GROEP T
LEUVEN ENGINEERING COLLEGE

TEAM APOLLO

Process Report

FINAL VERSION

APOLLO

13-5-2011

PROCESS REPORT

INTRODUCTION

We write this process report to evaluate how we operated as a team during EE4. For our previous deadline (week 6), we had to write a temporary process report. After that report was written, we could evaluate ourselves and try to improve as a team. In this final process report, we hope to find out we made some improvements and can be satisfied.

In the appendix, you can find our temporary process report. In this final process report there is a reference to the temporary process report, it makes this report easier to read.

PROCESS REPORT

In the temporary process report, we said the timing for the deadlines were quite good. Although we had no big problems to get everything finished for the deadlines, it maybe could have been better. We just started for most of the parts that had to be finished for a deadline, in the week itself. Off course, when you face a big problem when you are working on a task in that last week, it can become close to get everything done. Luckily, all reports went well and we were not too late for a deadline.

After Friday of week 11, the major part of our EE4-project is done and we can compare our actual progression with the planned progression in our Gantt Chart. When we take a look on the Gantt-Chart, it turns out that in our actual progression, all the finished tasks move slightly to the right, in the direction of the deadlines. This is normal off course, during the first weeks (when we compose the Gantt Chart) there is not much to do for other subjects and you do not take into account all those extra projects, tests, etc. But we cannot deny the planning of the Gantt chart is better because the work is spread and there are always some weeks left (which you can use as buffer).

In the temporary process report, we mentioned Jianlei, Ziang and Yu did the major part for the deadline of week 6 and we wanted to try to make sure the tasks were divided equally. After these weeks (week 6 – week 11), we can assume all tasks were divided fair and equal, everyone did at least 2 different things. The division was quite easy, just one or two responsibles who worked on one piece of the deadline. They have to make sure their part is done and finished on time.

We wanted to try to 'mix' our team a little bit more too. If you ask yourself what we mean when we use 'mixing', for the previous deadline all tasks were divided and the responsibles

were always two Belgians or two Chinese. There were never mixed teams. For the task division for the deadline of week 11, we tried to take this into account but it just succeeded

for a part. Maarten & Wouter were the responsibles for the construction of the car from the beginning and the other tasks we did mainly alone. Apart from the fact we did not always

together, you could feel the group has become closer. At the start from EE4, you could really feel there were two different groups who did not know each other and rather stay in their 'small little group'. Right now, after 11 weeks, we cannot say the feeling disappeared completely, we still feel some differences. After all, those differences never disappear just after 11 weeks of collaboration. But when we compare between the start and week 11, we made a lot of progression as a group. You can notice it at some details, the communication has improved (however it still is a weakness as a group), you know how to pretend, etc.

Like mentioned before, the communication was a weakness for our team. However, it went better during the project, meetings were a bit chaotic from time to time. Misunderstandings however never disappeared but because gathering was difficult because of the different languages, making appointments was not easy because of the 'chaos'. You have to repeat things regularly to make sure everyone understood it.

Another disadvantage was, maybe due to the fact of bad communication, we did not really gathered. At a meeting, the team leader presides the meeting, the task are divided and everyone starts working on their tasks but there were no real discussions. This maybe could have lifted the quality of our deadlines. On the other hand, because our team members are part of other class groups, it is really difficult to meet apart from Tuesday afternoon. And because, there is a lot of other work for other subjects, so everyone wants to be as efficient as possible and not 'waste' too much time.

A major advantage was the fact that everyone was motivated and interested in the project. It makes it a lot easier when everyone has a certain drive, this helps to make sure things get finished on time.

Another strength was the variety of the members, cultural variety but personal varieties too. We have members (just some examples) who are good at calculations and theoretical things, others were good at graphics (team logo, solid edge, design of our car), others were good at working with software. It makes our a team a very complete team.

CONCLUSION

The most useful thing we have learned, is to work with people of another culture. We had never thought there are so many differences in just working together. After all, the process

of EE4 went very well, much better as much of us thought it would going to be. We always have been busy and never had to panic. The car drove immediately, we managed all deadlines and there were no quarrels.

Our car eventually was not the fastest car, but it was a good compromise between price and performance. When we take a look to the race results, we are in the middle part of the standings. Because the showdown of the SSV's is postponed, we normally could try to get extra points for the beauty of our car. Unfortunately, there is a group who concentrated especially on the esthetics of the car and their car really looks amazing (they are actually quite invincible).

When we could restart, there are a few things we would change. First, we would try to know each other (for a bit) before we start. This project, we just started working for the first deadline without taking some time to get in touch. Another improvement is trying to spread the work a little bit more so that almost all the tasks are finished the week before the deadline. The most important improvement is the fact that we have to gather and discuss more and not just divide all the tasks and start working individually. In the worst case scenario, you just write pieces who do not fit with each other and other pieces who are exact the same as an another team member made.

But after all, we were a good team who did learn a lot about cooperation and solar energy. In fact, it was the first real 'engineering' project, we really have to design and calculate a product, so it was very interesting. Everyone of our team is convinced this was a very useful project.

APPENDIX: TEMPORARY PROCESS REPORT

In our team, we divide all the planned tasks that has to be done within a few weeks at the weekly team meeting. Every task is given to one or two team members, these members are responsible for that specific task. He/she has to make sure the task is finished at a given date. Of course, the team member(s) can ask for some other team members to help him. Each meeting, we tell the others which progress we have made with our task and let them control what is done. We think this approach works very well because the project proceeds and we are on schedule for the moment and no other problems have occurred. Our reports for the deadline of week six will be finished by Friday and we are working on the design of our car. We already started with the enterprising and educating part too.

In our plan of approach, we mentioned our language difference would be a possible bottleneck. We wanted to work together as one team and not split up in two different groups. After six weeks, we can conclude we did not achieve this objective successfully. During meetings and for example the solar panel measurements, we actually can work as a team. But until week six, the tasks mainly had to be done in small groups, the task division arranged itself in that way, there were 'no mixed' groups (with mixed, I mean Belgians and Chinese in one group). But this makes sense, the task division was voluntary, everyone could do whatever he/she wanted (as long as every task was occupied). Off course, everyone wants to work with the person he/she knows the best. Automatically, you end up with no 'mixed' teams. Another factor for this group division is, although everyone does his very best, there is a language problem. We can't deny it, during meetings there are often problems or misunderstandings. Off course, this is normal, you cannot expect everyone speaks English as good. But due to this problem, we rather choose to work with a team member who speaks the same language. It is logical, because working together with someone who speaks the same language is more efficient, there are less misunderstandings and you save a lot of time.

But now these reports are finished, we can concentrate on the design and building of the car for a while. Apart from the language problem, we obviously can work on this tasks together as a team. We all have the same desire to build a very decent SSV so we believe this 'non mixed' situation will improve significantly because we have the same goal to work for.

For now, this language difference maybe is a problem, but it will be very helpful for our further career. Apart from the fact our English will improve, we learn how to communicate when it is not easy, this will help us in future projects. Though, the Flemish teams have a large advantage compared to the mixed teams because they can communicate in their own language. But this is a motivation for us to defeat them.

We also thought there was going to be a problem with our time management. Because we had to combine five different schedules, free moments for our whole team are rare. After six weeks, this problem has not been a big problem. Our weekly team meeting is sufficient to make sure everything is finished in time. Our Dropbox account is a tool to keep updated for the newest documents and because we work in small groups with those who have the same schedules, it is easier to get everything done. But it might get a little more difficult in the future. During the design and building of our SSV, we cannot work apart, we have to work together. Finding a moment that suits for all team member will be major problem. A solution could be Doodles, at this way we can pick out moments when the most members of our team can work on our SSV.

Last meeting, we evaluated how well the task division for this deadline was done and if everyone was happy about the functioning of our team. Like we all expected, Jianlei mentioned the task division was out of balance. For this deadline he, Yu and Ziang did the biggest part of the deadline. Because they always volunteered to do a certain task, there is no 'friction' in the team. Off course, the others knew they did not as much work as Jianlei, Yu and Ziang, that is why we expected it. In contrary to Jianlei, Yu and Ziang, Shen was a little bit shy and quiet during this six weeks. But she will try to participate more during meetings and engage herself.

In the future, we will have to take care the task division is done well (even if someone volunteers for a lot of tasks).