Howe Robotics - TX Region 2019 Team # 467

> Period One- Project Plan

Goals and Tasks Botball 2019

Botball Game Goals and Tasks	Deadlines	Status
1. Organize group to review new game rules & scoring pieces	Jan. 24, 2019	Competed
2. Assign game table build assignments	Jan. 22, 2019	Completed
A. Mechanical team to construct buildings using plans	Jan. 29, 2019	Completed
B. Group to cut and assemble PVC frame	Jan. 27, 2019	Completed
C. Team to tape areas on table	Jan. 30, 2019	Completed
3. Assign game score strategy to group	Jan. 31, 2019	Completed
A. ID areas on table	Feb. 1, 2019	Completed
B. ID score amounts for pieces to each area. Learn score sheet.	Feb. 1, 2019	Completed
C. ID practical scoring strategies for team	Feb. 7, 2019	In process

Botball Robot Build Goals	Deadlines	Status
1. Discuss diagram and model Create robot build designs	Feb. 9, 2019	In process
A. Sketch designs of Create lever arm on paper and whiteboard	Feb. 11, 2019	Pending
B. Create models of lever arm simple designs on CAD software.	Feb. 15,2019	Pending
C. Create "mock up" models of lever arm for Create.	Feb. 16, 2019	Pending
2. Discuss diagram and model LEGO robot build designs	Feb. 12, 2019	Pending
A. Sketch designs of LEGO robot "bulldozer" claw concept	Feb. 13, 2019	Pending
B. Create models of bulldozer claw concept on CAD software	Feb. 17, 2019	Pending
C. Create "mock-up" models of dozer claw for lego robot	Feb. 18, 2019	Pending
3. Discuss suspension collection net for LEGO robot	Feb. 22, 2019	Pending
A. Sketch diagram of collection net concept on paper	Feb. 22, 2019	Pending
B. Create model of collection net to use on table	Feb. 23, 2019	Pending
C. Test collection net on people and water poms	Feb. 28, 2019	Pending

Programming Goals and Tasks	Deadlines	Status
1. Review current programming skills as they pertain to current game	Jan. 26, 2019	Completed
A. Discuss and review use of velocity and distance programs in		
Create	Jan. 27, 2019	Completed
B. Review servo programs to use on Create lever arm	Jan. 27, 2019	completed
C. Review our programs to modify for lego robot dozer claw	Feb. 8, 2019	In process
2. Increase skill level using while loop programs	Feb. 11, 2019	Pending
A. Review components of while loops and applications	Feb. 12, 2019	Pending

B. Test while loop codes using lego robot and digital sensors	Feb. 14, 2019	pending
C. Combine use of while loops and distance programs	Feb. 27, 2019	Pending
3. Experiment with the use of functions on lego robot	Feb, 27, 2019	Pending
A. Develop functions to command lego robot for repeating similar		
tasks	Feb. 28, 2019	Pending
B. Tests functions on different tasks on table	Mar. 2, 2019	Pending
C. Expand functions use to Create	Mar. 2, 2019	Pending
4. Experiment with use of camera to help in scoring strategy	Mar. 8, 2019	Pending
A. Investigate color recognition and location	Mar. 8, 2019	Pending
B. Combine color recognition with distance functions on Create	Mar. 9, 2019	Pending
C. Test color recognition to locate "burning buildings".	Mar. 10, 2019	Pending

Documentation Goals	Deadlines	Status
1. Document all build concept ideas and designs	Mar. 30, 2019	Pending
A. Record concept designs and ideas regularly	Mar. 6, 2019	Pending
B. Assign CAD software diagrams to team members	Feb. 8, 2019	Pending
C. Journal progress of prototypes and mechanical designs	Mar. 30, 2019	Pending
2. Document all programming tests	Mar. 30, 2019	Pending
A. Copy code as it is tested	Mar. 31, 2019	Pending
B. Explain code on Wallaby as it is written	Mar. 30, 2019	Pending
C. Explain code on paper and digital copies to share to Github	Mar. 4, 2019	Pending
3. Submit first period documentation	Feb. 6, 2019	In process
A. Team meetings and class assignments to collect documentation	Feb. 5, 2019	Completed
B. Discuss and agree as a team how documents are to be organized.	Feb. 5, 2019	Completed
C. Ensure documentation is submitted in proper format.	Feb. 6, 2019	In process
4. Review second period documentation format	Mar , 2019	Pending
A. Discuss with team new changes from last year and why.	Feb. 20, 2019	Pending
B. Procure equipment and items to submit mechanical video	Feb. 25, 2019	Pending
C. Create procedure for team to follow based on submission		
requirements.	Mar. 2, 2019	Pending

Anticip	ated Schedule Conflicts		Dates of Conflict
1.	Baseball, OAP, track and golf pra	actice	
2.	Basketball playoffs		Feb. 12-18
3.	Presidents Day		Feb. 18
4.	Various job work schedules	(ongoing)	
5.	Spring Break		Mar. 12 to 16 2019
6.	UIL competitions		

<u>Schedule of Meeting Times</u> Regional Workshop – Jan. 27 & 28 2019 Regional Tournament – April 7 2019 Work schedule for <u>February</u> – Each week after school on Tues., Thurs & Sun afternoon. (with alternate dates as needed) Work schedule for <u>March</u>- each after school Tues, Thu., Thurs, Friday and Sunday afternoon. (with alternate dates as needed) Division of Assignments for Team Members Adult Team Member: Sam Wingate

Team Student Leaders- Oleg Garbrandt & Gage Hendrickson & Luis Chacon Robot Building Team for Create- , Jackson Adkins, Brandon Stapleton, Brayden Smith, Luis Chacon Robot Building Team for Lego- Jackson Adkins, Austin Thurman, Jackson Wilson Programmers for Create- Oleg Garbrandt, Gage Hendrickson, Kobi Zolfaghari, Shiela Finney

Programmers for Lego- Brandon Stapleton, Jackson Adkins, Jacob

Roper,

Conflict resolution:

The team has agreed that if disagreements occur we will handle them in the following way:

- Team members who are in disagreement will first attempt to work out the disagreement together.
 Team members agree to allow everyone to express their opinions and thoughts one at a time and attempt to reach resolution.
- 2. If resolution cannot be reached, the team members will bring their problem to Gage Hendrickson or Oleg Garbrandt, the student team leaders.
- 3. If a resolution is still not reached (or the disagreement involves the student team leader), it will be brought to Mr. Wingate, the adult team leader. He will either decide how to resolve the conflict or will bring it to the team for discussion and a team vote. Mr. Wingate's decision or the team vote will be final.