Week 1 Update

Team Paragon

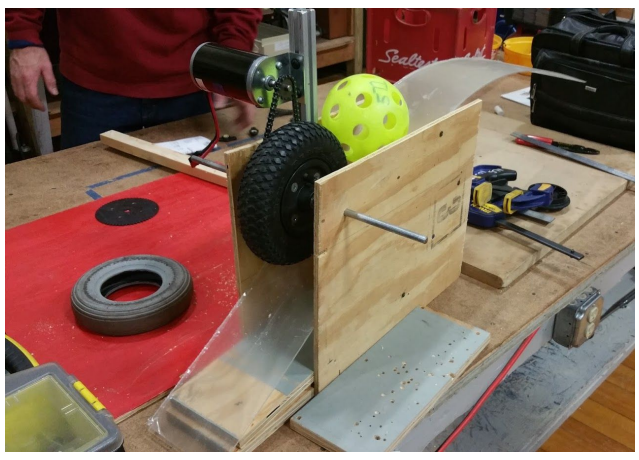
Getting in Gear

Week 1 is the week of new ideas as Team Paragon starts to become more familiar with the game. The team has accomplished a lot in the past week within all subgroups and is looking forward to picking the ideas that work best and refining them for our future robot.

Build:

This week in build, the team dabbled in the beginning phases of coming up with ideas for the three main components of the game: the balls, the gears, and the rope climbing. Two prototypes of a gear shooter were built, with a spinning wheel to shoot balls. After crafting some of our own parts for the job, the shooter worked pretty well, although it has been inconsistent in aiming. In the coming weeks we will need to consider how to incorporate this design into the robot and how to control the height of the ball leaving the shooter so we can to aim for either the low or high goals of the boiler.

A few team members also worked on building a cardboard prototype to catch gears in a small slot once they are dropped onto the playfield by the human player. The concept works well, and with a bit of tinkering to make sure it doesn't fall, it should be sufficient to hold the gear in the robot.



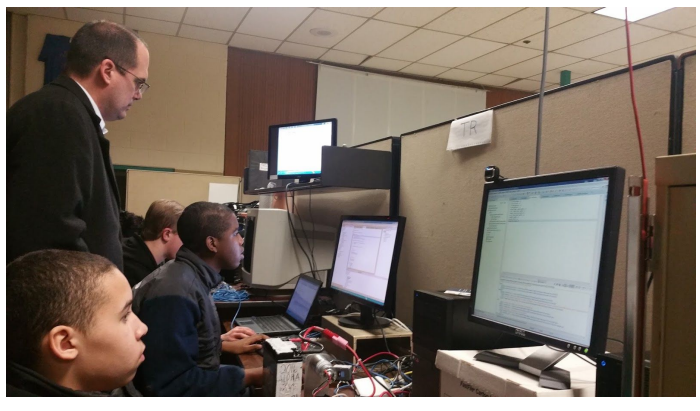
A whole bunch of different mechanisms for grabbing onto the rope were considered, but the team agreed that grabbing the rope and twisting it around two spokes to pull the robot up would be the easiest. One broom holder seemed particularly useful, but the team discovered it would be hard to grab the rope without it being held taught from the bottom as well. If a knot can be tied on the bottom of the rope that may work, but we are still unsure if the rules allow that to be done by the FIRST ropes.

Imagery:

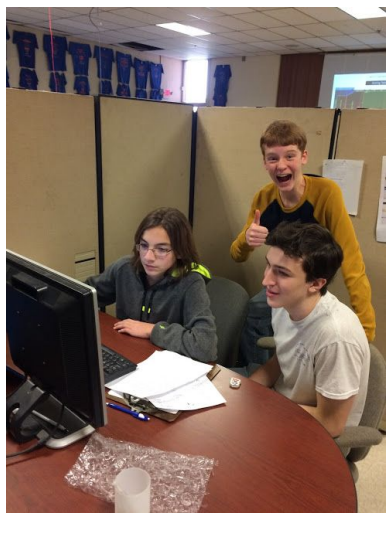
In Imagery, the team started out by discussing the general theme of the game and what we wanted to see from our team imagery-wise. Since steampunk is such a big theme this year, we wanted to discuss how we can bring that theme into the robot and our pits at competition, such as the awards we make for other teams every year. Many sketch designs for team t-shirts were created and considered for the upcoming year. Awards have also been started and physical prototypes have been developed for finalization later on.

Programming:

Programming has had a great start this year. No time was lost waiting to download and install software, as everything had been completed prior to the first onday of the season. This allowed the group to get down to business and begin tasks such as updating and assigning motor controllers (Talons), as well as begin writing code for parts of the robot that were most likely to be built later on. For instance, a system for mecanum wheels has already been developed and tested on an older mecanum-drive robot with great success.



Programming's main effort at the moment is focused on staying ahead of the Build process. This way, when a physical component of the robot is up and running, most of the time will be spent fixing any unexpected problems instead of writing more code from scratch.



Web:

Changes to Team Paragon's website are under way. It is tradition at this point for web to start off the season by updating the page with new team information. While the group works to input pictures and interesting facts about each new student, it is also looking to create ways for the site to be more navigation-friendly. Anyone who has tried to use the site has probably had trouble finding a particular item in at least one instance. Web hopes to minimize that.

Upcoming Events:

Suffield Shakedown - February 18th
Bag and Tag Day - February 21st
Waterbury Competition - March 3rd - March 5th
Hartford Competition - March 31st - April 2nd

-Amanda and Justin