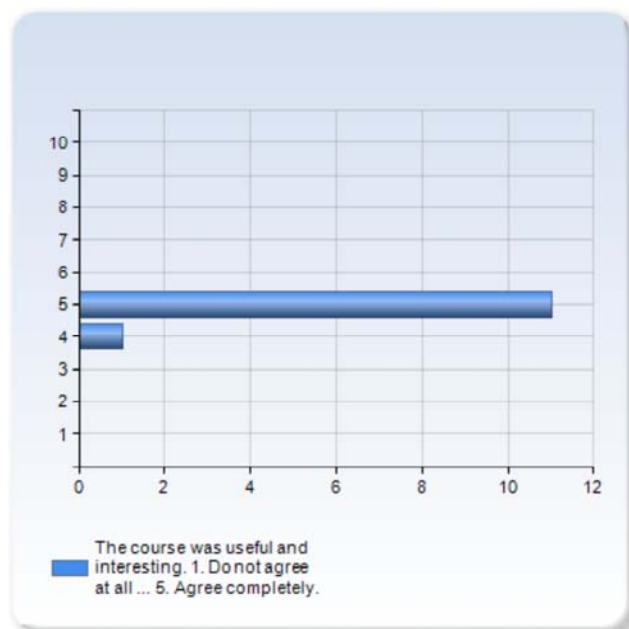


## Project in Wireless Communication, vt 2013, EQ2430/EQ2440

Answer Count: 12

The course was useful and interesting. 1. Do not agree at all ... 5. Agree completely.

The course was useful and interesting. 1. Do not agree at all ... 5. Agree completely.	Number of Responses	Cumulated Responses
1	0 (0.0%)	0 (0.0%)
2	0 (0.0%)	0 (0.0%)
3	0 (0.0%)	0 (0.0%)
4	1 (8.3%)	1 (8.3%)
5	11 (91.7%)	12 (100.0%)
6	0 (0.0%)	12 (100.0%)
7	0 (0.0%)	12 (100.0%)
8	0 (0.0%)	12 (100.0%)
9	0 (0.0%)	12 (100.0%)
10	0 (0.0%)	12 (100.0%)
Total	12 (100.0%)	12 (100.0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
The course was useful and interesting. 1. Do not agree at all ... 5. Agree completely.	4.9	0.3	5.9 %	4.0	5.0	5.0	5.0	5.0

### Comment

During the last two months, I have learnt a lot and very enjoy the process discuss with teacher and other members.

It was a lot of fun to work in a new group with people I didn't know before. It was also fun to work with something that may not have a perfect solution, it felt like in the real life.

It was a great learning process through testing, getting stuck and coming up with our own solution

The course gives me a lot of fun!

I've learned a lot knowledge through this project.

Interesting 5

Useful to learn yourself and use your own knowledge.

Really great course. An awesome learning experience.

The subject of the project was really interesting, so it was a pleasure to try to find solutions and apply them.

Is there anything that could be done to make the course more interesting ?

Is there anything that could be done to make the course more interesting ?

I haven't thought out yet

Not really

No, it was perfect and really fun.

It is already interesting.

Just stay with interesting project ideas.

A commented student framework.

No, it was really great as it was. Working in such huge teams, having daily reports and reflective dairies was a good way to keep track of the progress of the project and see if you are sticking to the time plan

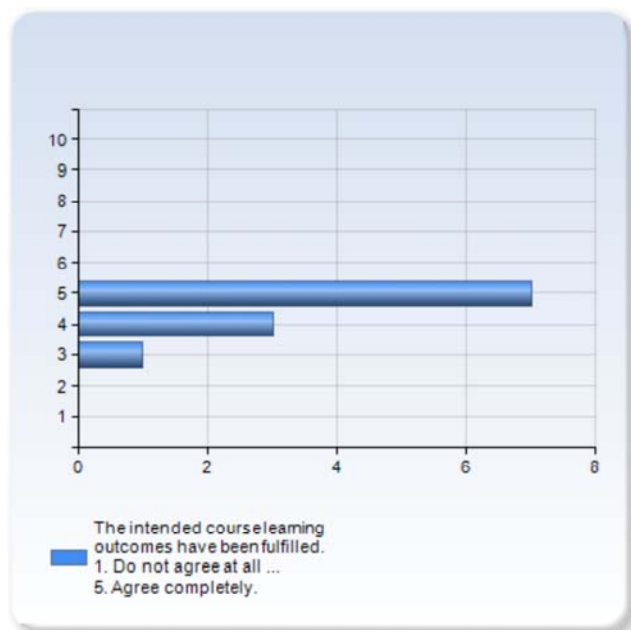
Maybe find a more useful subject because even if we spend really good time this two last month, our subject had not a lot of applications in everyday life.

More interesting projects could have been added having more applications in future

Personally, the course is quite good now. I learned a lot after this course. If there is something could be improved, I hope there is a communication party between students who took the course in the last few years. I think the communication will help students to better understand what they are going to do during the courses

The intended course learning outcomes have been fulfilled. 1. Do not agree at all ... 5. Agree completely.

The intended course learning outcomes have been fulfilled. 1. Do not agree at all ... 5. Agree completely.	Number of Responses	Cumulated Responses
1	0 (0.0%)	0 (0.0%)
2	0 (0.0%)	0 (0.0%)
3	1 (9.1%)	1 (9.1%)
4	3 (27.3%)	4 (36.4%)
5	7 (63.6%)	11 (100.0%)
6	0 (0.0%)	11 (100.0%)
7	0 (0.0%)	11 (100.0%)
8	0 (0.0%)	11 (100.0%)
9	0 (0.0%)	11 (100.0%)
10	0 (0.0%)	11 (100.0%)
Total	11 (100.0%)	11 (100.0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
The intended course learning outcomes have been fulfilled. 1. Do not agree at all ... 5. Agree completely.	4.5	0.7	15.1 %	3.0	4.0	5.0	5.0	5.0

#### Comment

I have learnt more about how to work as a project leader and what kind of responsibilities one needs to take. The project requirements was fulfilled and all the deliverables.  
 I learned QR codes, but not really more about Android. But I think programming can only learned by doing it yourself.  
 Real time applications has been developed and the solutions were found through testing which helped us learn more  
 Yes. I learned quite a lot and applied what I have learned in to practical use

What could be done in order to reach the learning outcomes better?

What could be done in order to reach the learning outcomes better?

don't know

If the project could have more relationships with the courses.

More lectures on Android development as not every one was familiar with it and more lectures would have helped them learn it faster

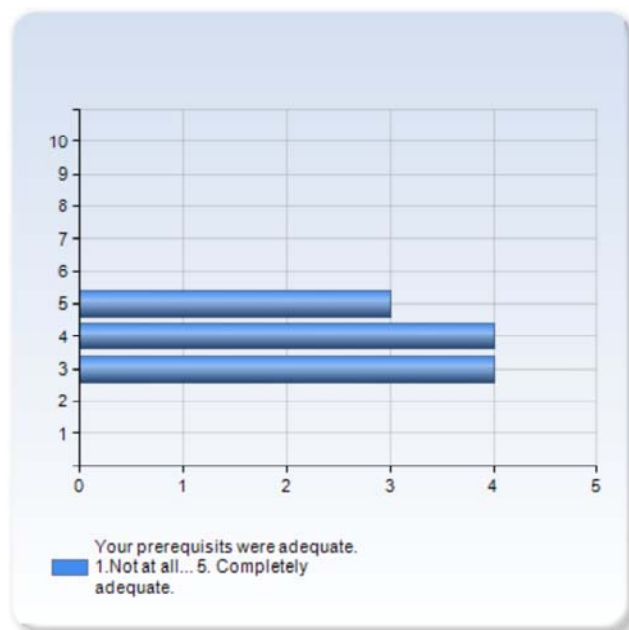
Difficult to do more in a project. Keep subject interesting.

Perfect course

Maybe some examples could be provided to better understand java and I hope each group owns someone has special ability in a certain area. For example, no one in my group have been access to Java, which makes it very hard for us to fulfill assignments.

Your prerequisites were adequate. 1. Not at all... 5. Completely adequate.

Your prerequisites were adequate. 1. Not at all... 5. Completely adequate.	Number of Responses	Cumulated Responses
1	0 (0.0%)	0 (0.0%)
2	0 (0.0%)	0 (0.0%)
3	4 (36.4%)	4 (36.4%)
4	4 (36.4%)	8 (72.7%)
5	3 (27.3%)	11 (100.0%)
6	0 (0.0%)	11 (100.0%)
7	0 (0.0%)	11 (100.0%)
8	0 (0.0%)	11 (100.0%)
9	0 (0.0%)	11 (100.0%)
10	0 (0.0%)	11 (100.0%)
Total	11 (100.0%)	11 (100.0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
Your prerequisites were adequate. 1. Not at all... 5. Completely adequate.	3.9	0.8	21.3 %	3.0	3.0	4.0	4.5	5.0

#### Comment

It felt like you had a clue at least of how to start the project

Although the framework was very useful and easy to use, only few people in my group were able to deal with it, unfortunately.

Better Java knowledge would have helped but since the groups were in such a way that there were people with good knowledge on the subject is present in every group, it wasn't much of a problem in the end

Since it was a 2 month course, it provided enough time to get familiar with the needed even if you didn't have specific knowledge about it before

Unfortunately, I only know some C language before programming the code part, which makes the beginning really hard. Lucky, I learned a course called Principles of Wireless Sensor Networks, which helped me quite a lot while finishing the trilateration of our project

Any suggestions on how to make students more prepared for the course?

Any suggestions on how to make students more prepared for the course?

More java and matlab skill

Maybe more litterature to study?

I feel like most of the students lack in programming skills. Probably, there should be some mandatory projects about Java programming before this course.

2 or 3 introduction lectures in Java

Every body hand on a plan or an idea on the project before the course.

Provide basic tutorial for Java or provide materials for it

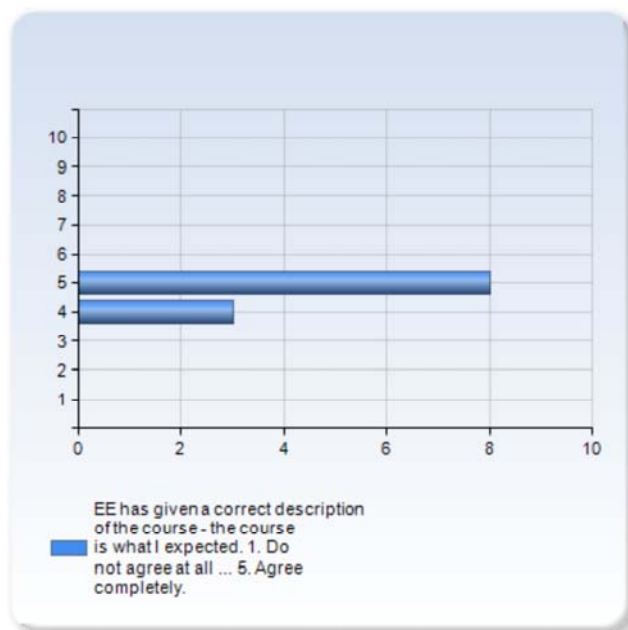
Maybe a preparation to programming (particularly Java) could be very useful for these projects.

Course was organized very well. Students were prepared to undertake the projects

I think that the reading materials given to us are too advanced. It is really hard for us to understand them. Is it possible to give us more 'balance' materials? By balance, I mean the material is very useful and is explained in an easy way to understand.

EE has given a correct description of the course - the course is what I expected. 1. Do not agree at all ... 5. Agree completely.

EE has given a correct description of the course - the course is what I expected. 1. Do not agree at all ... 5. Agree completely.	Number of Responses	Cumulated Responses
1	0 (0.0%)	0 (0.0%)
2	0 (0.0%)	0 (0.0%)
3	0 (0.0%)	0 (0.0%)
4	3 (27.3%)	3 (27.3%)
5	8 (72.7%)	11 (100.0%)
6	0 (0.0%)	11 (100.0%)
7	0 (0.0%)	11 (100.0%)
8	0 (0.0%)	11 (100.0%)
9	0 (0.0%)	11 (100.0%)
10	0 (0.0%)	11 (100.0%)
Total	11 (100.0%)	11 (100.0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
EE has given a correct description of the course - the course is what I expected. 1. Do not agree at all ... 5. Agree completely.	4.7	0.5	9.9 %	4.0	4.5	5.0	5.0	5.0

#### Comment

It was more than what I expected but in a good way

I feel like I learned a quite lot after this course.

Is there anything that EE could do to better describe the course to potential students ?

Is there anything that EE could do to better describe the course to potential students ?

To early tell the students that you should only read the project course and no other at the same time.

It is good enough.

Put a demo video of the previous project along with the course description to show what they are getting into

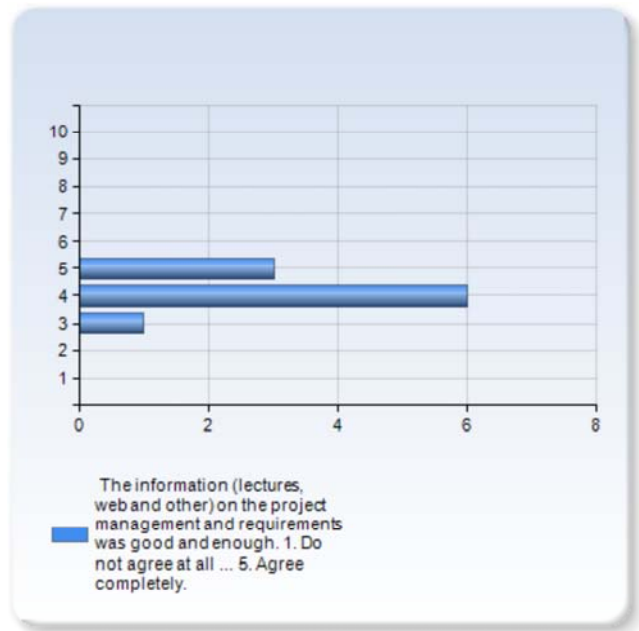
A demonstration of previous project before the course begins, so people can have a better view of the projects.

It was good already

I hope the duration of the course could be set a little longer so that we could finish the digital signature part of our project.

The information (lectures, web and other) on the project management and requirements was good and enough. 1. Do not agree at all ... 5. Agree completely.

The information (lectures, web and other) on the project management and requirements was good and enough. 1. Do not agree at all ... 5. Agree completely.	Number of Responses	Cumulated Responses
1	0 (0.0%)	0 (0.0%)
2	0 (0.0%)	0 (0.0%)
3	1 (10.0%)	1 (10.0%)
4	6 (60.0%)	7 (70.0%)
5	3 (30.0%)	10 (100.0%)
6	0 (0.0%)	10 (100.0%)
7	0 (0.0%)	10 (100.0%)
8	0 (0.0%)	10 (100.0%)
9	0 (0.0%)	10 (100.0%)
10	0 (0.0%)	10 (100.0%)
Total	10 (100.0%)	10 (100.0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
The information (lectures, web and other) on the project management and requirements was good and enough. 1. Do not agree at all ... 5. Agree completely.	4.2	0.6	15.1 %	3.0	4.0	4.0	4.5	5.0

#### Comment

It was good enough

The only problem we had is with the timeplan. I felt like our one was not very accurate.

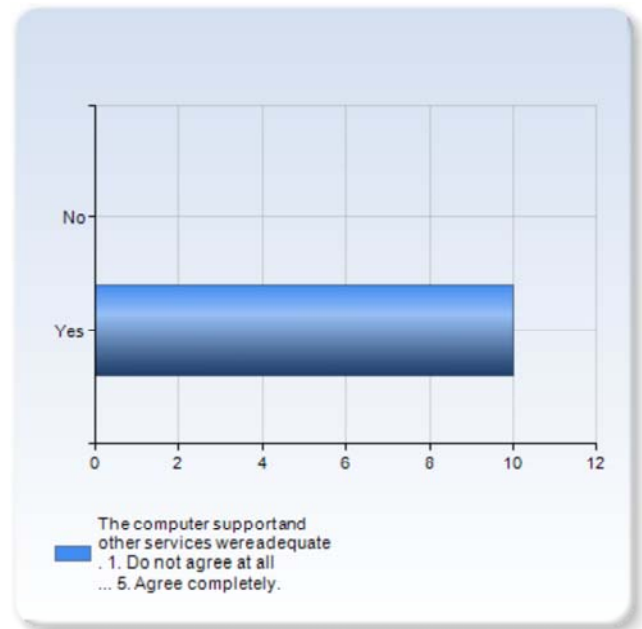
More than the web, it was the testing and the meetings that helped us come up with solutions to problems

On the programming, a list of web link or little lectures about the difficult points in Java would have been good.

There was not much material regarding project management

The computer support and other services were adequate . 1. Do not agree at all ... 5. Agree completely.

The computer support and other services were adequate . 1. Do not agree at all ... 5. Agree completely.	Number of Responses	Cumulated Responses
Yes	10 (100.0%)	10 (100.0%)
No	0 (0.0%)	10 (100.0%)
Total	10 (100.0%)	10 (100.0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
The computer support and other services were adequate . 1. Do not agree at all ... 5. Agree completely.	1.0	0.0	0.0 %	1.0	1.0	1.0	1.0	1.0

#### Comment

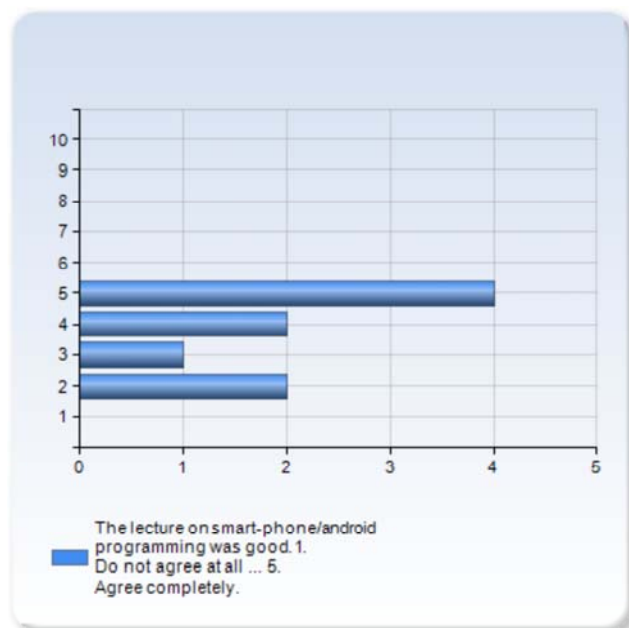
Just worked as expected

The facilities were amazing. The other facilities like microwave oven and coffee machine helped make the project that much easier. It was a really thoughtful and warm gesture from the professor

Just expect the last day of the project, all the MATLAB of our group were out of license. We really do not know why.

The lecture on smart-phone/android programming was good. 1. Do not agree at all ... 5. Agree completely.

The lecture on smart-phone/android programming was good. 1. Do not agree at all ... 5. Agree completely.	Number of Responses	Cumulated Responses
1	0 (0.0%)	0 (0.0%)
2	2 (22.2%)	2 (22.2%)
3	1 (11.1%)	3 (33.3%)
4	2 (22.2%)	5 (55.6%)
5	4 (44.4%)	9 (100.0%)
6	0 (0.0%)	9 (100.0%)
7	0 (0.0%)	9 (100.0%)
8	0 (0.0%)	9 (100.0%)
9	0 (0.0%)	9 (100.0%)
10	0 (0.0%)	9 (100.0%)
Total	9 (100.0%)	9 (100.0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
The lecture on smart-phone/android programming was good. 1. Do not agree at all ... 5. Agree completely.	3.9	1.3	32.6 %	2.0	3.0	4.0	5.0	5.0

#### Comment

HTC phone sometimes doesn't work well

I did not understand tht much and it went to fast

It is better if we can have more lecture about the android programming.

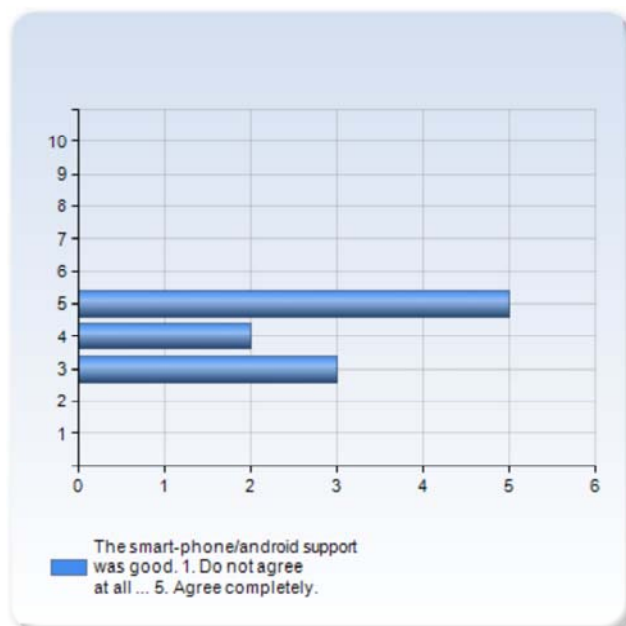
Didn't attended it.

It was really interesting

The student framework (and its lecture), were too full. We were losing time in computation. The think to do, in my opinion, it's to prepare more a list of tutorial to learn how to implement action or a list of prepared classes, to avoid to have too many think in an application which doesn't need all.

The smart-phone/android support was good. 1. Do not agree at all ... 5. Agree completely.

The smart-phone/android support was good. 1. Do not agree at all ... 5. Agree completely.	Number of Responses	Cumulated Responses
1	0 (0.0%)	0 (0.0%)
2	0 (0.0%)	0 (0.0%)
3	3 (30.0%)	3 (30.0%)
4	2 (20.0%)	5 (50.0%)
5	5 (50.0%)	10 (100.0%)
6	0 (0.0%)	10 (100.0%)
7	0 (0.0%)	10 (100.0%)
8	0 (0.0%)	10 (100.0%)
9	0 (0.0%)	10 (100.0%)
10	0 (0.0%)	10 (100.0%)
Total	10 (100.0%)	10 (100.0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
The smart-phone/android support was good. 1. Do not agree at all ... 5. Agree completely.	4.2	0.9	21.9 %	3.0	3.5	4.5	5.0	5.0

#### Comment

Bt we could figure it out in the end

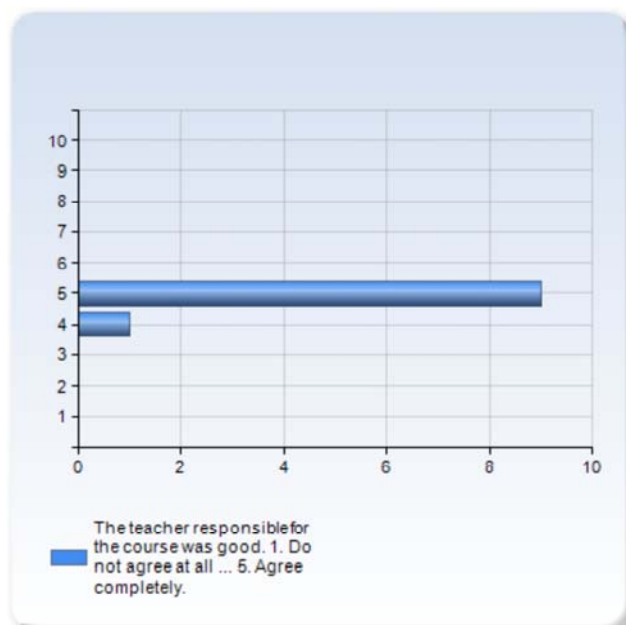
smartphone 5

android 2-3, often unclear

The framework did have some problems

The teacher responsible for the course was good. 1. Do not agree at all ... 5. Agree completely.

The teacher responsible for the course was good. 1. Do not agree at all ... 5. Agree completely.	Number of Responses	Cumulated Responses
1	0 (0.0%)	0 (0.0%)
2	0 (0.0%)	0 (0.0%)
3	0 (0.0%)	0 (0.0%)
4	1 (10.0%)	1 (10.0%)
5	9 (90.0%)	10 (100.0%)
6	0 (0.0%)	10 (100.0%)
7	0 (0.0%)	10 (100.0%)
8	0 (0.0%)	10 (100.0%)
9	0 (0.0%)	10 (100.0%)
10	0 (0.0%)	10 (100.0%)
Total	10 (100.0%)	10 (100.0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
The teacher responsible for the course was good. 1. Do not agree at all ... 5. Agree completely.	4.9	0.3	6.5 %	4.0	5.0	5.0	5.0	5.0

#### Comment

he felt interested in our work and good in responding to our questions

He was highly motivated.

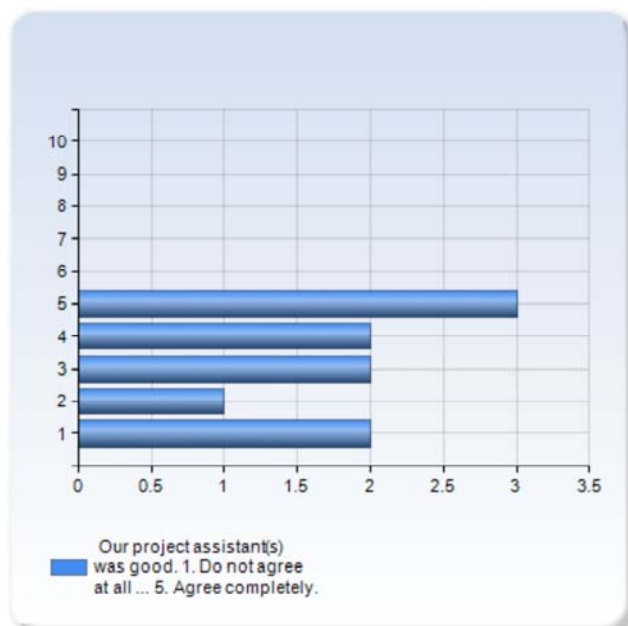
A really nice person and thanks for offering this wonderful course

Per is really good. Always have patience to answer our questions and really gave us a lot of help.



Our project assistant(s) was good. 1. Do not agree at all ... 5. Agree completely.

Our project assistant(s) was good. 1. Do not agree at all ... 5. Agree completely.	Number of Responses	Cumulated Responses
1	2 (20.0%)	2 (20.0%)
2	1 (10.0%)	3 (30.0%)
3	2 (20.0%)	5 (50.0%)
4	2 (20.0%)	7 (70.0%)
5	3 (30.0%)	10 (100.0%)
6	0 (0.0%)	10 (100.0%)
7	0 (0.0%)	10 (100.0%)
8	0 (0.0%)	10 (100.0%)
9	0 (0.0%)	10 (100.0%)
10	0 (0.0%)	10 (100.0%)
Total	10 (100.0%)	10 (100.0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
Our project assistant(s) was good. 1. Do not agree at all ... 5. Agree completely.	3.3	1.6	47.5 %	1.0	2.5	3.5	4.5	5.0

#### Comment

He could not help us at all unfortunately, he was only with us for the progress meetings

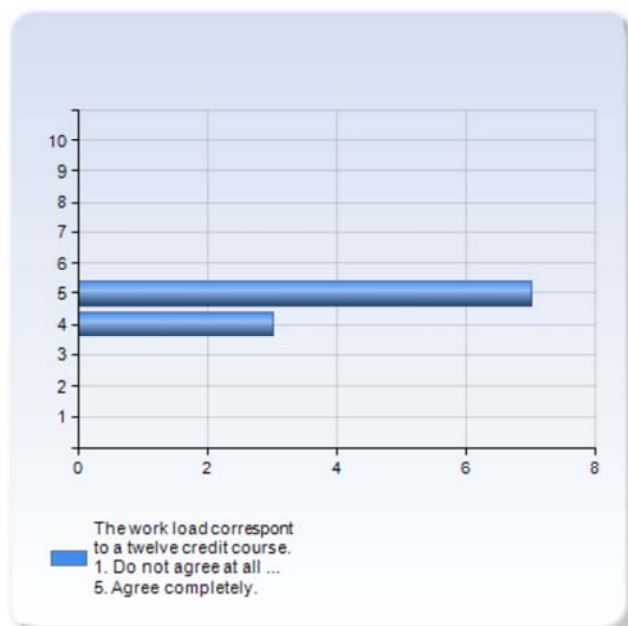
Unfortunately, our assistant didn't have any experience in this field, therefore he was not able to help us.

Next time I think there should be a more skillful assistant helping students. I mean the assistant at least should know more about the project than students, otherwise he cannot help.

The discussions with him were really good and helpful to solve some of the problems

The work load correspond to a twelve credit course. 1. Do not agree at all ... 5. Agree completely.

The work load correspond to a twelve credit course. 1. Do not agree at all ... 5. Agree completely.	Number of Responses	Cumulated Responses
1	0 (0.0%)	0 (0.0%)
2	0 (0.0%)	0 (0.0%)
3	0 (0.0%)	0 (0.0%)
4	3 (30.0%)	3 (30.0%)
5	7 (70.0%)	10 (100.0%)
6	0 (0.0%)	10 (100.0%)
7	0 (0.0%)	10 (100.0%)
8	0 (0.0%)	10 (100.0%)
9	0 (0.0%)	10 (100.0%)
10	0 (0.0%)	10 (100.0%)
Total	10 (100.0%)	10 (100.0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
The work load correspond to a twelve credit course. 1. Do not agree at all ... 5. Agree completely.	4.7	0.5	10.3 %	4.0	4.5	5.0	5.0	5.0

#### Comment

We almost come to lab very day except weekend, it is really worth twelve credit.

It is hard to say something about the work load in a project. I wanted to see the app running and add more things and play around, so I spent more hours than corresponding to 12 points.

It was challenging and interesting and worth the credits.

Yes. I learned quite a lot during the course and I felt like I have never taken a more interesting course than this one. I felt really excited moment when we got the distances printed on the screen as well as the position. I was really happy.

What was the best aspect of the course ?

What was the best aspect of the course ?
The professor is pretty good.
the interesting projects
Seeing the final demonstration.
We can really learn much useful knowledge, and the team work of the international students is really nice.
The running application at the end. To have a real outcome :)
The finale where everything just came out good and see the fruitful moments of 2 months work. Per was really good enough to treat us making the day all the more memorable and the external people appreciating the work was really satisfying.
Discover the result of our work when it finally worked. And see the interest of others people.
Steep learning curve
I could apply what I have learn on the textbook in to real use. For example, I could see the multi-path components on the plot of recording, which was just a concept from Wireless Communication for me before. And I could use a lot of knowledge I learn from Sensor Networks to do the trilateration which makes me feel a little proud of myself. I was really happy for that.

Is there something that has not functioned well or should be changed/removed from the course?

Is there something that has not functioned well or should be changed/removed from the course?
diary for the last week, there is not too much thing special to write.
the assistant maybe, his knowledge from the beginning
The framework can be improved
There is always something which need to be improved in a project but i don't see anything to remove
Excellent course

What is your experience from working in a project group ?

What is your experience from working in a project group ?
help each other, do different task. When one of us meet a stuck, others will come to think about a new idea. We are a group not several individual combination.
A lot of fun. I thought that I did a great job as the leader to prepare every meeting and structure the work
Well, I would say that sometimes it can be tougher than what I expected. You have to trust the others, and help them if they have problems.
We do what we are good at, then this team can be well organized and operate well.
Cool but some things could be changed or I would try to change in the next project work.
The group was really good. It was arranged in such a way that it was strong in all the areas. Some maybe good at java, some in matlab and blending all of these work together really taught us the power of team planning and organization
Really great
It was perfect experience with an opportunity to coordinate and learn from each other work/experiences
I know what I should do in a team work. Know how to cooperate with other group mates.

When did you hear about the course ? Why did you choose it?

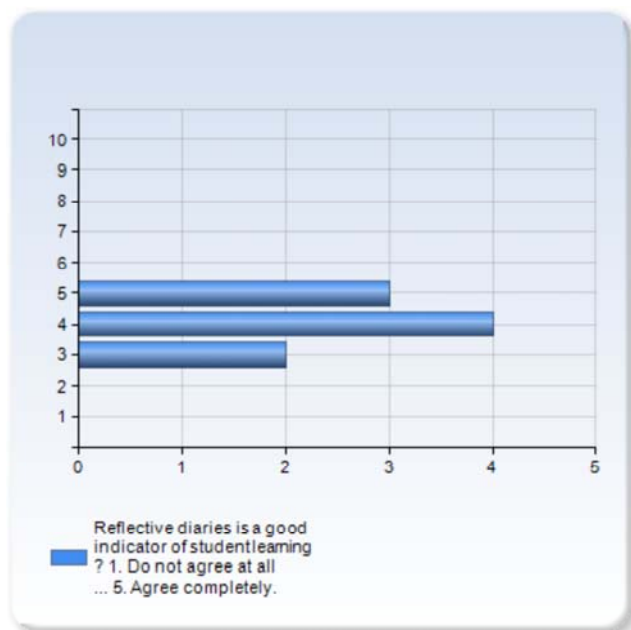
When did you hear about the course ? Why did you choose it?
The credit is high and I want to apply what I learn to do something
It was a mandatory course for my education
Actually I read about it on the web. I have chosen it because it was a chance to do something more practical.
It is an obligatory course for my program.
last term. I am interested in it.
Sounds interesting. Found it on the web/kth side.
It sounded interesting and in par with my interests. I heard it from the Electrical Engineering course website
I heard about the course during the first semester. I choose it because I wanted to make a project to apply what I learn before.
I heard about the course in last study period. The course inspired great learning outcome
I knew the course from Study Plan as well as some communication between some other students.
Honestly, at first I chose it because I have chosen the track of Information Processing and Transmission in my Master Program and this course is a compulsory. But after taking the course, especially after finishing the course, I felt I really learn a lot. I strongly agree that all your effort will be repaid.

Do you think smart-phones are a good platform for student projects?

Do you think smart-phones are a good platform for student projects?
Yes Nowadays more smart-phones are used. The application we will use in future should be more suitable to smart-phones.
it was fun yes
Yes, I think you can do a lot of interesting stuff with that.
yes, of course, since more and more apps are used based on smart-phones.
Yes, as everybody has one and see a use in developing for this device.
Ya, it is an excellent platform. It has so many applications and is such a vast field
Perfect, more and more system are based on the systems of applications (smart-phone, tablet) so it is really good to have an experience in it. In addition, Java is a good platform to begin because really easy to integrate for beginners.
Absolutely
Yes, it is really common these days and very close to our life

Reflective diaries is a good indicator of student learning ? 1. Do not agree at all ... 5. Agree completely.

Reflective diaries is a good indicator of student learning ? 1. Do not agree at all ... 5. Agree completely.	Number of Responses	Cumulated Responses
1	0 (0.0%)	0 (0.0%)
2	0 (0.0%)	0 (0.0%)
3	2 (22.2%)	2 (22.2%)
4	4 (44.4%)	6 (66.7%)
5	3 (33.3%)	9 (100.0%)
6	0 (0.0%)	9 (100.0%)
7	0 (0.0%)	9 (100.0%)
8	0 (0.0%)	9 (100.0%)
9	0 (0.0%)	9 (100.0%)
10	0 (0.0%)	9 (100.0%)
Total	9 (100.0%)	9 (100.0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
Reflective diaries is a good indicator of student learning ? 1. Do not agree at all ... 5. Agree completely.	4.1	0.8	19.0 %	3.0	4.0	4.0	5.0	5.0

#### Comment

Sometimes you just wrote because you had to...

Yes.

I'm not sure. You could write nearly everything in it?!

There was no feedback on the diaries, that is bad and somehow my experience in Sweden. You always have to hand in something to a Black Hole. Nothing comes back.

So the student learns nothing by handing it in as nobody reply and show off the mistakes errors or ways to enhance the way of working.

It helped us evaluate ourselves and even to make sure that you complete your task and keep up with the next tasks. It clearly indicated individual work flow

It is very useful especially the part of what you are going to do next week, which makes my work more oriental.

#### Any other comments?

Any other comments?

Thanks for the teacher!

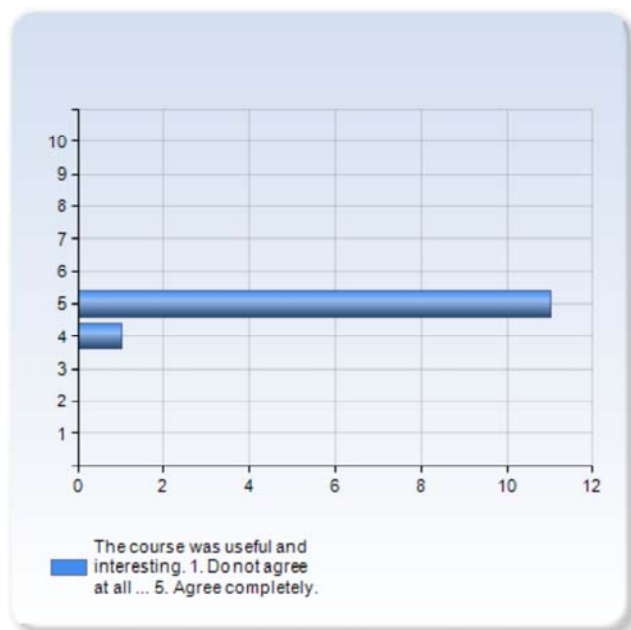
Exciting and challenging course

It was an excellent course having great learning opportunities

I could like to thanks Per again and thanks my group mates. I feel like a learn millions of stuff during this two-month study. I am sorry that we do not have time to implement the digital signature part. If possible, I hope someday, I could keep working on this one. Since I like my project so much and I really want it to be perfect.

The course was useful and interesting. 1. Do not agree at all ... 5. Agree completely.

The course was useful and interesting. 1. Do not agree at all ... 5. Agree completely.	Number of Responses	Cumulated Responses
1	0 (0.0%)	0 (0.0%)
2	0 (0.0%)	0 (0.0%)
3	0 (0.0%)	0 (0.0%)
4	1 (8.3%)	1 (8.3%)
5	11 (91.7%)	12 (100.0%)
6	0 (0.0%)	12 (100.0%)
7	0 (0.0%)	12 (100.0%)
8	0 (0.0%)	12 (100.0%)
9	0 (0.0%)	12 (100.0%)
10	0 (0.0%)	12 (100.0%)
Total	12 (100.0%)	12 (100.0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
The course was useful and interesting. 1. Do not agree at all ... 5. Agree completely.	4.9	0.3	5.9 %	4.0	5.0	5.0	5.0	5.0

#### Comment

During the last two months, I have learnt a lot and very enjoy the process discuss with teacher and other members.

It was a lot of fun to work in a new group with people I didn't know before. It was also fun to work with something that may not have a perfect solution, it felt like in the real life.

It was a great learning process through testing, getting stuck and coming up with our own solution

The course gives me a lot of fun!

I've learned a lot knowledge through this project.

Interesting 5

Useful to learn yourself and use your own knowledge.

Really great course. An awesome learning experience.

The subject of the project was really interesting, so it was a pleasure to try to find solutions and apply them.

Is there anything that could be done to make the course more interesting ?

Is there anything that could be done to make the course more interesting ?

I haven't thought out yet

Not really

No, it was perfect and really fun.

It is already interesting.

Just stay with interesting project ideas.

A commented student framework.

No, it was really great as it was. Working in such huge teams, having daily reports and reflective dairies was a good way to keep track of the progress of the project and see if you are sticking to the time plan

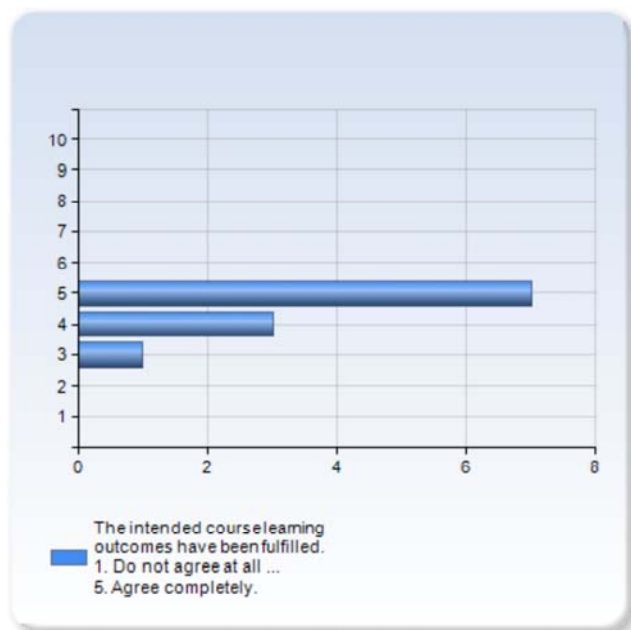
Maybe find a more useful subject because even if we spend really good time this two last month, our subject had not a lot of applications in everyday life.

More interesting projects could have been added having more applications in future

Personally, the course is quite good now. I learned a lot after this course. If there is something could be improved, I hope there is a communication party between students who took the course in the last few years. I think the communication will help students to better understand what they are going to do during the courses

The intended course learning outcomes have been fulfilled. 1. Do not agree at all ... 5. Agree completely.

The intended course learning outcomes have been fulfilled. 1. Do not agree at all ... 5. Agree completely.	Number of Responses	Cumulated Responses
1	0 (0.0%)	0 (0.0%)
2	0 (0.0%)	0 (0.0%)
3	1 (9.1%)	1 (9.1%)
4	3 (27.3%)	4 (36.4%)
5	7 (63.6%)	11 (100.0%)
6	0 (0.0%)	11 (100.0%)
7	0 (0.0%)	11 (100.0%)
8	0 (0.0%)	11 (100.0%)
9	0 (0.0%)	11 (100.0%)
10	0 (0.0%)	11 (100.0%)
Total	11 (100.0%)	11 (100.0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
The intended course learning outcomes have been fulfilled. 1. Do not agree at all ... 5. Agree completely.	4.5	0.7	15.1 %	3.0	4.0	5.0	5.0	5.0

#### Comment

I have learnt more about how to work as a project leader and what kind of responsibilities one needs to take. The project requirements was fulfilled and all the deliverables.  
 I learned QR codes, but not really more about Android. But I think programming can only learned by doing it yourself.  
 Real time applications has been developed and the solutions were found through testing which helped us learn more  
 Yes. I learned quite a lot and applied what I have learned in to practical use

What could be done in order to reach the learning outcomes better?

What could be done in order to reach the learning outcomes better?

don't know

If the project could have more relationships with the courses.

More lectures on Android development as not every one was familiar with it and more lectures would have helped them learn it faster

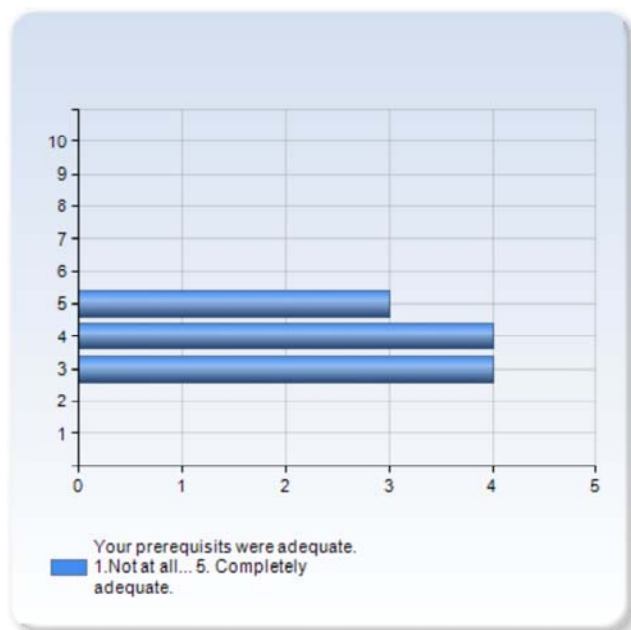
Difficult to do more in a project. Keep subject interesting.

Perfect course

Maybe some examples could be provided to better understand java and I hope each group owns someone has special ability in a certain area. For example, no one in my group have been access to Java, which makes it very hard for us to fulfill assignments.

Your prerequisites were adequate. 1. Not at all... 5. Completely adequate.

Your prerequisites were adequate. 1. Not at all... 5. Completely adequate.	Number of Responses	Cumulated Responses
1	0 (0.0%)	0 (0.0%)
2	0 (0.0%)	0 (0.0%)
3	4 (36.4%)	4 (36.4%)
4	4 (36.4%)	8 (72.7%)
5	3 (27.3%)	11 (100.0%)
6	0 (0.0%)	11 (100.0%)
7	0 (0.0%)	11 (100.0%)
8	0 (0.0%)	11 (100.0%)
9	0 (0.0%)	11 (100.0%)
10	0 (0.0%)	11 (100.0%)
Total	11 (100.0%)	11 (100.0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
Your prerequisites were adequate. 1. Not at all... 5. Completely adequate.	3.9	0.8	21.3 %	3.0	3.0	4.0	4.5	5.0

#### Comment

It felt like you had a clue at least of how to start the project

Although the framework was very useful and easy to use, only few people in my group were able to deal with it, unfortunately.

Better Java knowledge would have helped but since the groups were in such a way that there were people with good knowledge on the subject is present in every group, it wasn't much of a problem in the end

Since it was a 2 month course, it provided enough time to get familiar with the needed even if you didn't have specific knowledge about it before

Unfortunately, I only know some C language before programming the code part, which makes the beginning really hard. Lucky, I learned a course called Principles of Wireless Sensor Networks, which helped me quite a lot while finishing the trilateration of our project

Any suggestions on how to make students more prepared for the course?

Any suggestions on how to make students more prepared for the course?

More java and matlab skill

Maybe more literature to study?

I feel like most of the students lack in programming skills. Probably, there should be some mandatory projects about Java programming before this course.

2 or 3 introduction lectures in Java

Every body hand on a plan or an idea on the project before the course.

Provide basic tutorial for Java or provide materials for it

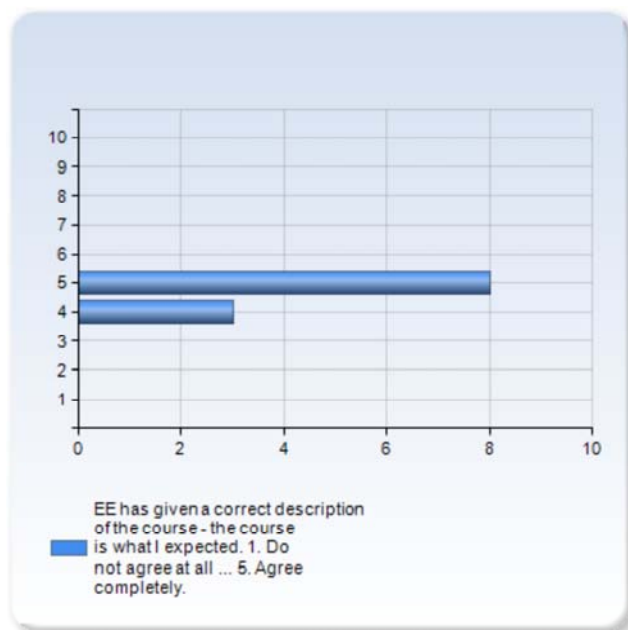
Maybe a preparation to programming (particularly Java) could be very useful for these projects.

Course was organized very well. Students were prepared to undertake the projects

I think that the reading materials given to us are too advanced. It is really hard for us to understand them. Is it possible to give us more 'balance' materials? By balance, I mean the material is very useful and is explained in an easy way to understand.

EE has given a correct description of the course - the course is what I expected. 1. Do not agree at all ... 5. Agree completely.

EE has given a correct description of the course - the course is what I expected. 1. Do not agree at all ... 5. Agree completely.	Number of Responses	Cumulated Responses
1	0 (0.0%)	0 (0.0%)
2	0 (0.0%)	0 (0.0%)
3	0 (0.0%)	0 (0.0%)
4	3 (27.3%)	3 (27.3%)
5	8 (72.7%)	11 (100.0%)
6	0 (0.0%)	11 (100.0%)
7	0 (0.0%)	11 (100.0%)
8	0 (0.0%)	11 (100.0%)
9	0 (0.0%)	11 (100.0%)
10	0 (0.0%)	11 (100.0%)
Total	11 (100.0%)	11 (100.0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
EE has given a correct description of the course - the course is what I expected. 1. Do not agree at all ... 5. Agree completely.	4.7	0.5	9.9 %	4.0	4.5	5.0	5.0	5.0

#### Comment

It was more than what I expected but in a good way

I feel like I learned a lot after this course.

Is there anything that EE could do to better describe the course to potential students ?

Is there anything that EE could do to better describe the course to potential students ?

To early tell the students that you should only read the project course and no other at the same time.

It is good enough.

Put a demo video of the previous project along with the course description to show what they are getting into

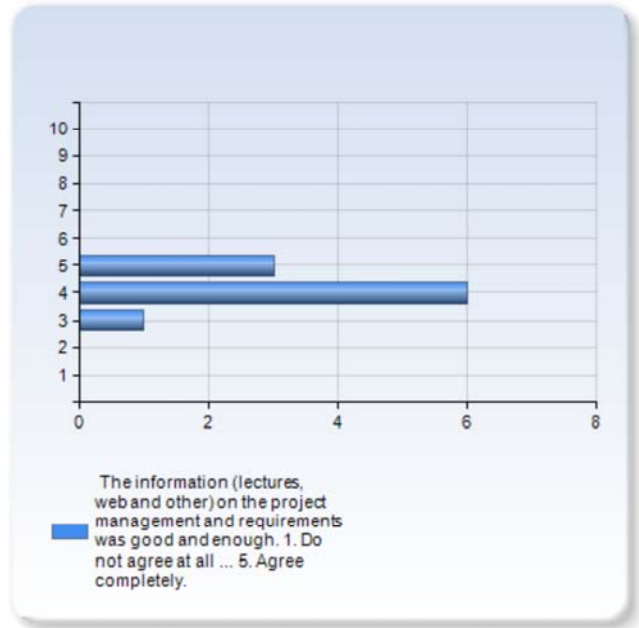
A demonstration of previous project before the course begins, so people can have a better view of the projects.

It was good already

I hope the duration of the course could be set a little longer so that we could finish the digital signature part of our project.

The information (lectures, web and other) on the project management and requirements was good and enough. 1. Do not agree at all ... 5. Agree completely.

The information (lectures, web and other) on the project management and requirements was good and enough. 1. Do not agree at all ... 5. Agree completely.	Number of Responses	Cumulated Responses
1	0 (0.0%)	0 (0.0%)
2	0 (0.0%)	0 (0.0%)
3	1 (10.0%)	1 (10.0%)
4	6 (60.0%)	7 (70.0%)
5	3 (30.0%)	10 (100.0%)
6	0 (0.0%)	10 (100.0%)
7	0 (0.0%)	10 (100.0%)
8	0 (0.0%)	10 (100.0%)
9	0 (0.0%)	10 (100.0%)
10	0 (0.0%)	10 (100.0%)
Total	10 (100.0%)	10 (100.0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
The information (lectures, web and other) on the project management and requirements was good and enough. 1. Do not agree at all ... 5. Agree completely.	4.2	0.6	15.1 %	3.0	4.0	4.0	4.5	5.0

#### Comment

It was good enough

The only problem we had is with the timeplan. I felt like our one was not very accurate.

More than the web, it was the testing and the meetings that helped us come up with solutions to problems

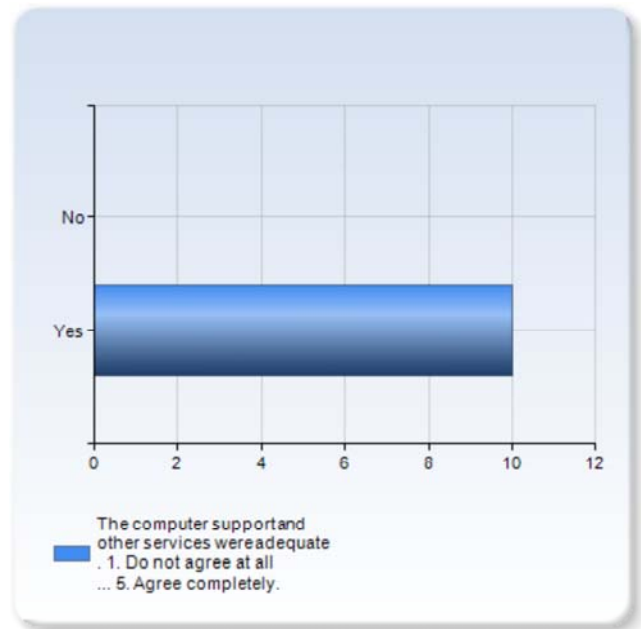
On the programming, a list of web link or little lectures about the difficult points in Java would have been good.

There was not much material regarding project management



The computer support and other services were adequate . 1. Do not agree at all ... 5. Agree completely.

The computer support and other services were adequate . 1. Do not agree at all ... 5. Agree completely.	Number of Responses	Cumulated Responses
Yes	10 (100.0%)	10 (100.0%)
No	0 (0.0%)	10 (100.0%)
Total	10 (100.0%)	10 (100.0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
The computer support and other services were adequate . 1. Do not agree at all ... 5. Agree completely.	1.0	0.0	0.0 %	1.0	1.0	1.0	1.0	1.0

#### Comment

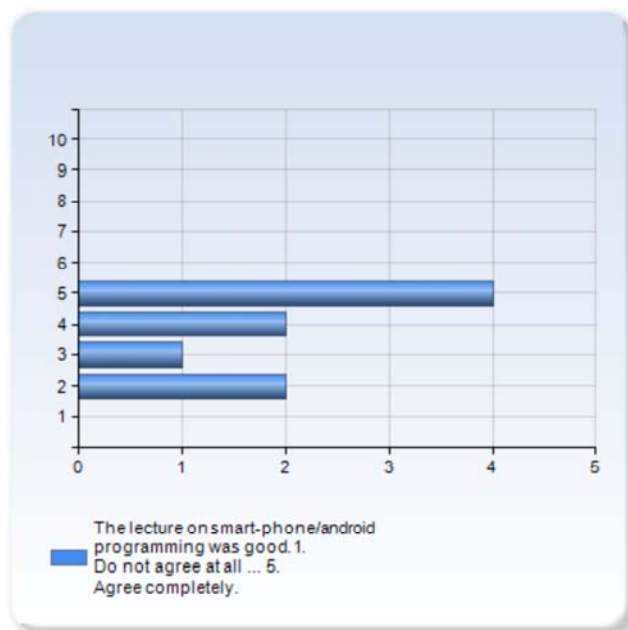
Just worked as expected

The facilities were amazing. The other facilities like microwave oven and coffee machine helped make the project that much easier. It was a really thoughtful and warm gesture from the professor

Just expect the last day of the project, all the MATLAB of our group were out of license. We really do not know why.

The lecture on smart-phone/android programming was good. 1. Do not agree at all ... 5. Agree completely.

The lecture on smart-phone/android programming was good. 1. Do not agree at all ... 5. Agree completely.	Number of Responses	Cumulated Responses
1	0 (0.0%)	0 (0.0%)
2	2 (22.2%)	2 (22.2%)
3	1 (11.1%)	3 (33.3%)
4	2 (22.2%)	5 (55.6%)
5	4 (44.4%)	9 (100.0%)
6	0 (0.0%)	9 (100.0%)
7	0 (0.0%)	9 (100.0%)
8	0 (0.0%)	9 (100.0%)
9	0 (0.0%)	9 (100.0%)
10	0 (0.0%)	9 (100.0%)
Total	9 (100.0%)	9 (100.0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
The lecture on smart-phone/android programming was good. 1. Do not agree at all ... 5. Agree completely.	3.9	1.3	32.6 %	2.0	3.0	4.0	5.0	5.0

#### Comment

HTC phone sometimes doesn't work well

I did not understand tht much and it went to fast

It is better if we can have more lecture about the android programming.

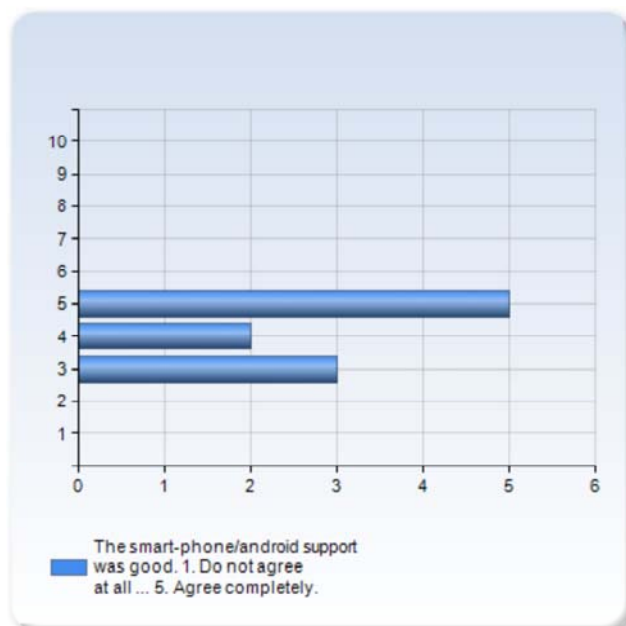
Didn't attended it.

It was really interesting

The student framework (and its lecture), were too full. We were losing time in computation. The think to do, in my opinion, it's to prepare more a list of tutorial to learn how to implement action or a list of prepared classes, to avoid to have too many think in an application which doesn't need all.

The smart-phone/android support was good. 1. Do not agree at all ... 5. Agree completely.

The smart-phone/android support was good. 1. Do not agree at all ... 5. Agree completely.	Number of Responses	Cumulated Responses
1	0 (0.0%)	0 (0.0%)
2	0 (0.0%)	0 (0.0%)
3	3 (30.0%)	3 (30.0%)
4	2 (20.0%)	5 (50.0%)
5	5 (50.0%)	10 (100.0%)
6	0 (0.0%)	10 (100.0%)
7	0 (0.0%)	10 (100.0%)
8	0 (0.0%)	10 (100.0%)
9	0 (0.0%)	10 (100.0%)
10	0 (0.0%)	10 (100.0%)
Total	10 (100.0%)	10 (100.0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
The smart-phone/android support was good. 1. Do not agree at all ... 5. Agree completely.	4.2	0.9	21.9 %	3.0	3.5	4.5	5.0	5.0

#### Comment

Bt we could figure it out in the end

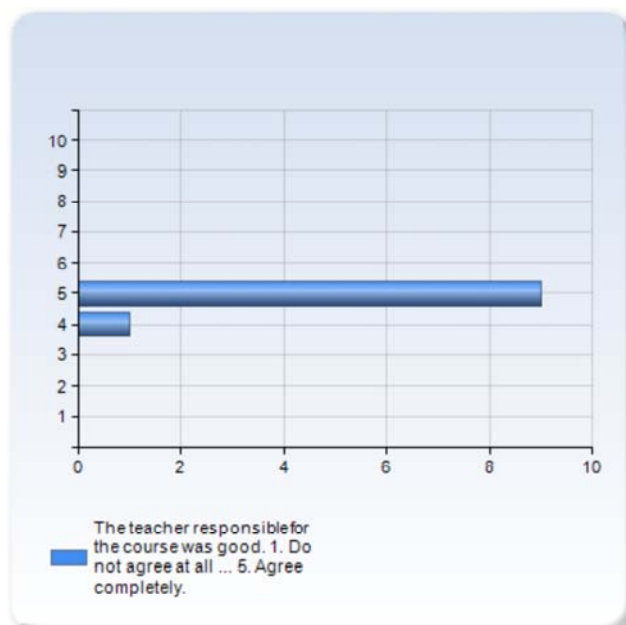
smartphone 5

android 2-3, often unclear

The framework did have some problems

The teacher responsible for the course was good. 1. Do not agree at all ... 5. Agree completely.

The teacher responsible for the course was good. 1. Do not agree at all ... 5. Agree completely.	Number of Responses	Cumulated Responses
1	0 (0.0%)	0 (0.0%)
2	0 (0.0%)	0 (0.0%)
3	0 (0.0%)	0 (0.0%)
4	1 (10.0%)	1 (10.0%)
5	9 (90.0%)	10 (100.0%)
6	0 (0.0%)	10 (100.0%)
7	0 (0.0%)	10 (100.0%)
8	0 (0.0%)	10 (100.0%)
9	0 (0.0%)	10 (100.0%)
10	0 (0.0%)	10 (100.0%)
Total	10 (100.0%)	10 (100.0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
The teacher responsible for the course was good. 1. Do not agree at all ... 5. Agree completely.	4.9	0.3	6.5 %	4.0	5.0	5.0	5.0	5.0

#### Comment

he felt interested in our work and good in responding to our questions

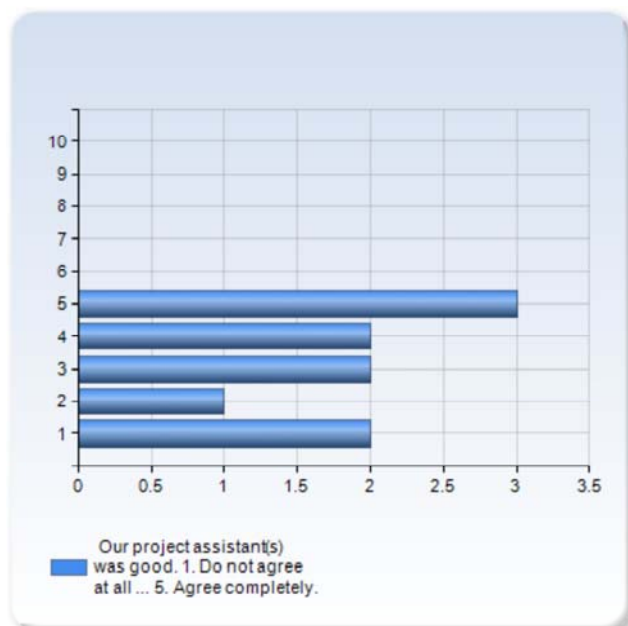
He was highly motivated.

A really nice person and thanks for offering this wonderful course

Per is really good. Always have patience to answer our questions and really gave us a lot of help.

Our project assistant(s) was good. 1. Do not agree at all ... 5. Agree completely.

Our project assistant(s) was good. 1. Do not agree at all ... 5. Agree completely.	Number of Responses	Cumulated Responses
1	2 (20.0%)	2 (20.0%)
2	1 (10.0%)	3 (30.0%)
3	2 (20.0%)	5 (50.0%)
4	2 (20.0%)	7 (70.0%)
5	3 (30.0%)	10 (100.0%)
6	0 (0.0%)	10 (100.0%)
7	0 (0.0%)	10 (100.0%)
8	0 (0.0%)	10 (100.0%)
9	0 (0.0%)	10 (100.0%)
10	0 (0.0%)	10 (100.0%)
Total	10 (100.0%)	10 (100.0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
Our project assistant(s) was good. 1. Do not agree at all ... 5. Agree completely.	3.3	1.6	47.5 %	1.0	2.5	3.5	4.5	5.0

#### Comment

He could not help us at all unfortunately, he was only with us for the progress meetings

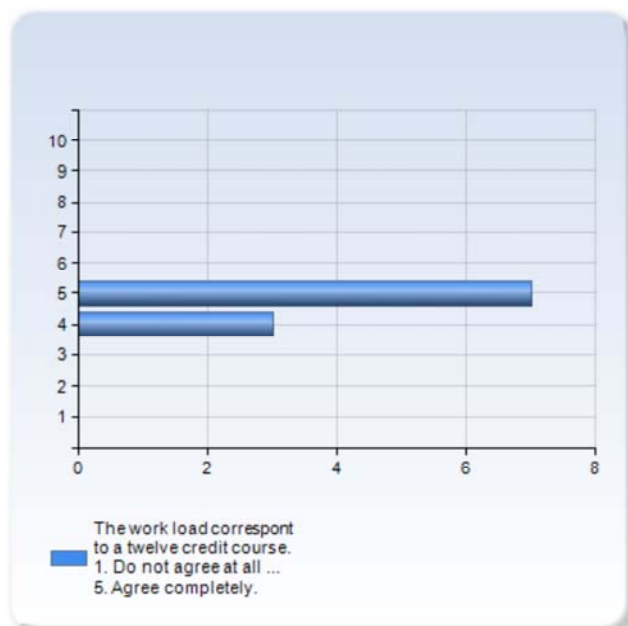
Unfortunately, our assistant didn't have any experience in this field, therefore he was not able to help us.

Next time I think there should be a more skillful assistant helping students. I mean the assistant at least should know more about the project than students, otherwise he cannot help.

The discussions with him were really good and helpful to solve some of the problems

The work load correspond to a twelve credit course. 1. Do not agree at all ... 5. Agree completely.

The work load correspond to a twelve credit course. 1. Do not agree at all ... 5. Agree completely.	Number of Responses	Cumulated Responses
1	0 (0.0%)	0 (0.0%)
2	0 (0.0%)	0 (0.0%)
3	0 (0.0%)	0 (0.0%)
4	3 (30.0%)	3 (30.0%)
5	7 (70.0%)	10 (100.0%)
6	0 (0.0%)	10 (100.0%)
7	0 (0.0%)	10 (100.0%)
8	0 (0.0%)	10 (100.0%)
9	0 (0.0%)	10 (100.0%)
10	0 (0.0%)	10 (100.0%)
Total	10 (100.0%)	10 (100.0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
The work load correspond to a twelve credit course. 1. Do not agree at all ... 5. Agree completely.	4.7	0.5	10.3 %	4.0	4.5	5.0	5.0	5.0

#### Comment

We almost come to lab very day except weekend, it is really worth twelve credit.

It is hard to say something about the work load in a project. I wanted to see the app running and add more things and play around, so I spent more hours than corresponding to 12 points.

It was challenging and interesting and worth the credits.

Yes. I learned quite a lot during the course and I felt like I have never taken a more interesting course than this one. I felt really excited moment when we got the distances printed on the screen as well as the position. I was really happy.

What was the best aspect of the course ?

What was the best aspect of the course ?
The professor is pretty good.
the interesting projects
Seeing the final demonstration.
We can really learn much useful knowledge, and the team work of the international students is really nice.
The running application at the end. To have a real outcome :)
The finale where everything just came out good and see the fruitful moments of 2 months work. Per was really good enough to treat us making the day all the more memorable and the external people appreciating the work was really satisfying.
Discover the result of our work when it finally worked. And see the interest of others people.
Steep learning curve
I could apply what I have learn on the textbook in to real use. For example, I could see the multi-path components on the plot of recording, which was just a concept from Wireless Communication for me before. And I could use a lot of knowledge I learn from Sensor Networks to do the trilateration which makes me feel a little proud of myself. I was really happy for that.

Is there something that has not functioned well or should be changed/removed from the course?

Is there something that has not functioned well or should be changed/removed from the course?
diary for the last week, there is not too much thing special to write.
the assistant maybe, his knowledge from the beginning
The framework can be improved
There is always something which need to be improved in a project but i don't see anything to remove
Excellent course

What is your experience from working in a project group ?

What is your experience from working in a project group ?
help each other, do different task. When one of us meet a stuck, others will come to think about a new idea. We are a group not several individual combination.
A lot of fun. I thought that I did a great job as the leader to prepare every meeting and structure the work
Well, I would say that sometimes it can be tougher than what I expected. You have to trust the others, and help them if they have problems.
We do what we are good at, then this team can be well organized and operate well.
Cool but some things could be changed or I would try to change in the next project work.
The group was really good. It was arranged in such a way that it was strong in all the areas. Some maybe good at java, some in matlab and blending all of these work together really taught us the power of team planning and organization
Really great
It was perfect experience with an opportunity to coordinate and learn from each other work/experiences
I know what I should do in a team work. Know how to cooperate with other group mates.

When did you hear about the course ? Why did you choose it?

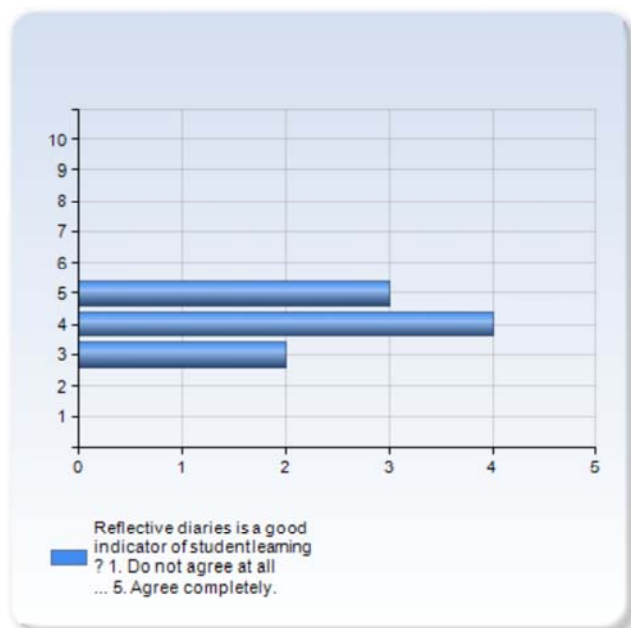
When did you hear about the course ? Why did you choose it?
The credit is high and I want to apply what I learn to do something
It was a mandatory course for my education
Actually I read about it on the web. I have chosen it because it was a chance to do something more practical.
It is an obligatory course for my program.
last term. I am interested in it.
Sounds interesting. Found it on the web/kth side.
It sounded interesting and in par with my interests. I heard it from the Electrical Engineering course website
I heard about the course during the first semester. I choose it because I wanted to make a project to apply what I learn before.
I heard about the course in last study period. The course inspired great learning outcome
I knew the course from Study Plan as well as some communication between some other students.
Honestly, at first I chose it because I have chosen the track of Information Processing and Transmission in my Master Program and this course is a compulsory. But after taking the course, especially after finishing the course, I felt I really learn a lot. I strongly agree that all your effort will be repaid.

Do you think smart-phones are a good platform for student projects?

Do you think smart-phones are a good platform for student projects?
Yes Nowadays more smart-phones are used. The application we will use in future should be more suitable to smart-phones.
it was fun yes
Yes, I think you can do a lot of interesting stuff with that.
yes, of course, since more and more apps are used based on smart-phones.
Yes, as everybody has one and see a use in developing for this device.
Ya, it is an excellent platform. It has so many applications and is such a vast field
Perfect, more and more system are based on the systems of applications (smart-phone, tablet) so it is really good to have an experience in it. In addition, Java is a good platform to begin because really easy to integrate for beginners.
Absolutely
Yes, it is really common these days and very close to our life

Reflective diaries is a good indicator of student learning ? 1. Do not agree at all ... 5. Agree completely.

Reflective diaries is a good indicator of student learning ? 1. Do not agree at all ... 5. Agree completely.	Number of Responses	Cumulated Responses
1	0 (0.0%)	0 (0.0%)
2	0 (0.0%)	0 (0.0%)
3	2 (22.2%)	2 (22.2%)
4	4 (44.4%)	6 (66.7%)
5	3 (33.3%)	9 (100.0%)
6	0 (0.0%)	9 (100.0%)
7	0 (0.0%)	9 (100.0%)
8	0 (0.0%)	9 (100.0%)
9	0 (0.0%)	9 (100.0%)
10	0 (0.0%)	9 (100.0%)
Total	9 (100.0%)	9 (100.0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
Reflective diaries is a good indicator of student learning ? 1. Do not agree at all ... 5. Agree completely.	4.1	0.8	19.0 %	3.0	4.0	4.0	5.0	5.0

#### Comment

Sometimes you just wrote because you had to...

Yes.

I'm not sure. You could write nearly everything in it?!

There was no feedback on the diaries, that is bad and somehow my experience in Sweden. You always have to hand in something to a Black Hole. Nothing comes back.

So the student learns nothing by handing it in as nobody reply and show off the mistakes errors or ways to enhance the way of working.

It helped us evaluate ourselves and even to make sure that you complete your task and keep up with the next tasks. It clearly indicated individual work flow

It is very useful especially the part of what you are going to do next week, which makes my work more oriental.

#### Any other comments?

Any other comments?

Thanks for the teacher!

Exciting and challenging course

It was an excellent course having great learning opportunities

I could like to thanks Per again and thanks my group mates. I feel like a learn millions of stuff during this two-month study. I am sorry that we do not have time to implement the digital signature part. If possible, I hope someday, I could keep working on this one. Since I like my project so much and I really want it to be perfect.