



**UTM**  
**UNIVERSITI TEKNOLOGI MALAYSIA**

**UKQE 3001 SECTION 9**  
**REFLECTION 1**  
**U-ROCK 2019**

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**SECTION : 09**

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## APPENDIX

### REPORT

- Activity Info
- Position Handle

### RESPONDING

- Feel exciting and satisfy with what i gained
- Learned on communication

### RELATING

- Other related event
- Similarities, Differences

### REASONING

- Great hard and softskill experience
- Glad in exchanging knowledge with competitor from other university

### RECONSTRUCTING

- What I learned and experienced
- Skill for future use

## **Content Summary**

Report:- U-ROCK, a national level robotis competition which will held every year.-

- Involve 50 teams from 15 higher learning institution.
- taking the role of robot programmer and robot operator
- solving sudden accident.\

Responding: - happy, proud disappointed, excited

- having argument is a good things
- nervous for the first game

Relating: - the event Robocon Malaysia 2019

- similarity is both of them are National level robotics competition.
- difference between both events is the role handling in the event

Reasoning: - most important aspect of the event was given the opportunity for me to get

know to lot of friends with having the same interest

- help me a lot in training my softskill and technical skill
- he was happy and proud in seeing our improvement for every demonstration

Reconstructing:- learned about teamworking, spirit of not giving up and time management.

- do better in problem solving

Reporting :

U-ROCK 2019 also called University Robot Competition: Kingdom of Champions 2019 which was held on 21<sup>st</sup> and 22<sup>nd</sup> September 2019. The location of the competition was held at sport hall UniMAP. The competition had participated by 50 teams from 15 higher learning institution, and I had represented as team UTM to the competition. U-ROCK is one of the largest national level robotics competition among Malaysia which will organise annually with the objective of improve and enhance the technology of Malaysia. U-ROCK was held with few type of categories which included legged robot, drone and robot combat and UTM Robocon team had sent 2 teams with all together 17 members in participating robot combat.

In this activity, I am taking the role of robot programmer and robot operator which taking the responsible on program and control the robot during the competition. Our teams spent 2 to 3 months in design, fabricate and program all the six robots for the competition. We had gone through hundreds of failure during the testing and it take us lot of days and nights and of course our hard work had bring us back the rewards, we won the champion and the 2<sup>nd</sup> runner-up of the competition. During the 3 months of preparation, we had gone through 3 times of demonstration. The demonstration is the event for our Robocon team to invite all the alumni of UTM Robocon team come back to have a look on the progress of competition preparing and sometime they will give us some suggestion in improving our robot which have higher chance to win the competition.

For the first day of competition, everything go smooth and both team from UTM won all the primary round and success to enter the final round of the competition. When come to evening the compressor which we need to use for competition was broken and not able to pump gas. This can be said as a big punch for us as all our 6 robots are using the gas pressure in shoot

the weapon in robot combating. In order to fix the broken compressor, we found all the repair shop around us and luckily found 1 shop who able to fix for us by that day.

When come to second days of competition, during the semifinal, Team A was won the competition but unfortunately we get disqualified due to the game field destroying and Team A become the 2<sup>nd</sup> runner-up of the competition. UTM Team B was successfully enter the final round and revenge for Team A become the champion of the competition.

This robotics competition is the first national level competition I participate in robotics area. It is challenging and tired but I am glad for having this opportunity in putting myself on the stage of nationl level. This is also an opportunity for me to challenge my limit in problem solving as everything may rise up without any prophecy and we are required to solve it as soon as possible since we are carry on the hope of the whole team. The robots are prepared by every member of the team but there will only 6 persons on the gamefield and the 6 persons have the responsible to bring the glory back for the team and for UTM.

Responding:

By the journey of going through this competition, I learned lot of things from all my teammate and learned lot of multinational culture as our team have the member from Bangladesh, Egypt and Arab. We came together because of the interest to the automation and robotics.

I am so happy for joining this team and competition as it is not only to learn knowledge or gain experience, it is more on learning in adapting to the working environment earlier since we will have conflict during our preparation. For what I think, having argument is a good things, at least this shows that everyone in putting effort on the same thing and having the same target. When everyone having the same target, then we will hope it is the best for our final result, so it is normal to have argument and conflict during our idea brainstorm session.

This competition is really fun and interestly, we spent 3 months to work together, eat together and sometime stayup for more than 36 hours just to make the best robot for the competition and it is my pleasure to work with all of them, a bunch of dream catcher. When we go to the competition, I am so nervous for the first game as I am bringing all the hopes from other teammate and it is a big challenge for me, and luckily our result does not wasted our hard work. When come to the end of the competition, I am so happy to have the chance in exchanging knowledge and problem solving methods with participants from other university because this is a good chance fo us to learn from others.

The only thing that I felt disappointed is we did not won the 1<sup>st</sup> runner-up of the competition because of the disqualification due to the game field destroying during our semifinal match. Overall, it is the good experience and memories for me, at least when I go old, there is something marvelous that I can imagine back.

Relating:

There is another event that I had joined before able to relate with this event is Robocon Malaysia 2019. It is the biggest robotics competition in Malaysia and also one of the biggest international level robotics competition in Asia. This competition is competing the speed to complete the task. This is the competition that UTM Robocon team will participate every year, we will spent around 10 months in preparing the robots for both national and international level competition.

The similarity between the Robocon Malaysia and U-Rock is both of them are National level robotics competition. Both of the competitions required the teamworking of the team member and both of them are problem solving type of competition. All of the team member are responsible, excellence and always ready to help each others. Basically, the robots are divided into mechanism, electronics and programming parts and it is impossible to let someone to complete everything so it is very important for having team working in the team.

The difference between both events is the role handling in the event. For Robocon Malaysia 2019, I am work as the robot programmer assistant who is just assisting senior in programming the robot because I am still a first year new member in the team and still in learning period. For the U-Rock, I am already the second year senior member and have the ability in program the robot myself so I am taking the role of robot programmer for U-Rock. Both the roles are totally different because while assisting I did not feel that stress of the robot programmer. The competition location also different for both competition.

Reasoning:

The most important aspect of the event was given the opportunity for me to get know to lot of friends with having the same interest. Those friends included the student UTM and also students from other university. A same problem there will be hundreds or thousands of solving method, and everyone having the different methods. Sometimes, even you won the champion, it does not means that your solution is the best, but you just having a little bit more luck compare with others. So, this is the most important aspect of this event. I am not only gain more friends and also the knowledge which will be useful for me in the future.

From my perspective, this event had help me a lot in training my softskill and technical skill as well. For example, the technical skill that I gained is mostly on ARM controleer programming and arduino programming which involve in controlling the robot. For the softskill which included in document preparation like bus requesting fom faculty, accomodation while staying in campus because for the 1<sup>st</sup> months of the preparation, it is sem break and students need to get the permission for staying in campus. Lastly. We are trained for presenting as well which also part of the competition in introducing your robot to the judges.

Dr Ridzuan is the advisor and also the UTM Robocon team manager and he is the one see us from zero until the moment we grab the champion. He told that he was happy and proud in seeing our improvement for every time of demonstration until seeing the moment of all of us standing on the stage for prize receiving. He hope that we can also get such good result in the next national and international level of competition to bring the name of UTM and Malaysia to a higher level of stage and get known by more and more person.

I also hope that this spirit can pass to my junior batch as a motivation for them to fight for knowledge and also their future!



Reconstructing:

In the nutshell, from this event I had learnt a lot that able to be used in my future life. Firstly, I learned how is the importance of teamworking and how to involve myself into a team. We close until able to predict what each other thought with just an action and this make us able to work together smoothly. Because of our register the competition quite late and we have to complete all the 6 well functioning robots in such short time. What we did is we plan the time shift for everyone to work. One day have 24 hours and we almost utilized all of them on the robot and make the impossible to possible.

Next, I had learned how the importance is the spirit of not giving up. During this journey, I have the mind to give up for lot of time due to the tiredness and over working load. But every time I saw my teammates are working hard on their part, I will get stimulate again and finally we completed the competition nicely. Last but not least, and also the most important lesson I had learnt by going through this competition is time management. Since other than competition preparation, we still need to concentrate on our academic study and strive for complete my targeted daily schedule.

For the future event, I hope that I can do better in problem solving and gain more technical experience.



