Last Name	First Name	Matriculation Number

Exam
CSCW

June 23rd, 2016

You have **90 minutes** to work on the exam. You can reach up to **90 points**. The information on points provided with each question gives you a hint on how much time you should invest to write an answer.

You can give the answers to the exam tasks either in English or in German. **All of your answers have to be in one and the same language throughout the whole exam**.

Do not use your own paper sheets, but only the ones provided in the exam.

Please, put matriculation number on **each** paper sheet.

If you have to make any assumptions, highlight and/or describe them accordingly.

Good luck!

Section	**1**	**2**	**3**	**4**	**5**		**Σ**
Points possible	16	30	18	12	14		90
Points reached							

Matriculation Number

Section 1:
Research Perspective on Collaborative Technologies
(16 points)

Question 1.1
(16 points)

Computer Supported Cooperative Work (CSCW) considers itself a group-oriented research discipline at the edge of applied informatics, sociology, psychology, etc. Group Support Systems (GSS) as a research field emerged from the area of information systems. Both streams deal with the design and development of collaborative technologies, Groupware.

Based on the information presented in the lecture, contrast the fields of GSS and CSCW while referring to, e.g., their theoretical grounding, typical methodology, research focus, scope, perspective on the group processes, typical outcomes, and history.

List at least *four* differences between CSCW and GSS.

For each difference, provide an *example* from the whole course (lecture's theories, discussed technologies, exercises, homework experience) to illustrate this difference.

Page intentionally left blank.

Use it for your answers. Indicate the number of the question you are answering.

Matriculation Number

Matriculation Number

Section 2:
Awareness in Group Work
(30 points)

Consider the following for this section: In the lecture, we were extensively talking about different ways to achieve awareness in various settings (distributed and co-located, dyad or group, etc.). When solving Homework 2 (team challenge), most of the groups experienced problems with establishing awareness and keeping it up during the collaboration. In the following, refer to the lecture slides on awareness and your experiences in group work.

Question 2.1
(4 points)

Provide a general definition of awareness in social context.

Matriculation Number

Question 2.2
(14 points)

Shortly *discuss* the *basics* of event-based awareness model. If you find it helpful, you may contrast the event-based and the space-based awareness models.

How did the tools for solving Homework 2* support event-based awareness? *Argue* while referring to at least *three* design elements or features from the tools you were using.

Propose one additional awareness feature that would enhance your collaboration but was not provided by the tools you were using.

*If you find it difficult, to remind yourself of anything from Homework 2 or any tools you used in there, please, consider any recent comparable experience. Provide additional information when necessary (group context, task).

Matriculation Number

Question 2.3
(12 points)

Awareness, while being necessary to mutually coordinate communication and collaboration, can lead to additional distraction and effectively make people less productive. Discuss the negative consequences of awareness support while referring to the problem of multitasking.

2.3.1. Why does multitasking happen to be a problem? *Discuss* in *five sentences* while referring to the basic theories/heuristics regarding the nature and capacity of cognitive processing. *(4 points)*

2.3.2. *Describe an example* of "dangerous" multitasking that occurred during your team work on Homework 2*. Shortly introduce the episode while referring to the *intentions* of the involved actors, as well as their *behavior*, and show how the multitasking caused a *suboptimal* conduct. *(8 points)*

*If you cannot remember any particular critical incident that occurred during Homework 2, think of any situation you encountered during the CSCW lecture and describe it in accordance with the above instruction.

Matriculation Number

Page intentionally left blank.

Use it for your answers. Indicate the number of the question you are answering.

Matriculation Number

Matriculation Number

Section 3:
Collaboration Engineering
(16 points)

Consider the following for this section: During the lecture and during homework, we introduced the collaboration engineering approach. It relies on the assumption that collaboration activities can be predefined and scripted in a way that (almost) guarantees for the desired output. We have extensively discussed the underlying concepts (six-layer model of collaboration, thinklets, facilitator) in the lecture and you had an opportunity to apply your knowledge in Homework 3. You, also, participated in a ThinkTank session. While taking together all your expertise from all those sources, please, solve the following tasks.

Consider the following story: Hannah and Barbara attend a meeting with their team today. They think, there is nothing easier than solving a problem as a group: "it is nice to meet and have a chat with others, discuss options, and at the end there will for sure be someone with an adequate solution". After the meeting, Hannah and Barbara end up complaining in a private conversation about "too much information processed", "lengthy monologues of the team leader", "too many people wanting to speak at once – we were at least 20 in the room", but they claim that they would like to have another meeting soon – they liked the coffee and "appreciate the news on what is going on in the company, especially between Robert and Jessica from the third floor".

Question 3.1
(4 points)

How would you convince Hannah and Barbara, that collaboration engineering would be a better choice for the preparation of their team's meetings?

Refer to at least *two different group effects* that lead to poor teamwork, explain them, and make clear to Hannah and Barbara that those effects occur in their meetings.

Page intentionally left blank.

Use it for your answers. Indicate the number of the question you are answering.

Matriculation Number

Matriculation Number

Question 3.2
(12 points)

The meeting, that Hannah and Barbara attended on that day, was about "Bug List: Identification of pains and problems in the research-and-development (R&D) division". The optimal output would be a list of 10 most annoying issues divided into those, which can be solved with some "quick fixes", and those, which require some more attention from the leading board. However, the meeting ended up with a list of complains about employee's performance and excuses contributed mostly by the team leaders.

After reading your argumentation from Question 3.1, Hannah and Barbara decided to Collaboration Engineering a chance – they decided to facilitate another meeting to the above topic.

They put the six-layer model of collaboration into a table form and made some notes on what they imagine would be good for their workshop. Still, they lack some knowledge on collaboration engineering – try to help them while completing their workshop plan*.

Review the workshop plan prepared by Hannah and Barbara (next page).

Fill all the empty cells in the table they prepared.
Provide additional *motivation* for your choices on the layer of *group procedures* and on the layer of *collaborative behaviors* (marked with ✎).

*There is no need to explicate each element of the script (e.g., the utterances of the facilitator or the participants). Instead, you may consider using one of the thinklets we provide on the additional piece of paper or describe the general steps involved in the collaborative behavior.

Matriculation Number

Layer	Content			
Collaboration Goals	To identify painful issues in the R&D department and to discuss their complexity			
Group Products	A list of most painful issues organized by the availability of quick-fix solutions into two groups: (1) ones that can be solved by quick fixes and (2) ones that need more effort			
Group Activities			Assessment of the complexity	
Group Procedures	Generate candidate issues	Evaluate based on painfulness of the issues and Reduce to 10 most painful issues	A	Organize into quick – middle – long fixes
Collaboration Tools (conventional, non-IT)			10 Flipcharts for each of the ten issues	
Collaborative Behaviors	B	C	ReviewReflect TL	D

A -

_____

B -

_____

C -

_____

D -

Matriculation Number

Matriculation Number

Section 4:
Technology Appropriation in Organizations
(12 points)

Consider the following for this section: We have extensively discussed various theories and concepts that shed more light on the issue of technology acceptance and appropriation, especially in organizational context. The following question refers to the Adaptive Structuration Theory (AST) as a theoretical grounding and to the User Centered Design (UCD) as a method or process used to design collaborative software. While reflecting on what you learned about appropriation, AST, UCD and related concepts, elaborate on the given topic.

Question 4.1
(12 points)

How can you use the Adaptive Structuration Theory (AST) to justify application of the User Centered Design (UCD) process for the design, the development, and the organizational implementation of collaboration platforms?

While answering the question, *refer* to the *core concepts* from the AST and UCD, and *explicate* how AST can be used for justifying and motivating UCD. Consider theoretical argumentation as well as examples from the lecture or from your personal experience.

Matriculation Number

Section 5:
Sociotechnical Design in Online Communities
(14 points)

Consider the following for this section: In the lecture, we discussed the benefits and problems related to the introduction of enterprise social networks (ESN). While referring to the lecture and your own experience with social networks in organizational context, answer the following questions.

Question 5.1
(6 points)

Explain the term “enterprise social network”.

Point to and shortly describe at least 2 differences between an enterprise social network and public social networks.

Matriculation Number

Question 5.2
(8 points)

Social software (e.g., ESN) found its way into companies not through top-down technology choice, but as a consequence of a grass-root movement. In the lecture, we discussed several cases illustrating enterprise social networks adoption and appropriation.

While referring to an ESN case of your choice, explain the mechanisms behind the appropriation of social software in organizations. Refer to the theoretical models that explain the processes involved therein.

Page intentionally left blank.

Use it for your answers. Indicate the number of the question you are answering.

Matriculation Number