

19-0356 Project Plan

Faith Academy

Goals and Tasks for Botball 2019

Game Goals and Tasks

1. Go over construction rules and Game Review document (completed 1/29/2019)
 - a. Make sure everyone understands the rules and main points (completed 1/29/2019)
 - b. Be sure our team is in agreement of our main goals and strategy (completed 1/29/2019)
2. Brainstorm strategies (complete by 1/29/2019)
 - a. Discuss game strategies and possibilities (completed 1/29/2019)
 - b. Make a decision on scoring priorities (completed 1/29/2019)
3. Build game board
 - a. Team inventoried PVC and other materials needed (completed 1/18/2019)
 - b. Team members that went to workshop collected game pieces (completed 1/29/2019)

Robot Building Goals and Tasks

1. Prototype lego and create robots built (complete by 2/8/2019)
 - a. Photos and video of Create robot initial design (complete by 2/15/19)
 - b. Photos and video of Lego bot initial design (complete by 2/15/19)
2. Complete final design of Create robot (complete by 2/15/2019)
 - a. Complete construction of rear bumper (complete by 2/15/19)
 - b. Complete construction of grasping claw (complete by 2/15/19)
3. Complete final design of Lego bot (complete by 2/15/19)
 - a. Complete construction of grasping claw (complete by 2/15/19)
 - b. Add sensors needed to complete tasks (complete by 2/15/19)

Programming Goals and Tasks

1. Run initial programs (complete by 2/15/19)
 - a. Write pseudocode for initial strategy (complete by 2/5/19)
 - b. Program moves to achieve first goal (complete by 2/15/19)

2. Complete programming for Create (complete by 4/5/19)
 - a. Write function to use camera for finding specific targets (complete by 4/5/19)
 - b. Use function for accurate turns and moving a distance (complete by 4/5/19)
3. Complete programming for Lego bot (complete by 4/5/19)
 - a. Use sensors for proximity and line following (complete by 4/5/19)
 - b. Write function for following lines (complete by 4/5/19)

Documentation Goals and Tasks

1. Complete Period 1 documentation (Complete on 2/6/19)
 - a. Set dates for completing goals (complete by 2/6/19)
 - b. Follow rubric (complete by 2/6/19)
2. Complete Period 2 Documentation (Complete by 3/6/19)
 - a. Set up Github account (complete by 3/6/19)
 - b. Photos and video of each robot (complete by 3/6/19)
3. Complete Period 3 Documentation (Complete by 4/3/19)
 - a. Collect Lessons Learned from each team member (complete by 4/3/19)
 - b. Submit code to Github (complete by 4/3/19)

Schedule

Schedule Conflicts

1. Mrs. Parmeter in CASA mediation (Feb 1)
2. Mrs. Parmeter in CASA mediation (Feb 26)
3. Spring Break (March 18-22)
4. Mrs. Parmeter in court for CASA (March 27)

Team Organization

Meeting times: 2:05-3:00 TWF, Jan 26 -April 6

Division of Labor

Mentor: Mrs. Parmeter

Team Captain: Quentin Pratt

Programmers: Leah Brown, Micah Anderson, Seth Jones

Builders: Noah Frederick, Elleson Lehmborg

Documentation: Campbell Murphy, Ella Plante

Conflict Solution

The team has agreed to handle any disagreements as follows:

1. Team members will first try to work out the disagreement between them. Team members agree to stop and listen to one another, without interruption, and attempt to reach a resolution.
2. If a resolution is not possible, team members will bring problem to Quentin Pratt and seek his advice.
3. If resolution is still not reached (or the disagreement involves Quentin), the problem will be presented to Mrs. Parmeter. Mrs. Parmeter can call for a team vote or decide the issue. Mrs. Parmeter's decision or the team vote is final.