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Student Robotics Team during Competition 2008

Student Robotics AGM 2008

Competition review meeting
Wednesday 17 Apr 2008

and

AGM meeting
Wednesday 24 Apr 2008

University of Southampton
Zepler building seminar room 1

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Review of Competition

Overall the competition day can be considered as a great success. Despite the few technical difficulties in the beginning after 45 minutes break the competition carried on as planned. The timing was good and the morning parts were very interesting, everybody was very keen to score points in the first rounds. The lunch break went as planned, the pack lunches were the perfect choice since many teams took away they portions and used the break to do some last minute repairs. The afternoon rounds were much more competitive and every team managed to score points even in the hard multicolour tasks. Everybody appreciated the great improvements made during the day, team morals were really high. The prize giving ceremony went as planned, the first team was really proud, alongside all the other teams, because what they all accomplished was a true challenge.

Here is a summary table of the good, bad and "ugly" (definitely needed to be corrected for next time) aspects of the competition:

good	bad	ugly
CUBE as venue	Slug boot time	Lack of debugging log (LCD screens?)
Arena layout and set up	Syntax checking on robo-IDE	Documentation (mainly programming)
Use of Xbee wireless modules	IDE crashes	Vision system highly unreliable (different webcams!)
Use of Walkie talkies for communication	File system synching	Mode B error on boot up of robots
Teamwork within SR and between teams and mentors	Versioning in robo-IDE	Battery charging issues and frying resistors
Reliable projector and other IT equipment		
Everything about food: size, package, quality		

Suggestions for next year

1) Teams need to make a poster (or presentation) by Christmas which has to contain the main design outline, than marked and counts towards the final score <= to encourage working early and to avoid major design changes before the actual competition, also to check process globally and outline issues with designs –*note this idea is changed for online box-ticking see point 6)*

2) Promote teams to start coding earlier. Use of simulator, or SR prototype to be able to test they code at an early stage

3) Proper mentor training day! Most mentors weren't able to help with certain stuff. Mostly software wise.

4) Better example code (by better I mean a full working and fairly advanced code which uses all or at least most of the robot's features)

5) Splitting mentors to mech and software specialist. Switching mentors around to give the schools the appropriate help

6) Interactive timeline on website for each team: e.g. they have to tick boxes when they finished a stage; if a box is not ticked they get spammed. Also they can check on other teams progress and realise when they fall behind

7) Better -maybe online and written- communication of mentors and SR. Maybe the best would be if only the mentors can tick the boxes (point 6)). In that case we realise if a mentor doesn't give enough support also the teams talk to the mentors more to tick they boxes.

8) Having a USB key with working code and a set of electronics boards working for quick testing of malfunctioning boards or codes on the day. Or maybe debugger box.

9) X86 boards instead of slug? Maybe, if is not to painful it would be a good improvement. (note: "Slugs" are out of production...) wait for Steve and Rob with this major discussion

10) Better webcams. Worth using better webcams, white balancing would be preferable, also auto focusing.

11) Do we really want to change the competition? Preferably only minor change. Simplified version of the "tennis" type competition, to be able to use the same arena again. Arena would be divided to 4 sections with little walls. They can either push tokens to another side through little slots or throw them over the wall.

12) Having a notice board for recording solutions of certain errors. Maybe wiki or track set up through the year and whiteboards on competition day...

13) Installing fuses on the boards and more protection against short circuiting

14) Pre-crimped wires preferably, RJ11 cables were great!

15) Battery charge monitor, also solving issues with frying resistors in charge mode, it would be good to have automatic charge mode. It would be good if chargers could run motors and servos for testing purposes. Multiple charger plugs for testing purposes would work.

16) Install LCD for debugging feedback.

Committee re-election

Committee positions

- Chair: SR representative towards sponsors, schools, media, university and members. The main Student Robotics contact and the one who organises the majority of management tasks.
- President: technical team leader. Responsible for SR technology, and electronics quality, improvements and reliability.
- Vice-President: secondary technical team leader. *(preferably other discipline than President)* Mainly responsible for mechanical kit quality and distribution, and prototyping.
- Treasurer: responsible of managing bank account and watching over the budget. Secondary contact for sponsors.
- Secretary: secondary contact for student robotics. *(preferably other school than Chair)* Responsible for meeting minutes, recruitment and publicity and socials.

Election

For the election the University of Southampton Students Union's procedure were used. The Chairman of last year Stephen English led the election. Anybody from the society could run for any position. Whoever chooses to run for a position had to introduce himself and explain why he thinks he is good for the position he is running for. After that everybody could ask him questions. If there were no more questions or applicants for the position he was asked to leave the room. Once all applicants left the room every member of Student Robotics was able to vote for any applicants or against all applicants (requesting, reconsideration of applicants and re-voting). Of course everybody had the right not to vote. There were 13 Student Robotics members present on the AGM. The following table summarises the results.

Position	Last year	Running for	Votes for	Votes against	New position
Chairman	Stephen English	Aron Kisdi	Aron - 11	0	Aron Kisdi
President	Rob Spanton	Dan Mulvaney Chris Cross	Dan - 5 Chris - 6	0	Chris Cross
Vice-President	Peter Law	Dan Mulvaney Peter Law	Dan - 6 Peter - 2	0	Dan Mulvaney
Secretary	Aron Kisdi	Peter Law	Peter - 7	0	Peter Law
Treasurer	Nick Greatbatch	Jeremy Morse	Jeremy - 9	0	Jeremy Morse

Introduction of new committee

Aron Kisdi chairman: I am a student at the University of Southampton studying Space Systems Engineering. I am currently in my second year of my four year degree. I have been involved with Student Robotics since my first year, and I have been on the committee as a secretary last year. Apart from robotics being an important aspect of spacecraft engineering I really like to support this project because of the outreach aspects. It is always very rewarding to see the children happy of they success. My skills in electronics and programming do not excel –I am learning though- therefore I would like help where I can, with getting sponsors and managing the project. I will try to make sure everybody has a task which they like and I will make recruitment of new members and expansion of Student robotics my first priority.