

Botball Pre-season Preparation

Trevor Carmack, T.J. Brown, and Braden Brown
Southwest Covenant
rosslinda28@gmail.com

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1 Thesis Statement

It is necessary to prepare during the Botball pre-season. If one does not successfully prepare for the regulation Botball season, he will find himself in a world of robotic failure, apt to programming misery, and with a malfunctioning team in the most critical period of the Botball season. Being prepared illustrates one of the quintessential qualities of superior Botballers, initiative, as well as grooming the assorted group of individuals in the Botball class into a well organized and highly functioning team capable of obtaining success. The proper preparations for a Botball season are ordaining workable meeting times for the team to congregate, synthesizing a compatible team infrastructure, memorizing the diverse parts lists associated with the robots, possessing general knowledge of fundamental building and programming, relegating positions to maximize efficiency, providing useful communication, and producing the necessary funds for the global competition.

2 Meeting Times

Ordaining specific times and dates for team meetings is one of the most important parts of the pre-season preparation. Gathering a team of middle school or high school students together simultaneously can become a perplexing task, as team members are often involved in multiple extracurricular activities, such as athletics and the performing arts. Despite the difficulties in scheduling meetings that can be attended by most of the team, it is absolutely necessary to maintain a Botball team that gathers regularly. The most convenient way to establish consistent

team meetings is to have the meetings during school as an elective class or directly after school. Whatever methods are used, the primary focus is to construct a consistent meeting schedule.

3 Creating the Team Infrastructure

Synthesizing a compatible team infrastructure is a high priority in obtaining an atmosphere conducive to success and facilitating the entire construction and programming process. A proficient team infrastructure consists of separate subdivisions of builders, programmers, and documenters who direct the focus of the team and take leadership of each respective field. For example, the team of Southwest Covenant divides its members between each of these three categories depending on where each team member thinks that he will most benefit the team. Builders do not strictly build the robots, but also share in the responsibilities of programming, documenting, and administrating. Conversely, documenters lead the team on documentation, while assisting with construction and programming. This method is successful because every team member is being utilized at the highest possible efficiency and performing as both a mentor and a protégé.

4 Parts List Memorization

The extensive parts list associated with Botball is quite daunting but also beneficial. It is the vernacular of the Botball program and is useful in a building catastrophe. Memorization of the parts list allows a team to successfully communicate amongst themselves and with other Botballers. Without a common term for each piece, it is unnecessarily difficult to differentiate between often ambiguous parts and slows building exponentially. This also requires communication and collaboration to accomplish. The parts list is a necessary evil by which building commences.

5 Fundamental Building and Programming Knowledge

Possessing general knowledge of fundamental building and programming is crucial to facilitating both production and quality in terms of competing ability. When every member of a team is equipped with this knowledge, a sense of security becomes prevalent throughout the team because it is capable of overcoming any calamity that may take place. This fundamental knowledge is obtainable through multiple ways, including team workshops held by the more experienced, regional workshops held by KIPR staff, and personal mentorship amongst team members. When in its entirety possesses the basic knowledge of building and programming, all members are capable of participating in the creation of competition robots.

6 Assigning Tasks

Relegating specific tasks to members in congruity with his personal strengths is a vital part of preparing for the Botball season. A team captain should be selected for his skills in leadership communication; there will often be some minor conflicts or stalemate meetings which can be dispelled by a team captain. A photographer should be decided upon early in the pre-season, because pictures of the events occurring in every aspect the Botball program can be used in various ways, ranging from documentation to promotional videos. A webmaster is essential to the upkeep of a team website or blog, so that people may remain updated in the team's endeavors throughout the Botball pre-season and season. These specific roles should be fulfilled on a team in order to ensure a smooth and successful transition into the Botball season.

7 Communication

According to George Bernard Shaw, "The single biggest problem in communication is the illusion that it has taken place" [1]. Without communication, a Botball team would be void of success. Daily communication amongst team members is needed to ensure that all tasks are completed promptly and that all passwords are shared. Some of the various ways of

communication are through conversation, email, and text, all of which are appropriate in different situations. Meetings can be set and changed via electronic communication, but ideas about robots are best shared verbally. When a team communicates effectively, the amount and quality of work is optimal. Communication is a key to success when used to effectively portray information and ideas.

8 Fundraising

One of the most time consuming tasks involved in the pre-season is fundraising. Every team needs a means of raising or earning money for its robotics program whether by carwashes, raffles, or sponsors. Besides these traditional activities, there is a host of other ways to raise money, such as dodge ball tournaments, sponsored athletic events, and candy sales. Whatever means to raise money is being used will require planning and coordinating to be successful. Without the appropriate funds, team members will have to supplement the needed amount to travel to tournaments or pay for replacement parts. Often, the fundraising aspect of the pre-season will carry over to the regular season, making it a priority in the botball program.

9 Conclusion

To accomplish the seven aforementioned tasks places a team on the path to excellence in Botball by maintaining a functioning team and ensuring that all tasks are accomplished. This outline of preparations for the Botball season are to be built upon throughout the actual season and others to come, so that an autonomous team may take place. By using these seven practical and applicable steps, a Botball team will assuredly be prepared for success.

References

[1] George Bernard Shaw. www.quotationspage.com/quotes/George_Bernard_Shaw, 1925