# Period One – Project Plan

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

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

- 1. Goal organize team.
  - a. Deadline: February 22.
  - b. Task 1 Decide on leadership.
    - i. Deadline February 22.
  - c. Task 2 Separate into teams.
    - i. Deadline February 22.
- 2. Goal Learn about this year's game.
  - a. Deadline March 2.
  - b. Task 1 Attend workshop.
    - i. Deadline February 24 25.
  - c. Task 2 Review documents with team.
    - i. Deadline March 2.
- 3. Goal Decide on strategy.
  - a. Deadline March 2.
  - b. Task 1 Discuss optimal point scoring methods.
    - i. Deadline March 2.
  - c. Task 2 Allocate tasks to robots.
    - i. Deadline March 2.

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

- 1. Build VacuumBot (to Push Poms to End Zone.)
  - a. Deadline: March 8.
  - b. Task 1 Rebuild Roomba shield.
    - i. Deadline: March 8.
  - c. Task 2 Learn to program the Roomba.
    - i. Deadline: March 8.
- 2. Rebuild ClawBot to Mickey Mouse bot.
  - a. Deadline: March 8.
  - b. Task 1 Construct robot.
    - i. Deadline: March 8.
  - c. Task 2 Build color sorter.
    - i. Deadline: March 8.

- 3. Build Minnie Mouse bot (to move Date Crates and Botguy.)
  - a. Deadline: March 8.
  - b. Task 1 Construct claw to grab Date Crates and Botguy.
    - i. Deadline: March 8.
  - c. Task 2 Check for button sensor compatibility.
    - i. Deadline: March 8.

## **Programming Goals and Tasks**

- 1. Push poms, onto End Zone using the Roomba.
  - a. Deadline March 15.
  - b. Task 1 Move to middle.
    - i. Deadline: March 15.
  - c. Task 2 push objects to End Zone.
    - i. Deadline: March 15.
- 2. Program color sorting.
  - a. Deadline: April 13.
  - b. Task 1 Program camera.
    - i. Deadline: March 15.
  - c. Task 2 Program color sorting.
    - i. Deadline: April 13.
- 3. Grab Cubes and Botguy.
  - a. Deadline: April 13.
  - b. Task 1 -Grab Botguy and Date Crates.
    - i. Deadline: March 15.
  - c. Task 2 Place Botguy and Date Crates in Yellow Zone.
    - i. Deadline: April 13.

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

- 1. Goal complete period 1 documentation.
  - a. Deadline: March 14.
  - b. Task 1 Learn about the documentation requirements.
    - i. Deadline March 2.
  - c. Task 2 Interview team about documentation methods.
    - i. Deadline March 8.
- 2. Goal Complete period 2 documentation.
  - a. Deadline: March 28.
  - b. Task 1 Interview construction team.
    - i. Deadline March 28.
  - c. Task 2 Interview programming team.
    - i. Deadline March 28.
- 3. Goal Complete period 3 documentation.
  - a. Deadline: April 18.
  - b. Task Get team members to take the online survey.
    - i. Deadline April 13.
  - c. Task 2 Ask teammates about the Botball experience.

## i. Deadline: April 13.

#### **Schedule Conflicts**

- 1. End of sports seasons.
  - a. Many team members will be unavailable until winter sports are complete.
  - b. Date: February 1 March 2.
- 2. Spring Break.
  - a. Many team members will be unavailable.
  - b. Date: March 26 April 6.
- 3. Open House.
  - a. Meeting room is unavailable.
  - b. Date: March 1.

# **Team Organization**

# Team meeting times:

• Team meetings will be every Thursday at 3:15 p.m. in room 10, from January 10 to April 21.

## Division of Labor:

- Half of the team builds robots.
- Half of the team programs the robots.

#### Conflict Resolution:

• For any conflicts that arise, we will vote as a team.