Explorer Post 1010, Team #160
Region: Greater DC/Virginia

Period 3: Lessons Learned

Experience Gained

This past year of Botball has taught us about the many benefits and joys of working together as a team to achieve a common goal. Throughout the process, we learned a lot about building and coding effective robots. Working together had its hardships, such as disagreements over the creation and pathing of our robots, but in the end we realized that in order to create the best robot possible, teamwork was a necessity. Aside from learning about the importance of teamwork, we also gained experience in conceptual design for how to make our robots more precise and more consistent, learning to make use of as many sensors as possible to reduce our margin of error. In the end, it helped us make incredibly consistent robots.

Documentation Process

The documentation process taught the team the importance of making a plan ahead of time in case of emergencies. It also gave us the opportunity to explore the building and coding process in depth. It forced us to stick to a more strict schedule in order to complete our tasks on time.

Surprises

The thing that surprised us the most about the Botball experience was the process of having to rebuild and modify our robots numerous times to make them performance ready. We had to make constant, seemingly miniscule changes in order for our robots to run optimally at all times. It was also a pleasant surprise to see our robots perform multiple tasks with consistency once we found the correct values and used the correct sensors.

Advice for Future Teams

Our best advice would be to start planning their schedule for building and testing the robots as soon as possible. If we had a proper schedule from the very beginning, we could have had a lot more time to focus on improving our robots. Another thing that future teams should do is make sure that their code is readable and organized so that other coders can understand what each part of the code does. Effective comments especially make it easy for other coders to pick up where you left off and make further improvements to the bots. Future teams should also rigorously test the robots to maximize consistency, and should meet frequently so that they have enough time to work on the robots.