

Period One - Project Plan

Goals and Tasks for Botball 2019

Game Goals and Tasks

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| 1. Review Game Documents | 1/14/19 |
| a. Make a copy of all the necessary documents for every member of the team. | 1/14/19 |
| b. Review the game documents. | 1/14/19 |
| 2. Create Strategies for the Game | 1/15/19 |
| a. Have each member create a strategy and present it with a flow chart. | 1/16/19 |
| b. Have meeting to discuss the strategies and agree on one or compromise. | 1/16/19 |
| 3. Build Game Board | 1/22/19 |
| a. Acquire all materials necessary to build game board. | 1/18/19 |
| b. Assemble game board. | 1/22/19 |

Robot Building Goals and Tasks

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| 1. Discuss Prototype Robots | 1/14/19 |
| a. Decide which robots will be used. | 1/14/19 |
| b. List which mechanisms robot requires in order to succeed with game strategy. | 1/14/19 |
| 2. Build Moving Prototypes | 1/25/19 |
| a. Build effector arm required for Create's strategy. | 1/25/19 |
| b. Build effector claw required for Lego Bot's strategy. | 1/25/19 |
| 3. Add Sensors | 1/22/19 |
| a. Add tophat, light, and camera sensors to Create. | 1/22/19 |
| b. Add tophat, lever, and light sensor to Legobot. | 1/22/19 |

Programming Goals and Tasks

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| 1. Enable Basic Movements | 1/25/19 |
| a. Program Create to maneuver gameboard. | 1/25/19 |
| b. Program Legobot to maneuver gameboard. | 1/25/19 |
| 2. Establish Use of Sensors | 1/28/19 |
| a. Allow both robots to start on light detection. | 1/28/19 |
| b. Allow both sensors to line follow. | 1/28/19 |
| c. Use camera sensor on Create to detect and approach colored objects. | 1/28/19 |
| 3. Score Points | 1/29/19 |
| a. Combine use of movement and sensors to score points with the Create. | 1/29/19 |
| b. Combine use of movement and sensors to allow the Legobot to not interfere with the Create while still scoring points. | 1/29/19 |

Documentation Goals and Tasks

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| 1. Complete Period 1 Documentation | 1/28/19 |
| a. Gather knowledge on both robots goals and strategies to enable documentation progress. | 1/24/19 |
| b. Documentation team begins work on period 1. | 1/23/19 |
| c. Documentation team finishes period 1. | 1/28/19 |
| 2. Complete Period 2 Documentation | 2/20/19 |
| a. Gather knowledge of programming and mechanical specifics to begin documentation progress. | 1/24/19 |
| b. Documentation team begins work on period 2. | 2/13/19 |
| c. Documentation team finishes period 2. | 2/20/19 |
| 3. Complete Period 3 Documentation | 3/6/19 |
| a. Team meeting to discuss reflections, lessons learned, and assisting ideas for documentation. | 3/4/19 |
| b. Use information from discussion to complete period 3. | 3/6/19 |

Schedule Conflicts

- a. January 18 - Pep Rally - Students absent for school assembly.
- b. January 21 - Martin Luther King Jr. Day - No school.
- c. January 25 - All City Band - Certain team members absent for band concert.

Team Organization

Schedule for Meeting Times:

Regional Workshop - January 12th and 13th

Regional Tournament - March 9th

Each meeting will run from 9:25 am - 10:15 am

Schedule for January- 14, 15, 16, 17, 18, 22, 23, 24, 28, 29, 30, 31

Schedule for February - 1, 2, 4, 5, 6, 7, 12, 13, 14, 15, 18, 19, 20, 21, 22, 25, 26, 27, 28

Schedule for March - 1, 4, 5, 6, 7, 8

Division of Labor

Billy Johnson - Adult Sponsor

Brayan Martinez (Team Leader) - Create Leader

Gilberto Diaz - Create Assistant

Daylyn Isaacs - Demobot Leader

Eduardo Arevalo - Demobot Assistant

All members will work on the documentation cohesively.

Team Resolutions

1. Team members who have a disagreement will first have to resolve it or try to find a resolution on their own accounts. Showing respect in others ideas and opinions is a requirement.
2. If no resolution is found they will seek advice from the Team Leader.
3. Final attempt for resolution shall be to go to Team Adult Sponsor and he shall have the final word on the argument.