Last Name	First Name	Matriculation Number

Exam CSCW

June 23rd, 2022

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

You can write the answers to the exam tasks either in English or in German. All 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.

Do not write on the back of the paper. Use an additional sheet of paper.

Do not use pencil or red colored pens.

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

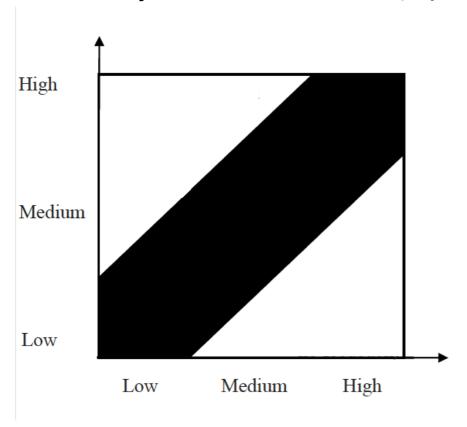
If you have to make any assumptions, highlight and/or describe them accordingly.

Good luck!

Section	1	2	3	4	5	Σ
Points possible	16	16	16	26	16	90
Points reached						

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Section 1: Dyads and media richness (16 points)



Daft, R.L., Lengel, R.H.: Organizational Information Requirements, Media Richness and Structural Design. Management Science. 32, 5, 554–571 (1986).

Question 1.1

(12 points)

First label the two axes and the three areas of the media richness framework on the picture above. Place the media listed below in the media richness framework (use the number associated with each medium) and explain your decision. Indicate if the chosen medium is a good fit to the task and propose a better suitable medium if necessary (otherwise leave the field of "Alternative medium" empty).

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Medium 1: A tax advisor providing a citizen a list of required documents for the tax statement of 2021 in a phone call
Explanation:
Alternative medium:
Medium 2: A student requesting a meeting with Prof. Schwabe to discuss a potential Master's thesis in his research group via E-mail
Explanation:
Alternative medium:

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Medium 3: A doctor providing a medical diagnosis including blood analysis to the patient via a mail letter
Explanation:
•
Alternative medium:
Medium 4: A supervisor and employee defining yearly goals for the employee
via Microsoft Teams
Explanation:
Alternative medium:

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Question 1.2

(4 points)

The Media Richness Theory works well for dyads. For larger groups it can be shown that it does not always work properly. In the lecture we discussed another theory which better explains the media characteristics and media choice for larger groups. Name the theory and explain how this theory is better suitable for large groups by pointing out how it addresses shortcomings of the media richness theory.

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Section 2: Small Groups (16 points)

Question 2.1 (8 points)

In the lecture, we discussed small group characteristics and how opinions form in groups. While referring to the lecture and your own experience from the homework 2 (the creative challenge), answer the following question.

Below are the four theories that describe the formation of opinions in groups, illustrated with pictures from the lecture slides. Please describe the gist of each of the theories in 1~2 sentences and provide one example for each of these four theories.

Theory of the informal communication

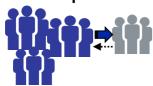


Exchange Theory



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Social Impact Theory



Theory of strong minorities



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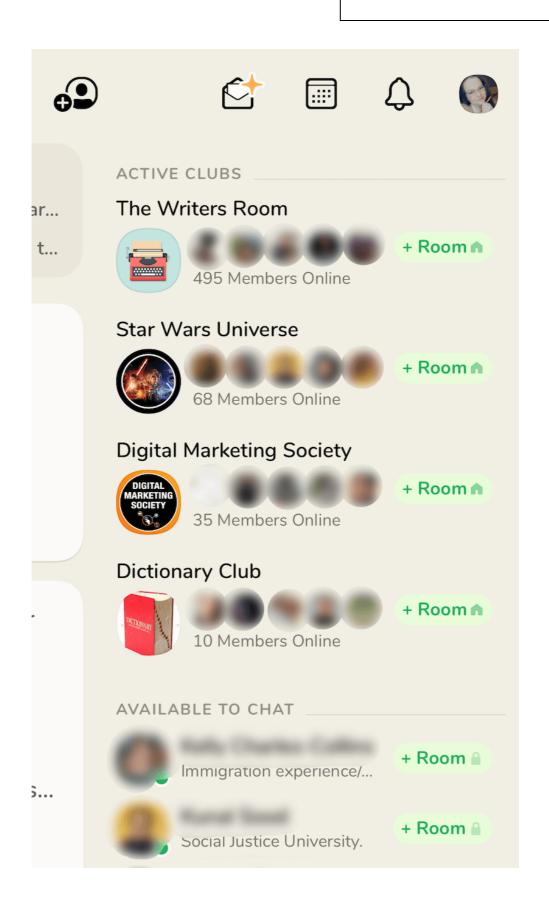
Consider the following for questions 2.2 and 2.3: in the lectures, we extensively talked about different ways to achieve awareness in various settings (distributed and co-located, dyad or group, etc.).

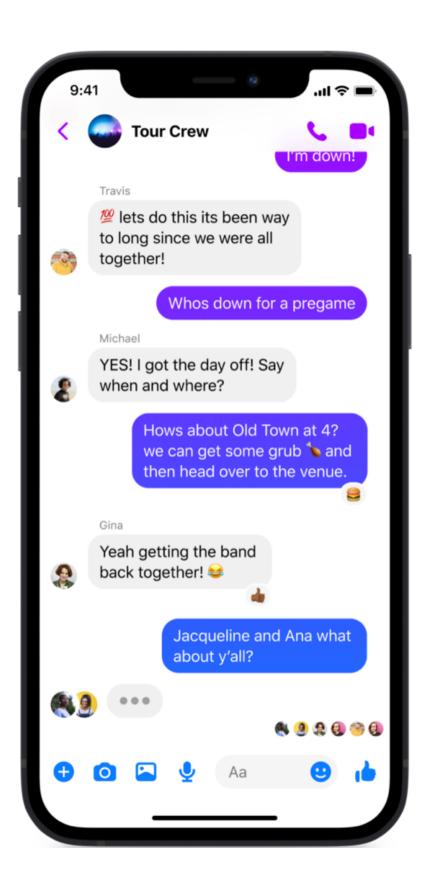
Question 2.2 (4 points)

Please explain what awareness is and provide one example.

Question 2.3 (4 points)

Please identify 4 features in the messaging systems by circling them in the two screenshots below that are designed to provide social awareness.





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Section 3: Engineering Collaboration in Large Groups (16 points)

Consider the following: During the lecture and the homework, we introduced the Collaboration Engineering approach. 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 xLeap session. While taking together all your expertise from those sources, solve the following tasks.

Background story:

You are part of the ICU at the IFI. The institute approaches the ICU as the university provides some funding for student associations to set up a collaborative workspace for their active members. The president of the ICU is inviting all active members (around 30) to a workshop to discuss the most important needs and solutions to these needs. The outcome of this meeting should be a list with the most important needs and concrete solutions to address these needs. This list should then be handed to the dean in order to decide what is feasible within the available funding.

Question 3.1

(4 points)

As a member of the ICU board you are involved in the discussions on how to organize the workshop. You have learned about and experienced the concept of collaboration engineering. How would you convince your fellow board members to use the six layer model of collaboration for the ICU workshop?

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Question 3.2

(12 points)

You are now asked to help prepare the workshop*. Fill in all fields in the table below. Provide an explanation for your choice for the fields with the pencil icon ().

*If you are struggling with the collaborative behaviors, have a look at the set of relevant ThinkLets provided on the separate sheet of paper entitled "ThinkLets Cheat Slip" (no need to employ all provided ThinkLets; you are also allowed to create your own ThinkLets – to do so provide the overview, inputs, and outputs; you are also allowed to combine the ThinkLets to one collaborative behavior).

Layer		Content	
Collaboration Goals	To discover needs of ICU for the needs	eir collaborative workspace and jo	intly develop solutions for these
Group Products		e collaborative workspace, ranked	by priority and elaborated with
Group Activities	Identification of the ICU's needs		
Group Procedures			Generate list of solutions to identified needs, clarify by discussing solutions
Collaboration Tools (conventional, non-IT)	Sticky notes and magnetic white board		
Collaborative Behaviors			LeafHopper

Page intentionally left blank.
Use it for your answers. Indicate the number of the question you are answering.

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Section 4: Communities and Social Neworks (26 points)

Question 4.1 (5 points)

Explain what social capital is by using an example from a social media platform and list at least 3 positive outcomes of social capital.

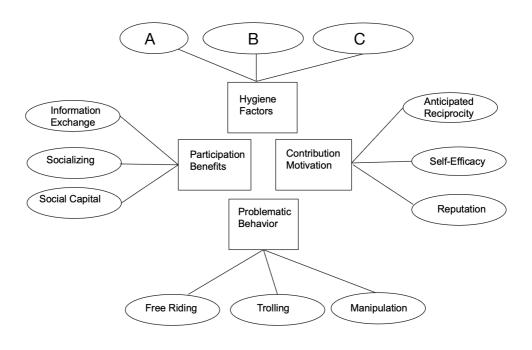
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Question 4.2 (21 points)

In the lecture, we discussed the model of behavioral problems and theories in social networks. For example, we discussed hygiene factors in different social networks (e.g., Facebook). While referring to the lecture and your own experience with social networks, answer the following questions.

a) (3 points) See the model of behavioral problems and theories in social networks. Add the missing pieces for Hygiene Factors.

Behavioral Problems and Theories



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b) (9 points) In HW4, you were asked to identify behavioral problems/needs on a given social media platform. A student identified three behavioral problems/needs on Facebook: 1) filter bubble 2) Fake News and 3) hate speech. For each of these three behavioral problems, please discuss one design principle misused by the developer and/or users.

c) (9 points) Propose one design principle Facebook can implement to prevent or reduce each of the three behavior problems in b) (i.e., three design principles in total).

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Section 5: Engineering collaboration in organizations (16 points)

Question 5 (16 points)

In the lecture on organizations we have extensively discussed collaboration platforms and enterprise resource planning (ERP) systems in organizations. Name 4 characteristics that differentiate collaboration systems and ERP systems. Describe and explain the differences between ERP systems and collaborations platforms along each of the 4 characteristics using Microsoft Teams (i.e., collaboration platform) and the module booking tool of the University of Zurich (ERP system) as examples.

Characteristic 1:

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Characteristic 2:

Characteristic 3:

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Characteristic 4: