Organizing A Botball Event

Organizing a Botball event in Al-Ruya Bilingual School

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Abstract: Having a MENA region Botball event would allow more teams and creative students to join the tournament, a MENA region event was set in Qatar though not long ago the event's region changed from MENA schools to Qatari schools only.

Keywords: MENA(Middle East, and North Africa); RBS (Al-Ruya Bilingual School); Kits; Boards; ECER (European conference on educational robotics); GCER(Global Conference on Educational Robotics)

I.   INTRODUCTION

KIPR as an institution that works with students should support the increase in the regions as this allows more students to join even on low budgets. As Qatar allows no MENA schools anymore, the thought of hosting a tournament in our region came to the minds of many though organizing and hosting it correctly would be the trickiest part as some schools can't allow that due to the restricted space they have. Our school has an area that is big enough to hold a tournament, but only a few teams know about Botball and KIPR's tournament in our region making it hard to get approval to host the tournament. How to inform more students was one of the questions that we as a team had to ask, not only inform them we also need to convince them to join.

II.   PLAN

2.1 Approval

To start the project we need to get the approval of the school; we will need to talk to the schools administration to secure the place for the event or fund the event outside the school using the help of other sponsors many of which have allegedly agreed to help in any future events.

2.2 Including More Teams

If we got the approval, we would need to include more teams from the area. To do so our team and multiple experienced recruits from other teams would start a website and interact with other schools and students to give them a general idea about botball and where to learn more about it.

Going to schools presenting the event in the best way possible seems to be the best way possible to inform and include more students, to do that we shall include some presentations about the idea behind the tournament, how the competition is set, where and when would it be, and some videos of the past years' victorious teams of MENA, ECER(European Conference on Educational Robotics), and GCER(Global Conference on Educational Robotics).

Once that is done, and the teams registered and paid the fees a workshop date would be set, and it would be hosted in our school's auditorium. Then the kits would be ordered for shipment to our school prior to the workshop.

2.3 Workshop

As mentioned the workshop would be hosted in our school's auditorium. We will allow three students from each team to attend the workshop. The workshop would be divided into two courses (Days) for programming and one course in mechanical design. It would be just like many others we will use the slides provided by KIPR to explain and teach programming to the students. The kits are going to be shipped to our school and distributed to the teams accordingly. Our constructors would show some mechanical designs; their flaws would be explained, and the ways of correcting them would be suggested by the students as to help them think and construct the best mechanical builds suitable for the year's game board. Once the workshop is done

A forum would be set to get the students to talk about their codes, designs, share their problems or errors for us as a community to answer or solve.

2.4 Preparation for the Event

Throughout the time between the workshop and the event, students will have to complete a few documents that count as one-third their score.

A week before the actual tournament starts we will have to clear the area where the event is hosted and setting up, at least, five boards where 2 are primary while the others are for testing. Last year GCER didn't allow many testing tables the primary tables were used as testing tables before the start of the event but later on it was just one practicing table.

Allowing more testing tables would encourage the students to work on improving their robots. Doing that would make the process of winning a challenging thing as teams would always find a way to fix their robots and make them more efficient concerning movement and precision.

Judges chosen for the event should have no connection at all to the students participating, as favoring a team on another would result in many unwanted events such as fighting and so.

Setting up tables for the teams is something we have to plan out, as they need a place to program and store their robots, so each team gets a table and each table should include five chairs.

2.5 The Day of the Event

Students should be at the place before the start of the event to get ID badges to separate them from their teachers as teachers or mentors are not allowed near the tables but are allowed to see the games from a fair distance.

Students will have time to practice and test their robots on the boards we prepared; it shouldn't take long as the students should test their robots in school before the day of the event.

To start each team will have three shots in the seeding rounds (a game where robots of one team play without an opponent on the other side of the table) the two best scores achieved in the seeding rounds will be considered.

After the seeding rounds are done, the students will have a break in which they could charge their robots or continue testing if needed. After the break is done the

double elimination rounds should start (two teams get their robots to play against each other where each team has two strikes the team with least

score would get their first strike if they played again and lost they will get eliminated from the double elimination rounds) losing teams will have a chance at a round called the alliance round where two teams unite and one robot from each team is to go on the board, the scores of both teams will be added, and the alliance with the highest score wins a trophy of first in alliance.

Losing teams shouldn't leave as there might be a certificate of the judge's choice it is an award that could count for many things such as the best cooperative team or things like that.

III. REASON FOR THE PLAN

The concept of having multiple practicing tables was due to going to GCER and struggling to be able to correct something in the code and one thing was that we had to build a robot on the day of the alliances and then had to wait for a single table to be empty as we needed to test the two robots on different sides.

Students in the MENA region were successful, and some even reached the semi-finals in the GCER event. That proved to us that the MENA regional tournament needed to be restored as to prove that there is talent in the students and that they only need a little push to be successful and have a chance to determine what their future could be like.

IV. CONCLUSION

The MENA Botball tournament needs to be restored and the students from the team of RBS are willing to help achieve that the only thing standing as a barrier in front of us is that we need to be approved from KIPR themselves once approved talent from the MENA region would start rising, and more people would start participating in the event making the final global event more challenging than before. And besides this is to help the students and KIPR aim to help students learn about robotics and engineering.