

Oklahoma Region

Girl Scouts of Kansas Heartland

19-0227

Period One – Project Plan

Goals and Tasks for Botball 2019:

Game Goals and Tasks

1. Review the game documents, read through rules (***Deadline: 1/12/19***)
 - a. Download game documents on every computer (***1/12/19***)
 - b. Team goes through documents at one time to make sure everyone understands them (***1/12/19***)
2. Establish a game strategy (***Deadline: 1/19/19***)
 - a. Review game board illustrations (***1/12/19***)
 - b. Review scoring documents (***1/19/19***)
 - i. Figure out which objectives are worth the most points
3. Create a list of objectives to complete on the game board (***Deadline: 1/19/19***)
 - a. Which robots will do what task, etc. (***1/19/19***)
 - b. Figure total points we will earn from these objectives (***1/19/19***)

Robot Building Goals and Tasks

1. Build demo Create and LEGO Robots (***Deadline: 1/26/19***)
 - a. Plan for added accessories like claws, arms, etc. (***1/19/19***)
 - b. Construct accessories (***1/26/19***)
2. Decide on sensors needed for the robots to complete the course (***Deadline: 1/26/19***)
 - a. Plan where to put sensors and how to attach them (***1/26/19***)
 - b. Attach sensors to robots (***1/26/19***)
3. Complete building of both robots (***Deadline: 2/2/19***)
 - a. Plan for where accessories will be attached (***2/2/19***)
 - b. Attach accessories to robots (***2/2/19***)

Programming Goals and Tasks

1. Program the servos and sensors for both robots (***Deadline: 1/26/19***)
 - a. Figure out what task each servo needs to accomplish (***1/26/19***)
 - b. Accomplish successful programming of at least one sensor (***1/26/19***)
2. Complete one section of programming for Create robot (***Deadline: 2/2/19***)
 - a. Determine the best method to place the large water container on the burning skyscraper (***1/26/19***)
 - b. Program servos to accomplish this task (***2/2/19***)
3. Complete one section of programming for LEGO robot (***Deadline: 2/2/19***)
 - a. Program scoop to pick up food piles (***1/26/19***)

- b. Program serves on scoop to place the food in the proper zone (2/2/19)

Documentation Goals and Tasks

1. Complete Period One Documentation (***Deadline: 1/28/19***)
 - a. Decide which team members will type up documentation (1/19/19)
 - b. Other team members working on building will provide information about their robot and help establish goals and tasks (1/19/19)
2. Complete Period Two Documentation (2/16/19)
 - a. Collect data from both robot teams (2/16/19)
 - b. Establish goals for the following weeks (2/16/19)
3. Complete Period Three Documentation (3/2/19)
 - a. Ask every member about lessons they've learned (3/2/19)
 - b. Have every member complete a computer survey about the season (3/2/19)

Schedule Conflicts

1. One coach, 1 student gone – personal holidays (1/26/19)
2. 2 students gone – personal holidays (2/2/19)
3. 1 student gone – volunteering (2/9/19)
4. 1 student gone – music festival (2/23/19)
5. 1 student gone – sports event (3/2/19)
6. 1 student gone – music festival (3/9/19)

Team Organization

Schedule of Meeting Times

Regional Workshop: January 12th and 13th

Schedule for January: 12th, 19th, 26th

Schedule for February: 2nd, 9th, 16th, 23rd

Schedule for March: 2nd, 9th

All meetings are from 11am to 3pm

Division of Labor

Adult Team Leader: Tina

Student Team Leader: Debi

Create Robot (Frumpy) Team: Debi, Emily M., Emily L.

LEGO Robot (Thing 1) Team: Tori, Sophie, Michaela

Documentation Team: Everyone (rotating every period)

Conflict Resolution

1. Students in disagreement who cannot reach an agreement will find another impartial student to give their input on the situation. Other students are also able to give their opinions on the situation.
2. If an agreement cannot be made, both ideas will be tested and the best proved idea will be used. If there is no clear superior idea, the idea with the least lines of code or the easiest to carry out will be used.
3. If there is still conflict, the adult team leader will intervene and help the students come to a resolution. Rock, paper, scissors will be used as a last resort in solving a conflict between students.