions for the Create and Wallaby, 2/22/19
2. Program the camera to recognize if a building is on fire, 3/8/19
  - A. Find the colors of the fire panel and how to represent them in code, 2/15/19
  - B. Program the camera to determine if the building has the fire panel, 3/1/19

- C. Program the crank or arm to pick up poms, 3/8/19
- 3. Program a claw to extend to the top of the skyscrapers and pick up botguy/mayor, 3/8/19
  - A. Create a function to extend the claw upwards, 2/15/19
  - B. Program the claw to open & close, 3/1/19
  - C. Create a function to steadily descend the claw, 3/8/19

### **Documentation Goals and Tasks:**

- 1. First Period Documentation Complete, 2/6/19
  - A. Assemble the documentation team, 1/30/19
  - B. Have the teams create goals and deadlines for the year, 2/1/19
- 2. Second Period Documentation Complete, 3/13/19
  - A. Gather data from the building teams, 3/6/19
  - B. Gather data from the programming teams, 3/6/19
- 3. Third Period Documentation Complete, 4/24/19
  - A. Set up computers for every member of team to take survey, 4/17/19
  - B. Get feedback from members to improve the team for next year, 4/17/19

### **Schedule Conflicts:**

- 1. Chemistry Club - meetings every Thursday, several members absent
- 2. Model Bridge Club - meetings every Thursday, several members absent
- 3. Bishops Holiday - school closed - no meeting 2/4/19

### **Team Organization:**

Workshop: January 26th and 27th

Meeting times: Starting after the workshop, meetings runs from 2:45pm - 4:00pm every weekday, unless specified

### **Division of Labor:**

*Adult Team Leader* - Mr. Caristinos

*Captains* - Harrison Jumper and Gavin Sadler

*Team Leaders* - Harrison Jumper, Gavin Sadler, David Sullivan and Maguire O'Donnell

*Documenting Team* - Harrison Jumper, Gavin Sadler, David Sullivan, Michael MacCush and Sam

*Firefighters Group* - Gavin Sadler, Bobby Sullivan, Michael Sekenski and Steve Dewsnap

*Water Collection Group* - Maguire O'Donnell, Owen, Michael, Daniel Rodriguez, Alex Pacey and Zach O'Connell

*Skyscraper Group* - David Sullivan, Michael MacCush, Alex Nguyen, Charles, Reinhardt and Peter

*Fire Group* - Harrison Jumper, Dante LaPriore, Peter Fan, Sam and Hannah Burton

**Conflict Resolution:**

- If there is a conflict between two group members, they will try to work it out between themselves.
- If the team members cannot settle the conflict between themselves, then the team leader will try to settle the conflict.
- If the team leader cannot settle the conflict or the team leader is involved in the conflict, the one of the captains will decide how to solve the conflict.
- If the captains cannot settle the conflict or are involved in the conflict, then the adult team leader Mr. Caristinos, will have the final say.