Høgskulen
på Vestlandet

Visualizing smart charging of electric vehicles for support personnel

Project Handbook

Version 1.3

REVISION HISTORY

Date	Version	Description	Author
01/FEB/22	1.0	First iteration. Added Gantt-diagram.	Mads Henrik Sørbø Kristin Standal
01/MAR/22	1.1	Updated hours.	Mads Henrik Sørbø
19/APR/22	1.2	Updated Gantt, hours, status reports.	Mads Henrik Sørbø
22/APR/22	1.2	Updated status reports.	Mads Henrik Sørbø
20/MAY/22	1.3	Finishing the document before hand-in.	Mads Henrik Sørbø Kristin Standal Roger Karlsen
21/MAY/22	1.3	Added the last timesheets and the estimates for the next two weeks.	Kristin Standal

TABLE OF CONTENTS

1 Progress Plan – Gantt-diagram

ACTIVITY	START WEEK	DURATION	ASSIGNED	PERCENT COMPLETE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Initiation meeting	1	1	KS, MS, RK	100%	■																						
Technical Setup	1	2	KS, MS, RK	100%	■	■																					
OA-6 Rapport 1st Iteration	2	3	KS, MS, RK	100%		■	■	■																			
SC-1 Overview Skeleton	2	3	MS, RK	100%		■	■	■																			
SC-2 Configuration	5	3	RK, KS	100%					■	■	■																
SC-3 Configuration Checks	5	3	MS	100%					■	■	■																
OA-8 Analyse av tidlegare oppgåver	5	2	KS, MS, RK	100%					■	■																	
OA-8.2 Rapport 2nd Iteration	5	3	MS, RK	100%					■	■	■																
SC-3.1 Create Tab for Schedules	8	3	KS, MS, RK	100%								■	■	■													
OA-10 Forprosjektrapport	8	3	KS, MS, RK	100%								■	■	■													
SC-4 List Scheduler Event	9	3	POSTPONED	0%									▧	▧	▧												
SC-5 Visualize Charging Schedule	10	3	RK	100%										■	■	■											
SC-6 Filter Scheduler Event	12	4	POSTPONED	0%												▧	▧	▧	▧								
OA-12 Project Status, Rapport 3rd It.	12	5	KS, MS, RK	100%												■	■	■	■	■							
OA-13.1 Bachelor 1st Draft	14	3	KS, MS, RK	100%														■	■	■							
SC-7 Show Price Graph	15	2	MS	100%															■	■							
SC-10 Add Calculator	17	2	MS, RK	100%																	■	■					
OA-13.2 Bachelor 2nd Draft	17	2	KS, MS, RK	20%																	■	■					
SC-12 Statistics View	18	2	MS, RK	100%																		■	■				
OA-14 Bachelor Final	19	2	KS, MS, RK	100%																			■	■			
OA-15 Reflection Note	19	2	KS, MS, RK	50%																			■	▧			
OA-16 EXPO Poster	19	2	KS, MS, RK	50%																			■	▧			
OA-17 Bachelor Presentation	22	2	KS, MS, RK	0%																						▧	▧

2 Risk Analysis

Risk	Cause	Probability	Consequence	Risk product	Mitigation
Application fails to meet requirements	Misunderstanding of requirements. Unable to code required features.	Low (2)	Very high (5)	10	Iterative development cycle (agile) where work is presented often.
Inaccurate estimations	Unfamiliarity with "proper" software development with a clear goal. Under or over-estimations might occur which can skew timeframes and deadlines.	Medium (3)	Medium (3)	9	Adjust the Gantt-diagram as necessary.
Change of scope	Change of scope, be it from going in a different direction than thought, both from the developers' side or from a directive of the stakeholders.	Very low (1)	High (4)	4	Adhere as closely as possible to the original goals set.
Failing to meet stakeholder expectations	Skills / knowledge in the tools not up the standard expected of the students.	High (4)	High (4)	16	Crash courses on Udemy or ask for help.
Low quality of code	No uniformity or previous experience in working on a big project together. Code might suffer as a consequence.	Medium (3)	High (4)	12	Review pull-requests together and comment on bad code / improvements.
Low productivity	Being stuck in a task and uncertain on how to proceed, and the more time passes the more anxious one gets, leading to a vicious circle. Low interest in the project.	Medium (3)	Very high (5)	15	Open and honest communication between students. Reserve judgment.
Lack of ownership	No one takes responsibility ensuring that deadlines and milestones are met and celebrated.	Very high (4)	Medium (3)	12	Assign tasks to individual students in the Gantt-diagram and follow up each other.
Getting Corona	Pandemic.	High (4)	Very high (5)	20	Follow guidelines from FHI.

Update 22/FEB/22

Project has had a steady flow of work being done and none of the risks listed above has been a hindrance.

Update 03/MAY/22

All students have had Corona at some point during this project. But it posed no risk for the project as the application was worked on.

3   Meeting invitations and meeting reports

Invitation: Start Up Meeting

Time/Place: Tuesday 18 Jan 2022 11:00 - 11:30,

Google Meet: meet.google.com/cdd-rzoj-ozp

The following persons are invited:

Kristin Standal

Mads Henrik Sørbø

Roger Karlsen

Volker Stolz

Marcus Almgren

Agenda:

Case 01: Workplace and equipment

Case 02: Contact Info

Case 03: Ownership of the results

Case 04: Meeting frequency

Case 05: Other

Please contact undersigned if you cannot make the proposed time.

Regards,

Mads Henrik Sørbø   Førde, 12 Jan 2022

Summary of Start Up Meeting
Date and time: 18 Jan, 11:00 - 11:30
Place: Google Meet
Present: Mads Henrik Sørbø, Marcus Almgren, Volker Stolz
Not present: Kristin Standal, Roger Karlsen

Case 01.

Mads informed that the students have received equipment from Tibber to use for the project. That they have gotten assigned places at the Tibber office in Førde, should they have the need to go to the physical office, as they're currently working from home with the current restrictions. Marcus reiterated later in the meeting that the students should never feel pressured or feel obligated to go into the office. It was also noted that the students are onboarded as regular employees.

Case 02.

Volker and Marcus confirmed they have each other's contact information.

Case 03.

Clear consensus that the end result is owned by Tibber. There were talks about the possibility of putting the code in "quarantine" (I am not sure if it's a program / app or something else) should the need to keep some of the code a secret. Marcus will follow up as we go if there's anything in the code / visualization that needs to be omitted in the report to preserve company secrets.

Case 04.

Marcus informed that he and the students had a start-up meeting in the beginning of January, and a scheduled follow up meeting Friday the 21st of January with the purpose of checking that all students are up and running on the technical side. Marcus will schedule a meeting roughly every two weeks going forward. Volker and the students will schedule a meeting within the next ten days, where all students need to be present.

Case 05.

Both Volker and Marcus stress the importance of the report. Marcus underlines that Tibber as a company is not just after a result, they want the students to succeed. Marcus will follow the students up on progress on the report in every follow up meeting. To make sure the students are iterating on it and not having the report as an afterthought.

Volker mentioned that if the students found it a hassle having a remote supervisor that there are possibilities of getting another supervisor. Mads assured that there's no problem in having a remote supervisor but will hear with the other students if they have an issue with it.

18 Jan 2022, Mads Henrik Sørbø

Invitation: Meeting with HVL Supervisor

Time/Place: Thursday 27 Jan 2022 10:30 - 11:00, Google Meet.

The following persons are invited:
Kristin Standal
Mads Henrik Sørbø
Roger Karlsen
Volker Stolz

Agenda:
Case 01: Necessary equipment/workplace from HVL
Case 02: Review of Start Up Meeting
Case 03: Confidentiality
Case 04: Meeting frequency
Case 05: "Rettleiingsavtale"
Case 06: Other

Please contact undersigned if you cannot make the proposed time.

Regards,
Mads Henrik Sørbø   Førde, 18 Jan 2022

Summary of meeting with HVL Supervisor
Date and time: Thursday 27 Jan, 10:30 - 11:00
Place: Google Meet
Present: Mads Henrik Sørbø, Roger Karlsen, Kristin Standal, Volker Stolz

Case 01

The participants quickly concluded that HVL does not need to supply the students with anything, neither equipment nor a place to work. Tibber is very accommodating and has supplied everything the students should need.

Case 02

The participants quickly review the meeting between the supervisor and Tibber. There wasn't much to be said as the students are currently on the ball.

Case 03

Marcus Almgren is following up any needs of confidentiality from Tibber's side. The students have also not signed any NDAs or document that prohibits the students from working at a competing company following the bachelor project.

Case 04

The supervisor and students will meet every other Thursday at 10:30 am. Volker will give notice if he is unable to attend. Mads will set up recurring meetings and try another video service than Google Meet.

Case 05

Volker and the students reviewed the written agreement proposal between the students and supervisor. The students will read through, sign off on it and send it to Volker last on e-mail for signing.

Case 06: Other

Volker noted that he is more than happy to review documents related to the report given an advance of two days. He underlined that he'd still help on short notice, but feedback might not be as thorough as when he would have had the time to prepare.

It was discussed that the deadlines set in Canvas are more guidelines for what the students should have accomplished at any given time. There is some leniency regarding the deadlines, but the students should try to uphold them.

The Gantt-diagram was also discussed. The students showed off what they currently have in their Gantt-diagram, and it mostly consists of tasks related to the obligatory assignments. It was agreed upon that the students should focus more on the tasks that are needed to finish the project / assignment from Tibber, and not so much the tasks related to the obligatory assignments. However, they should also be added.

27 Jan 2022, Mads Henrik Sørbø

OA-7 Status Meeting
Date and time: Thursday 11 Feb, 10:30 - 11:45
Place: Microsoft Teams
Present: Kristin Standal, Mads Henrik Sørbø, Roger Karlsen, Volker Stolz

Time was mostly spent on going through the vision document. Volker informed that the product overview should not have a literal sketch of the product i.e., wireframes, but more of a descriptive outline of how the application will work. The students should expand on how customer support interacts with the customer, with what tools they are currently using, is it a call center, and how many support personnel will be using the system the students are developing. Maybe create a use case diagram showing customer support interaction. The product overview should probably not be longer than two pages including diagrams and descriptive texts. Expand with information about where computation happens - client side, cloud, or backend.

Regarding prerequisites and dependencies, the students should expand on what Varys is, what can it currently do and how it is built up. This can also be put under the product overview section.

Regarding the "alternatives of our products" section, Volker said that even though we are making a view in a custom-built tool there are still alternatives. For example, for visualization of charts, there are other services that provide this, expand on what they do and what we will do. This section does not have to be long, maybe a 5-line paragraph.

Under user's requirements, maybe expand a bit on the algorithms that are going to be used. Since the columns "affects" and "product" are the same for every point in the table, remove them and write a one sentence before the table is presented explaining this.

Volker would like to see an updated version of the Gantt-chart, where we have more of the development in focus, and not so much the different parts of the obligatory assignments. Other than those points Volker made direct comments in the vision document that the students should consider before submitting for the next obligatory assignment.

11 Feb 2022, Mads Henrik Sørbø

OA-9 Status Meeting
Date and time: Tuesday 8 March, 10:30 - 11:45
Place: Microsoft Teams
Present: Mads Henrik Sørbø, Roger Karlsen, Volker Stolz

Time was spent mostly going through the first iteration of the project rapport and getting feedback from Volker. Feedback was added as comments on the working document for the rapport.

9 Mar 2022, Mads Henrik Sørbø

Final Status Meeting
Date and time: Tuesday 16 May, 10:00 - 12:00
Place: Microsoft Teams
Present: Mads Henrik Sørbø, Roger Karlsen, Kristin Standal, Volker Stolz

Spent time going through the main report. Volker discussed what changes should be made to the main report. Especially highlighting the evaluation section and the solution section. Comments to be resolved were added to the main document. It was agreed upon sending a new draft of the main report on Thursday 19th of May for additional feedback from Volker.

16 May 2022, Mads Henrik Sørbø

4 Timesheet with status reports

Week 1

Activity	Mads	Roger	Kristin	Weekly sum for activity
Onboarding	4	4	4	12
Meetings	2	2	2	6
Weekly sum for person	6	6	6	
Hours accumulated so far	6	6	6	

Week 2

Activity	Mads	Roger	Kristin	Weekly sum for activity
Onboarding	1	1	1	3
Assessing	5	5	4	14
Lectures	4	4	4	12
Weekly sum for person	10	10	9	
Hours accumulated so far	16	16	15	

Week 3

Activity	Mads	Roger	Kristin	Weekly sum for activity
Lectures	4	4	4	12
Meetings	2	2	2	6
Gantt-planning	3	3	4	10
Project handbook	3	3	3	9
Vision document	3	3	3	9
Weekly sum for person	15	15	16	
Hours accumulated so far	31	31	31	

Week 4

Activity	Mads	Roger	Kristin	Weekly sum for activity
Onboarding	4	4	4	12
Lectures	4	4	4	12
Meetings	2	2	2	6
Development /Coding	4	4	0	8
Gantt-planning	3	3	4	10
Project handbook	6	6	0	12
Vision document	6	6	4	16
Weekly sum for person	29	29	18	
Hours accumulated so far	60	60	49	

Student	Mads	Student	Kristin	Student	Roger
Task worked on this week	Project handbook, vision document	Task worked on this week	Gantt diagram	Task worked on this week	Coding, project handbook, vision document
Project status		Project status		Project status	
Result		Result		Result	
Time		Time		Time	
Economy		Economy		Economy	
Cooperation		Cooperation		Cooperation	
Problem(s)		Problem(s)	COVID	Problem(s)	
Measure(s)		Measure(s)	Blankets	Measure(s)	
Tasks for next week	Learning about Tibbers architecture	Tasks for next week		Tasks for next week	Coding

Week 5

Activity	Mads	Roger	Kristin	Weekly sum for activity
Lectures	2	2	2	6
Development /Coding		4		4
Gantt-planning		1	1	2
Project handbook		1	1	2
Vision document			3	3
SC-2 Highlights			2	2
SC-3 Configuration	20	20		40
Udemy Course	6		6	12
Weekly sum for person	28	28	15	
Hours accumulated so far	88	88	64	

Student	Mads	Student	Kristin	Student	Roger
Task worked on this week	Learning about Vue	**Task worked on this week**	Vue Components	**Task worked on this week**	Learning about Vue
Project status		Project status		Project status	
Result		Result		Result	
Time		Time		Time	
Economy		Economy		Economy	
Cooperation		Cooperation		Cooperation	
Problem(s)		Problem(s)	COVID	Problem(s)	
Measure(s)		Measure(s)	Blankets	Measure(s)	
Tasks for next week	Learning about microservices	**Tasks for next week**	Learning about microservices	**Tasks for next week**	Learning about microservices

Week 6

Activity	Mads	Roger	Kristin	Weekly sum for activity
Project handbook	2	1	4	7
Vision document	3	2	2	7
SC-2 Highlights			8	8
SC-3 Configuration	20	16		36
SC-1 Overviews		2		2
SC-2 Show Config		8		8
Meetings	5	5	5	15
Udemy Course	2		4	6
Weekly sum for person	32	34	23	
Hours accumulated so far	120	122	87	

Student	Mads	Student	Kristin	Student	Roger
Task worked on this week	Vue Components	Task worked on this week	Analyze prev. bachelor-reports	Task worked on this week	Fetching data to populate tables
Project status		Project status		Project status	
Result		Result		Result	
Time		Time		Time	
Economy		Economy		Economy	
Cooperation		Cooperation		Cooperation	
Problem(s)		Problem(s)		Problem(s)	
Measure(s)		Measure(s)		Measure(s)	
Tasks for next week	Coding	Tasks for next week	Coding, Project Handbook	Tasks for next week	Coding

Week 7

Activity	Mads	Roger	Kristin	Weekly sum for activity
Project handbook			2	2
SC-3 Configuration	15	14		29
SC-2 Show Config	5	3		8
OA-8 Analyze prev. reports	8	8	10	26
Requirement document			5	5
Lectures	4	4	4	12
Meetings	3	3	3	9
Weekly sum for person	35	32	24	
Hours accumulated so far	155	154	111	

Student	Mads	Student	Kristin	Student	Roger
Task worked on this week	Vue Components	Task worked on this week	Vue Components	Task worked on this week	Fetching data to populate tables
Project status		Project status		Project status	
Result		Result		Result	
Time		Time		Time	
Economy		Economy		Economy	
Cooperation		Cooperation		Cooperation	
Problem(s)		Problem(s)		Problem(s)	
Measure(s)		Measure(s)		Measure(s)	
Tasks for next week	1st draft of report	Tasks for next week	1st draft of report	Tasks for next week	1st draft of report

Week 8

Activity	Mads	Roger	Kristin	Weekly sum for activity
Developing / Coding	18	18	10	46
Meetings	3	3	3	9
Writing main report	2	2	6	10
Weekly sum for person	23	23	19	
Hours accumulated so far	178	177	130	

Student	Mads	Student	Kristin	Student	Roger
Task worked on this week	Alert component, report	Task worked on this week	1st draft of report	Task worked on this week	Cars table
Project status		Project status		Project status	
Result		Result		Result	
Time		Time		Time	
Economy		Economy		Economy	
Cooperation		Cooperation		Cooperation	
Problem(s)		Problem(s)		Problem(s)	
Measure(s)		Measure(s)		Measure(s)	
Tasks for next week	Continue coding	Tasks for next week	Continue coding	Tasks for next week	Continue coding

Week 9

Activity	Mads	Roger	Kristin	Weekly sum for activity
Developing / Coding		12	4	16
Meetings		3	3	6
Writing main report		4	6	10
OA-10 1st draft hand-in		5	8	13
Weekly sum for person	0	24	21	
Hours accumulated so far	178	201	151	

Student	Mads	Student	Kristin	Student	Roger
Task worked on this week		**Task worked on this week**	Highlights	**Task worked on this week**	Online cars
Project status		Project status		Project status	
Result		Result		Result	
Time		Time		Time	
Economy		Economy		Economy	
Cooperation		Cooperation		Cooperation	
Problem(s)	COVID	Problem(s)		Problem(s)	
Measure(s)		Measure(s)		Measure(s)	
Tasks for next week		**Tasks for next week**	Continue with highlights	**Tasks for next week**	Coding

Week 10

Activity	Mads	Roger	Kristin	Weekly sum for activity
Developing / Coding		17	3	20
Meetings		3	3	6
Writing main report		4	6	10
Udemy course		4	2	6
Weekly sum for person	0	28	14	
Hours accumulated so far	178	229	165	

Student	Mads	Student	Kristin	Student	Roger
Task worked on this week		**Task worked on this week**	Highlights	**Task worked on this week**	Online cars
Project status		Project status		Project status	
Result		Result		Result	
Time		Time		Time	
Economy		Economy		Economy	
Cooperation		Cooperation		Cooperation	
Problem(s)	COVID	Problem(s)		Problem(s)	
Measure(s)		Measure(s)		Measure(s)	
Tasks for next week	Coding	**Tasks for next week**		**Tasks for next week**	Coding

Week 11

Activity	Mads	Roger	Kristin	Weekly sum for activity
Developing / Coding	18	18	4	40
Meetings	3	3	3	9
Writing main report	4	4	8	16
Udemy course	4	4	2	10
Weekly sum for person	29	29	17	
Hours accumulated so far	207	258	182	

Student	Mads	Student	Kristin	Student	Roger
Task worked on this week	Alerts	Task worked on this week	Report writing	Task worked on this week	Offline cars
Project status		Project status		Project status	
Result		Result		Result	
Time		Time		Time	
Economy		Economy		Economy	
Cooperation		Cooperation		Cooperation	
Problem(s)		Problem(s)		Problem(s)	
Measure(s)		Measure(s)		Measure(s)	
Tasks for next week	Coding	Tasks for next week		Tasks for next week	Coding

Week 12

Activity	Mads	Roger	Kristin	Weekly sum for activity
Developing / Coding	18	18	2	38
Meetings	3	3	3	9
Writing main report	4	4	8	16
Udemy course	4	4	6	14
Weekly sum for person	29	29	19	
Hours accumulated so far	236	287	201	

Student	Mads	Student	Kristin	Student	Roger
Task worked on this week	Alerts	Task worked on this week	3rd draft of report	Task worked on this week	Offline cars, battery calculator
Project status		Project status		Project status	
Result		Result		Result	
Time		Time		Time	
Economy		Economy		Economy	
Cooperation		Cooperation		Cooperation	
Problem(s)		Problem(s)		Problem(s)	
Measure(s)		Measure(s)		Measure(s)	
Tasks for next week	Coding	Tasks for next week	Writing	Tasks for next week	Coding

Week 13

Activity	Mads	Roger	Kristin	Weekly sum for activity
Meetings	2	2	2	6
Writing main report	4	4	8	16
Udemy course	4	4	4	12
SC-2 Highlights	4	4	2	10
Implement UI updates	9	5		14
Code refactoring, quick fixes	8	12		20
Weekly sum for person	31	31	16	
Hours accumulated so far	267	318	217	

Student	Mads	Student	Kristin	Student	Roger
Task worked on this week	Alerts	Task worked on this week		Task worked on this week	
Project status		Project status		Project status	
Result		Result		Result	
Time		Time		Time	
Economy		Economy		Economy	
Cooperation		Cooperation		Cooperation	
Problem(s)		Problem(s)		Problem(s)	COVID
Measure(s)		Measure(s)		Measure(s)	Blankets
Tasks for next week	Coding	Tasks for next week	Coding	Tasks for next week	Coding

Week 14

Activity	Mads	Roger	Kristin	Weekly sum for activity
Meetings	3	3	3	9
Writing main report	4	4	5	13
Udemy course	4	4	6	14
Implement Charging Calc.	2	13		15
Implement Alerts update	8	1	1	10
Code refactoring, quick fixes	6	2	2	10
Weekly sum for person	27	27	17	
Hours accumulated so far	294	345	234	

Student	Mads	Student	Kristin	Student	Roger
Task worked on this week	Alerts	Task worked on this week		Task worked on this week	
Project status		Project status		Project status	
Result		Result		Result	
Time		Time		Time	
Economy		Economy		Economy	
Cooperation		Cooperation		Cooperation	
Problem(s)		Problem(s)		Problem(s)	COVID
Measure(s)		Measure(s)		Measure(s)	Blankets
Tasks for next week	Coding	Tasks for next week	Coding	Tasks for next week	Coding

Week 15 (Easter Holidays)

Activity	Mads	Roger	Kristin	Weekly sum for activity
Meetings	2	2	2	6
Writing main report	4	4	8	16
Udemy course	6	6	4	16
Prepare for release	4	2	4	10
Weekly sum for person	16	14	18	
Hours accumulated so far	310	359	252	

Student	Mads	Student	Kristin	Student	Roger
Task worked on this week	Report	Task worked on this week		Task worked on this week	Getting healthy
Project status		Project status		Project status	
Result		Result		Result	
Time		Time		Time	
Economy		Economy		Economy	
Cooperation		Cooperation		Cooperation	
Problem(s)		Problem(s)		Problem(s)	COVID
Measure(s)		Measure(s)		Measure(s)	Blankets
Tasks for next week	Coding	Tasks for next week	Coding	Tasks for next week	Coding

Week 16

Activity	Mads	Roger	Kristin	Weekly sum for activity
Meetings	2	2	2	6
Writing main report	8	4	10	22
Project handbook	2	1	3	6
Bug reporting	3	3	3	9
Feature requests	3	10		13
Weekly sum for person	18	20	18	
Hours accumulated so far	328	379	270	

Student	Mads	Student	Kristin	Student	Roger
Task worked on this week	Report, Release	Task worked on this week	Release	Task worked on this week	Getting healthy
Project status		Project status		Project status	
Result		Result		Result	
Time		Time		Time	
Economy		Economy		Economy	
Cooperation		Cooperation		Cooperation	
Problem(s)		Problem(s)		Problem(s)	
Measure(s)		Measure(s)		Measure(s)	
Tasks for next week	Report and follow up on bugs	Tasks for next week	Follow up on bugs.	Tasks for next week	Report and follow up on bugs

Week 17

Activity	Mads	Roger	Kristin	Weekly sum for activity
Meetings	4	4	4	12
Writing main report	12	12	12	36
Project handbook	2	1	3	6
Code fixes	4	2	4	10
Weekly sum for person	22	19	23	
Hours accumulated so far	350	398	293	

Student	Mads	Student	Kristin	Student	Roger
Task worked on this week	Report	Task worked on this week	Project handbook, meeting	Task worked on this week	Metadata stats
Project status		Project status		Project status	
Result		Result		Result	
Time		Time		Time	
Economy		Economy		Economy	
Cooperation		Cooperation		Cooperation	
Problem(s)		Problem(s)		Problem(s)	
Measure(s)		Measure(s)		Measure(s)	
Tasks for next week	Coding	Tasks for next week	Writing report	Tasks for next week	Coding

Week 18

Activity	Mads	Roger	Kristin	Weekly sum for activity
Meetings	2	2	2	6
Writing main report	12	13	14	39
Weekly sum for person	14	15	16	
Hours accumulated so far	364	413	309	

Student	Mads	Student	Kristin	Student	Roger
Task worked on this week	Report	Task worked on this week	Ch. 3 on report	Task worked on this week	
Project status		Project status		Project status	
Result		Result		Result	
Time		Time		Time	
Economy		Economy		Economy	
Cooperation		Cooperation		Cooperation	
Problem(s)		Problem(s)		Problem(s)	
Measure(s)		Measure(s)		Measure(s)	
Tasks for next week	Report	Tasks for next week	Continue on report	Tasks for next week	Writing report

Week 19

Activity	Mads	Roger	Kristin	Weekly sum for activity
Meetings	2	2	1	5
Writing main report	10	5	10	25
System documentation	2	5		7
Weekly sum for person	14	12	11	
Hours accumulated so far	378	425	320	

Student	Mads	Student	Kristin	Student	Roger
Task worked on this week		Task worked on this week	Ch. 3 on report	Task worked on this week	System Documentation
Project status		Project status		Project status	
Result		Result		Result	
Time		Time		Time	
Economy		Economy		Economy	
Cooperation		Cooperation		Cooperation	
Problem(s)		Problem(s)	Illness	Problem(s)	
Measure(s)		Measure(s)		Measure(s)	
Tasks for next week	Writing	Tasks for next week	Writing	Tasks for next week	Writing

Week 20

Activity	Mads	Roger	Kristin	Weekly sum for activity
Meetings	2	2	1	5
Writing main report	20	10	25	55
System documentation	5	15		20
Weekly sum for person	27	27	26	
Hours accumulated so far	405	452	346	

Student	Mads	Student	Kristin	Student	Roger
Task worked on this week	Finalize Report	Task worked on this week	Finalize Report and Project Handbook	Task worked on this week	System Documentation
Project status		Project status		Project status	
Result		Result		Result	
Time		Time		Time	
Economy		Economy		Economy	
Cooperation		Cooperation		Cooperation	
Problem(s)		Problem(s)		Problem(s)	
Measure(s)		Measure(s)		Measure(s)	
Tasks for next week	Reflection Note	Tasks for next week	Reflection Note	Tasks for next week	Reflection Note

Week 21 (estimate)

Activity	Mads	Roger	Kristin	Weekly sum for activity
Write reflection note	2	2	2	6
EXPO-poster	3	3	3	9
Meeting	1	1	1	3
Weekly sum for person	6	6	6	
Hours accumulated so far	411	458	352	

Week 22 (estimate)

Activity	Mads	Roger	Kristin	Weekly sum for activity
Prepare oral presentation	12	12	12	36
Weekly sum for person	12	12	12	
Hours accumulated so far	423	470	364	