

New England Region

Hanover High School Robotics Team 19-0123

Period One - Project Plan

Goals and Tasks For Botball 2019

Game Goals and Tasks

1. Goal 1 - Collect poms off the black line 2/8
 - 1.1. Write a sample program to move poms 2/6
 - 1.2. test it out until you can get all of them 2/8
2. Goal 2 - Be able to put the pom poms back into the cup 2/14
 - 2.1. If it doesn't work, test it out accordingly 2/12
 - 2.2. Once it is finished test it out multiple times making sure it works 2/12
3. Goal 3-be able to put them in the disaster relief area 2/10
 - 3.1. Fix robot or code if needed to get all the pom poms in 2/12
 - 3.2. Make sure claw works to get them in 2/12
4. Goal 4-be able to save bot guy 2/14
 - 4.1. Goal 4.1-make robot claw bigger or better if needed to for bot guy 2/14
 - 4.2. Once bot guy fits make sure the robot accordingly picks him up and moves him 2/14

Robot Building Goals and Tasks

1. Goal 1. - Find wheels for the robot that work successfully 2/1

- 1.1. Goal 1.1 - Attach working wheels or change if necessary 2/1
- 1.2. Goal 1.2 - Test out which wheels work the best 2/1
- 2. Goal 2. - Create plow for robot (Feb 1)
 - 2.1. Goal 2.1 - Plow needs to be large enough to fit all the pom poms 2/1
 - 2.2. Goal 2.2 - Make sure plow is structured so that it is sturdy while collecting. 2.1
- 3. Goal 3. Write Code for Robot (Feb 9)
 - 3.1. Goal 3.1 The code can successfully have the robot move from place to place 2/8
 - 3.2. Goal 3.2 The code can make the robot successfully pick up and move the pom poms to the right locations 2/8
- 4. Goal 4. Complete Full Robot (Feb 19)
 - 4.1. Goal 4.1 - Robot needs to be completely finished before competition. (Feb 19)
 - 4.2. Goal 4.2 - Test the code to make sure it works successfully before the competition. (Feb 17)

Programming Goals and Tasks

- 1. Goal 1. Plan out possible programs (Jan 22)
 - 1.1. Look at goals that need to be accomplished. (Jan 22)
 - Brainstorm the best way to accomplish the goals. (Jan 22)
 - Create step-by-step flowcharts for each task (Feb 24)
- 2. Goal 2. Test Programs (Done by 2/20/19)
 - 2.1. Create the best programs planned out in the brainstorming phase. [2/30/19]
 - 2.2. Test out the programs created. [3/5/19]

- 2.3. Refine and retest. [3/6/19]
- 3. Goal 3. Create Final Programs (Done by 3/30/19)
 - 3.1. Take all the bugs out of the selected program. [3/25/19]
 - 3.2. After all the bugs have been taken out test/refine the program to make sure it works consistently and to fine tune it. [3/30/19]

Documentation Goals and Tasks

- 1. ● Programming Report 3/21
 - 1.1. ○ Save all programs with specific task names and dates to show progression 3/19
 - 1.2. ○ Comment all code to explain purpose 3/19
- 2. ● Mechanical Report 3/21
 - 2.1. ○ Photograph the chassis when complete 2/20
 - 2.2. ○ Photograph any claws or plows 2/25
 - 2.3. ○ Photograph all sensors 2/30
- 3. ● Lessons Learned Report 4/25
 - 3.1. ○ Record daily events 4/20 (ongoing)
 - 3.2. ○ Record mistakes made 4/20 (ongoing)
 - 3.3. ○ Brainstorm ideas for the future 4/22

Schedule Conflicts

- February Vacation 2/18/19 - 2/22/19
- April Vacation 4/15/19 - 4/19/19

Team Organization

MEETING TIMES

After school on Tuesdays and Thursdays from 2:40-4 (robotics team)

Every other day during school from 8:50-9:45AM

Division of Labor

- Mrs.Borgeson-Adult Team Leader
- Wes, Graydon - Programmers
- Cole, Cam, - Builders
- Wes, Cole - Documentation managers

Conflict Resolution

- Discuss the issue and attempt to come to an agreement
- Consult with the adult team leader and attempt to come to an agreement
- Rock paper scissors or coin toss to decide

