

Week Four Update



Build

The build subdivision of our team has started constructing the chassis of our competition bot. While our practice bot is not completely finalized, we have decided on the ultimate dimensions. The aluminum frame has been painted in Paragon's signature blue and orange and has been precisely riveted together. We have begun attaching our larger-than-average tires to the rest of the chassis, and manufacturing the "Josh drive" to power the wheels. We have also assembled the potentiometer to sense the position of the arm, but upon testing, it became non functional. A second iteration of the potentiometer is currently undergoing testing, and programming is using it



to get values for the angles of the arm. The arm is undergoing constant improvement in order to give the robot the greatest control over the obstacles. The new motor powering the arm has significantly more torque and now is able to lift the portcullis with limited difficulty. We also are in the process of designing and manufacturing an extension to the arm to enable us to manipulate the drawbridge and sally port.

Imagery

Imagery used this week to continue working on our many projects. The standard that Akira has been working hard on is almost complete, with just a few more details waiting to be added. The t-shirt design has been finalized and is ready to be sent to be printed. Keeping with the medieval theme, team members are submitting their "name." Two of the three awards we give to the other teams have been constructed and painted. We also recently came up with the idea of writing a story book that brings our robot to life. All of imagery got together and decided the storyline of the book. Amanda ran with the those ideas and began writing the book. We plan to add pictures and turn it into a story book we can hand out at competitions.



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Programming



Programming has continued creating the code that allows our robot to operate as we command it to. This past week we have worked to get readings from the potentiometer on the arm. These values to allow the drive team to hit a button to automatically move the arm into a preset position to prepare for manipulating different obstacles. We also added

methods to calibrate the arm upon user input, using the potentiometer. However, build has yet to get the potentiometer hardware fully functionality, so programming created a virtual potentiometer that is calibrated through the z axis of the operator's joystick. This code will later be swapped out for the actual piece of hardware.

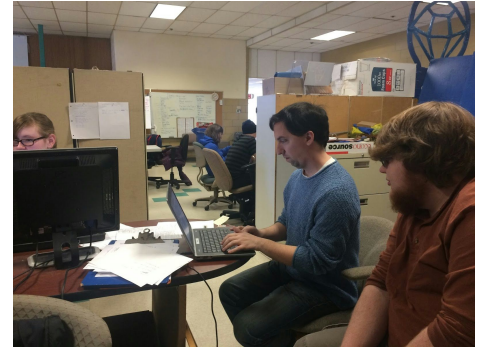


Web

Web used the week to continue working on the website. After looking at the websites of other teams for inspiration, they decided to create a slideshow on our homepage to showcase the logos of our top sponsors. This allows us to show more logos without it looking too busy. After Zachary created the slideshow James



cleaned up the resolution of the blurry logos. The group also worked on updating the pictures for our community outreach section. Web continues to run our social media, our new team instagram, facebook and twitter are updated often. check out instagram at <https://www.instagram.com/teamparagon571/> . If you would like to learn more about the team, or come visit us, contact teamparagon571@att.net or check out the web site at team-paragon.org



Special Thanks:

A special thanks goes out to Cameron for agreeing to be official rules meister (after minor arm twisting and cookie bribes). This job is invaluable to make sure the team does not violate any rules, as well as insuring our drive team is informed when going into competition.

CONGRATULATIONS

Congratulations goes to Blazing Spirits, FRC team, for their performance at their competition this weekend. Through their efforts and strong work, the Blazing Spirits came in fourth place and will be going to States on Feb 20th

UPCOMING EVENTS:

Suffield Shakedown: Sat., February 20th
 Stop Work/Bag and Tag: Tuesday, February 23rd
 Waterbury District Event: March 5-6th
 Hartford District Event: April 1-3rd

~Addison & Sam