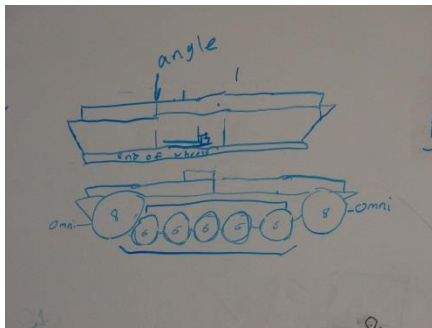


# RAGE Robotics

## BUILD SEASON - WEEK 2 UPDATE

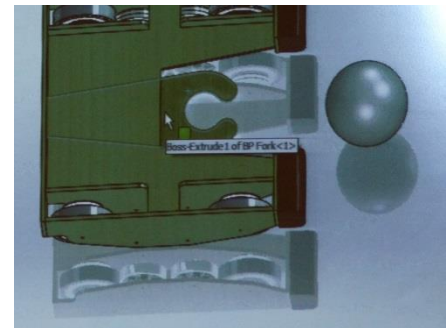
Now that the game has been introduced, the subgroups got to work this week working on all facets of the design and competition.

**CAD (Base and Manipulator)** – The CAD subgroup began creating elements of the robot in CAD and came up with two preliminary designs. The designs were presented to the team at the weekly whole group meeting on Thursday night and it looks like we have a design! The team settled on a combination of the two concepts. In the process, the kids learned the importance of scaled drawings this week – we had some great looking designs with lots of wheels that simulated a tank but when the design was put into CAD to scale and the competition limitations of a 120" perimeter were applied, the CAD team realized some adjustments were necessary.



←  
became something like  
→

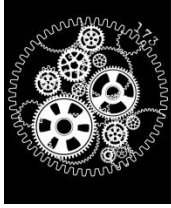
once the wheel and obstacle dimensions were accounted for... with the decisions from this week's meeting we will see what the team comes up with!



**Mechanical Build** - The build team met several times this week finishing up with the remaining defenses as well as the nearly 10' tall tower that we will be "shooting" boulders through by week 6.

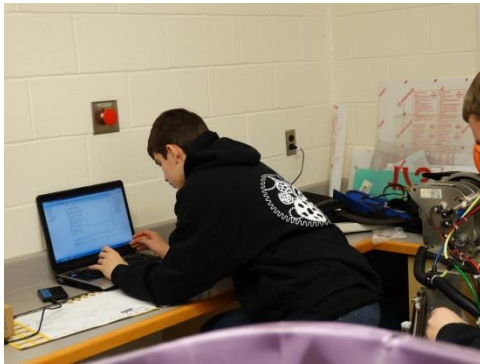
**Safety** – This week the safety team discussed when/where many accidents occur when working on the robot. Tip of the week: "Stay out of the envelope". Last time we met they were creating a scaled diagram of the RAGE room and discussing safety features... Stay tuned for next week's safety topic!





# RAGE Robotics

**Electronics** – The electronics subgroup focused on learning about the components that will make up their portion of the robot, including studying last year’s robot (“Murphy”) to see how and where the components are placed. With the potential for impact and jostling associated with this year’s competition, they also focused on which components would need to be accessible after the robot is built, which could be “hidden”, what the spacing typically is for the different components and how they could ensure the wires do not become loose during the competition.



**Programming** – The programmers met several times this past week working on the programming from the last years robot, focusing on moving the pneumatics and controlling the electronics.

For additional updates please check out our website ([www.ragerobotics.com](http://www.ragerobotics.com)) or like us on Facebook (RAGE Robotics).