Group Cooperation and Coordination

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1 Group Collaboration

1.1 Organizing the Project

WRITTEN BY JACOB How did you organize yourselves to fulfill the project?

- Roles (lose definitions)
- Fascilitator, notetaker, reviewer
- Fascilitator sets goals and creates a smooth collaboration where all members can work productively
- Notetaker keeps a log of daily accomplishments and future goals
- Reviewing has been done by an external member.
- Reuse group contract with, prior work to establish group values and expectations
- Democratic approach with veto

1.2 Division of Tasks

WRITTEN BY DENNIS How did you split the workload? Were individual team members assigned to be responsible for specific parts of the project?

Tasks have been iteratively delegated to members We have chosen tasks independent from time consumption Divide and conquer

- Workload has both joint and individual
- Initially split work in sections and components
- Subsections were individual
- Group work: split in subsections
- Iterative distribution, qualified guess, too big workload (Waterfall)
- Tasks divided in topics or code packages

RAD Example: split into sections of Introduction, Current System, Proposed System and graphical content (scenario, use case, object model, dynamic model)

Work load is based on the time spent for each task

Things that involve decisions on the future implementation of the program have been worked on in collaboration by all members (e.g. design goals)

NEED TABLE

RAD	Introduction	Current System	Proposed System	Scenarios	Use Cas
Dennis	10%	0%	20%	50%	15%
Jacob	0%	100%	20%	50%	15%
Thor	85%	0%	30%	0%	15%
William	5%	0%	30%	0%	55%

Figure 1: RAD Work Distribution

SDD	System Purpose	Design Goals	Subsystem Decomposition	Persister
Dennis	0%	25%	5%	95%
Jacob	0%	25%	0%	0%
Thor	0%	25%	10%	5%
William	100%	25%	85%	0%

Figure 2: SDD Work Distribution

Code Skeleton	UserManagement	ExportM	ProtocolM	StorageM	WebAPI
Dennis	50%	5%	5%	5%	60%
Jacob	0%	0%	0%	0%	0%
Thor	20%	0%	60%	90%	0%
William	30%	95%	35%	5%	40%

Figure 3: Code Skeleton Work Distribution

1.3 Cooperation Tactics and Tools

The group work was coordinated primarily by using tools for planning, version control and communication. We generally applied a loose version of scrum to manage the project and become familiar with the SCRUM methodology. In practice we tried to keep each other updated every time we met (partial stand up) and would try to give each other an overview of three things accordingly; what did we do last, what are we planning to do today and finally whether anything is blocking this purpose. If anything was blocking a team member from continuing his work, the SCRUM facilitator would try to find the required help to solve this. We also established official meeting hours and contact periods to separate study related activities from social life. This was done to cope with the otherwise stressful environment that team members felt due to the heavy work load in this semester. Communication tools such as Facebook and Messenger were used to keep in contact and inform the group about practical information. Finally, the collaboration tool "Trello" was used to keep track of everything. Note that all members are assumed to stay updated about changes on both Facebook, Git and Trello.

Trello is a collaboration tool we use to organize the project into so called "boards". In one glance, Trello tells you what's being worked on, who's working on what, and where something is in a process. The board represent a combination of the different phases used in SCRUM and the Waterfall Model. We have a Backlog board that corresponds to the Product backlog containing all possible features and requirements in the system. Secondly, the Sprint board contains a backlog with a work that must be addressed during the next sprint (usually one for each week). When team members finish a task it is tested and reviewed by another member in the other boards and finally put in the Done board.

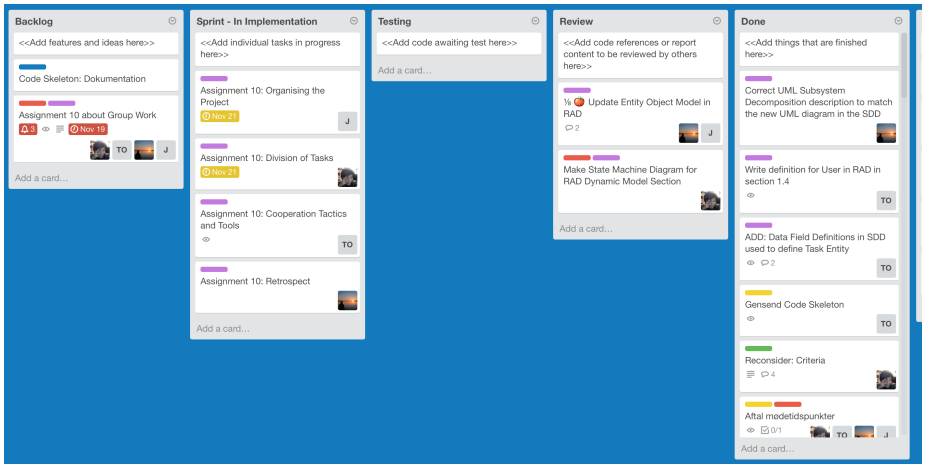

Figure 4: Trello Board

1.4 Retrospect

When thinking of the group work in retrospect it has become clear that certain things could have been done differently which would probably have improved the communication, cooperation and efficiency in the group. The first thing which should be mentioned is the attempt to follow the SCRUM method, which only was accomplished partially, since one of the core features (the stand up meetings) was not done by the group. If these meetings had been upheld it would probably have strengthened the communication which could potentially have lead to fewer misunderstandings and less miscommunication during the work. During the beginning of the group work Trello was not used probably, which meant that the group work did not become as structured as it could have been. By using the Trello board probably it would also have made the first issue with SCRUM easier to handle, since it would have been possible to structure the SCRUM using this tool. Also the use of a Trello board would have made the planning and distribution of tasks a lot easier. A better communication could also have been accomplished by the use of Trello or a more structured use of Facebook e.g. by setting up some guide lines for how and what to write. By scheduling strict deadlines and communicating more about them, some of the unfortunate mistakes with missing content, which was made during hand ins could have been avoided. Also a better set of rules for VCS when writing the documents in LaTex could have prevented some critical compile errors. In the beginning the working hours were very flexible and mostly decided based on people's job schedule. This lead to very late working sessions and meetings where only parts of the group could attend. Also it had an impact on the stress level in the group, which was why a decision was made to make a schema of office hours where people could be contacted and plan a fixed meeting schedule for the week. This should have been done a lot earlier in the work process, since this initiative created a better working environment for most of the group. Besides the group work it has become clear that a better use of TAs and application domain specialists throughout the course would have been rewarding, because a better understanding of the application domain from the beginning would have resulted in less resubmissions and a better foundation for future work. Some of this might originated from a delegation of tasks which was too fast, and thus the group did not always take the time to talk about the theory and establish a solid and common knowledge before beginning the work. In this way the approach became much practical with a fail faster mentality which also had its pros because a lot of practical experience was achieved quickly, but maybe some resources could have been saved by using slightly more time on the theory before trying to solve the tasks.

2 Individual Reflection