**Safety**

During the construction of the robot, we took several measures to ensure the safety of all members of the club. For starters, four of our members are OSHA certified, meaning they have undergone a ten-hour training course over general construction and occupational safety. With all this, we established a foundation on our team to eliminate the malpractices of tasks.

In August our main priority was to establish ground rules that will promote safety at all cause. Over the past few years, our team has struggled with completing certain tasks since few of our members have the skills to perform a certain task. This year we implemented a method from one of our mentors called PIPE, and it has shown a great significance with the production quality over the season. PIPE stands for Perspective, Inspection, Protection, and Execution; furthermore, this method created an easier way for all of our members to be participating in the project. Perspective, which could be described as a point of view, creates a way for the person to analyze if the way they want to achieve a certain task is effective, and if it is ineffective the person needs to find another process to finish their task. Completion of the step above will determine the range of risk involved; therefore, Inspection is the next step which approved by an individual (usually OSHA certified) or the sponsor to see if the strategy taken place is safe and effective. Once this is approved protection needs to be taken place. Afterwards, the final step is to execute which is where you must start what you finished and you are the only one who can finish it. Concluding, the PIPE method had shown a major reduction of injuries and shows the promotion of involvement in our team.

Other than the PIPE method our team members are encouraged to help each other and learn more about the different procedures. For example, when we were building the wheels for our robot, we tried to learn the power tools needed. Experiences increase more knowledge and strategies to reduce the number of risks presented. Similarly, the encouragement of working as a team has minimized many of our errors since we’ve seen the many opinions a group has to offer. Overall, working with peers and engaging in multiple activities together has helped us be successful at completing a task which conveys a way to decrease the level of risk.

Above all, we have shown that based on our methods of completing tasks the level of risks has decreased while out level has increased.