Last Name	First Name	Matriculation Number

Exam
CSCW

June 20th, 2019

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 give 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.

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		Σ
Points possible	7	20	35	28		90
Points reached						

Section 1:
Small Group: Influence of individuals on group behavior
(7 points)

Consider the following for this section: In the lecture, we discussed small group characteristics and how individuals influence group behavior. While referring to the lecture and your own experience from the homework 2 (creative challenge), answer the following question.

In your homework you worked together in a small group. <u>Name the 4 theories</u> that describe how individuals influence behavior in a group. <u>Provide at least 3 examples</u> for these 4 theories. Hint: You might remember the following pictures from the lecture related to the influence of individuals on group behavior:

Section 2:
Designing service encounters for dyads
(20 points)

Consider the following for this section: In the lecture, we were talking about problems of dyadic collaboration and how collaborative systems can help here, e.g., in doctor-patient encounters, burglary prevention, or in bank advisory services. In the following refer to the lecture slides on systems for dyads, the examples from the lecture (Livepaper, Banknotes, Smart Travel, Mobile Crime Prevention Counselling), and the problems they address.

Consider the following situation: Alex needs to buy a drug for his lungs. He goes to a pharmacy. At the counter, the pharmacist asks how she can help him. He shows a prescription from the doctor for the drug. She takes the prescription and walks away from the client to find the drug in the store. 2 minutes later, the pharmacist arrives with the drug. She asks whether Alex knows how to use this drug for the lungs. Alex is not sure and would like to know more. Alex mentions, he is further not aware of any interaction between other drugs and mentions, that he also takes some blood pressure drugs. The pharmacist pushes a button on a tablet placed on the counter and asks a speech assistant how the drug is being used. The assistant plays a short animated video which shows a person how the drug is being inhaled properly. It stops and then asks whether there are any questions. The pharmacist pushes again a button to ask what are potential interactions between other drugs. The system lists all indications related to his drug one after another on a small screen. Alex doesn't understand how they relate to his blood pressure drugs, but is in a hurry to catch the train. He thanks the pharmacist and says goodbye.
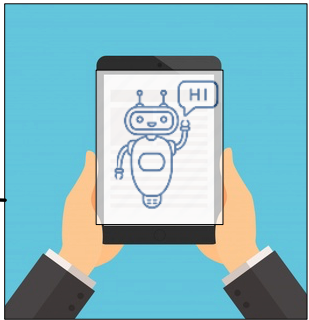
https://www.iconfinder.com/icons/3959143/chat_bot_chatbot_chatterbot_greeting_hi_robot_speech_bubble_icon
https://www.pharmacy.biz/pharmacy-profession-backs-nhs-englands-stay-well-pharmacy-campaign/pharmacy-counter/
https://www.freepik.com/free-photos-vectors/tablet

Refer to the scenario in the pharmacy above. The speech assistant helped to provide information about drug use and side effects. The assistant became an *information provider* in the dyadic scenario.

Question 2.1
(14 points)

<u>Describe now what problems</u> of classic counseling can be solved through using a digital assistant for a dyadic collaboration, for example in a pharmacy. Think about the examples we had in the lecture for dyadic collaboration. Find at least 5 problems that are solved with the various systems designed for dyadic collaboration presented in the lecture.

You are further allowed to add more examples or use cases from a pharmacy visit as long as it is related to the <u>advisory encounter</u> and interaction between pharmacist and client/patient. You can assume that the digital assistant is able to understand and speak. Please, assume that there is a screen connected to the digital assistant.

Question 2.2
(6 points)

The assistant as described in the scenario above took the role of an information provider. <u>Discuss which other roles a digital assistant</u> could take in a dyadic advisory situation between client/patient and the pharmacist? Find at least 3.

Section 3:

Communities and Organizations
(35 points)

Consider the following for this section: This section focuses on analyzing design principles of a social network called BlaBlaCar. The basic idea of BlaBlaCar is to bring together people who want to share a car. It can be also used as a platform for carpooling within a company. In the lecture, we addressed various theories and concepts that shed light on how a collaboration platform might be implemented in an organization either top down or bottom up. Focus in this section on the top down approach.

On the next pages, you will find 4 screenshots from BlaBlaCar. The screenshots feature the following:
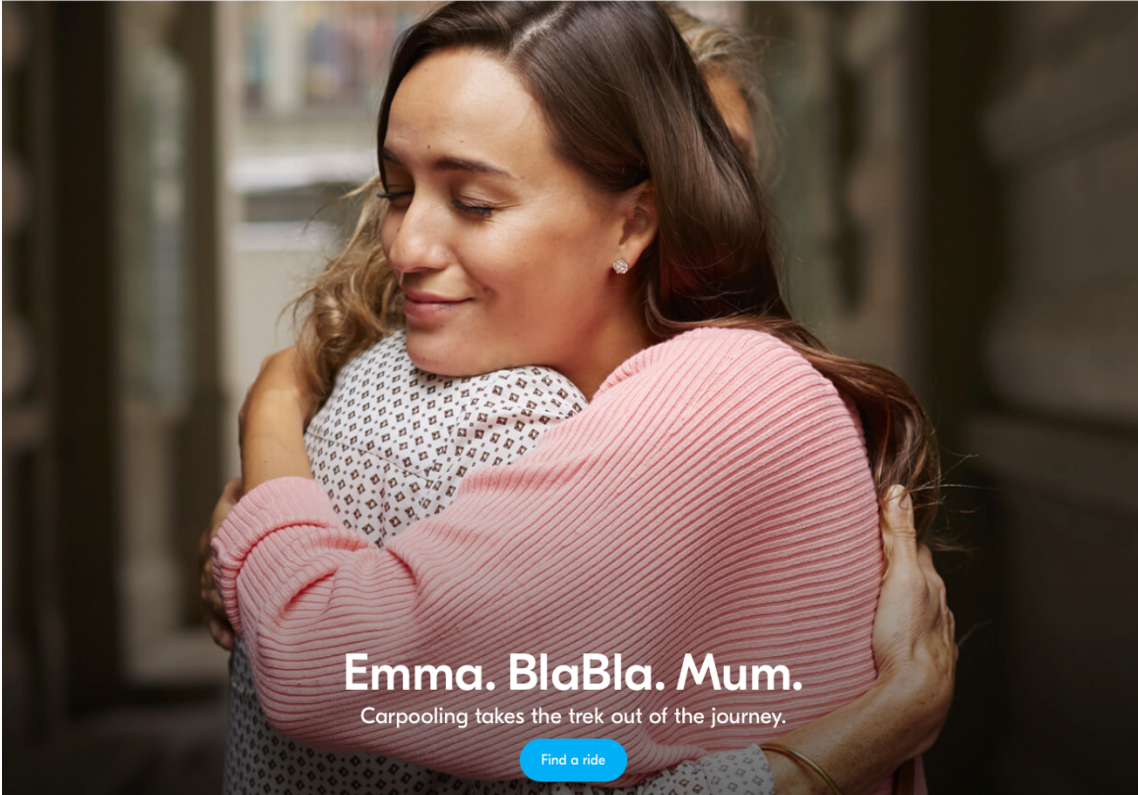
- Figure 1. Shows the landing page right after you login. There is a button where you can start the search for finding a car /offering a car ride.

- Figure 2. Shows the result page for searching a car ride on 7th June 2019 from Zurich to Paris.

- Figure 3. Shows the reviews for the car owner Jose and Felix (see Figure 2). Both offer a car ride.

- Figure 4. Shows the member profile of a BlaBlaCar client who travelled with blablacar. The experience level is provided on top of the screen.

Look through the screenshots before answering the questions.

Figure 1.

Figure 2.

Figure 3.

Felix

18 y/o

Experience: Experienced

Student a the ETH in Zürich. I'm from France so I speak French and German.

⭐ **5/5 — 3 ratings**　　　　　　　　　　›

🎵 It's all about the playlist!

🐾 No pets in the car

🚬 Smoking in the car is fine

💬 I'm chatty when I feel like it

✓ ID verified

✓ Phone verified

✓ Email verified

✓ 219 Facebook Friends

3 rides published
Member since August 2018

Report this member

José

50 y/o

Experience: Ambassador

Pour des raisons professionnelles, je me déplace sur toute la Suisse et partager ma voiture me permet de faire des connaissances et de mieux passer le temps du voyage.

⭐ **4.9/5 — 27 ratings**　　　　　　　　›

3/3 - Good driving skills

🎵 It's all about the playlist!

🐾 No pets in the car

🚬 No smoking in the car

💬 I'm chatty when I feel like it

✓ ID verified

✓ Phone verified

✓ Email verified

36 rides published
Member since June 2015

Report this member

Figure 4.

BlaBlaCar

Dashboard

Find a ride   (+) Offer a ride   Kermit

Hello Kermit
→ Edit my profile
→ See my public profile

Your current level

Newcomer   Intermediate   Experienced   Expert   Ambassador

→ Find out more about Experience Levels

Carpooling preferences

→ Edit my preferences

Profile verification

⊘ Phone number verified
⊘ Email address verified
⊙ Verify your ID
→ Complete my profile verification

Member activity

Member since: Feb 2018

Notifications (0)

New messages (0)

See all my messages

Question 3.1
(4 points)

A social network such as BlaBlaCar shares several characteristics with other platforms such as Facebook or Twitter. The model below summarizes the characteristics about behavior problems and theories for communities and social networks. Please complete the fields A, B, C, and D below.

A_____

B_____

C_____

D_____
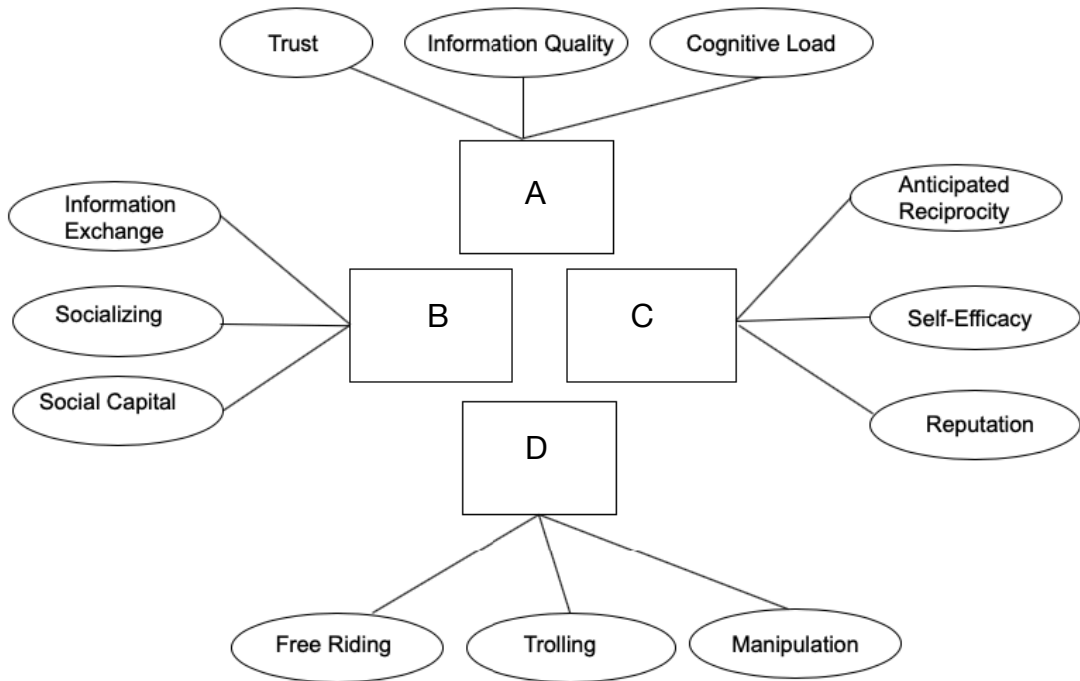
Question 3.2
(16 points)

Review the screenshots and identify 4 design principles for social networks employed in BlaBlaCar:

- <u>mark the relevant areas in the screenshots</u> by using letters A to D

- shortly <u>describe the implemented design principle</u>

- state what <u>design requirement</u> is addressed by this <u>design principle</u>

A _____

B_____

C_____

D_____

Question 3.3
(15 points)

Consider the following situation: A multinational company named Pinapple Inc. purchased full access to the BlaBlaCar platform for its internal, company-wide use. Employees should be motivated to use this car pooling community for the business travels and daily way to work to save money and help the evironment. It was <u>implemented top down</u> and the users only sheldom use this platform: there are only few car rides offered by the employees and only 50 persons out of 1000 employees booked a car ride. In the last board meeting, the CEO Tim Bake looks for ways to improve the number of active users / contributors without the necessity to change the top-down strategy.

Help Tim Bake to improve the number of contributors and use of the BlaBlaCar platform. <u>Propose a strategy</u> on how the number of contributors can be increased. What would have facilitated the top down implementation? Refer to what you have learned in the lecture.

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

Section 4:
Large Groups and Organizations
(28 points)

Consider the following: During the lecture, we covered collaborative buildings. For example, the Apple Campus, Apple Park or Google Campus are buildings designed for a new, collaborative working culture. They generate space for unplanned meetings, enable persons to get together without common working background and/or motivate employees to organize common activities. While taking together all your expertise from the lecture, solve the following tasks.

Question 4.1
(3 points)

How can the new working culture in these buildings be supported? Name 3 examples of how collaborative building and information technology in them can support collaborative work.

Consider the following situation: The University of Zurich plans to establish a new Campus Oerlikon with the building Binzmühlestrasse to be the core of the campus. For this, it requires rooms for efficient collaboration between students, employees, and employees with external partners. Thus, it is required to design a campus for a large group of people with different needs. Short, Binzmühlestrasse 14 should be turned into a collaborative building.

Question 4.2
(25 points)

In homework 3, you designed a workshop of a "Conference for the Improvement of Teaching". Now design a half-day-workshop according to the six-layer reference model of collaboration on how Binzmühlestrasse 14 could be redesigned into a "University Campus Oerlikon". In this workshop, the collaborative building is developed together with 5 stakeholders. The workshop is moderated by an externally acquired person. For 3 hours (2 pm - 5 pm) incl. one break of 30 minutes, the director of the department of Informatics, the student representative, the PhD student representative, the academic coordinator, and the managing director, meet to decide on what changes are required to create a Campus Oerlikon and develop a plan on how to achieve it. The participants should be creative to develop new ideas on redesigning the existing building, organize the ideas, and build commitment on who is going to perform what work package to achieve the goal of the workshop.

Please apply the 6-layer-model as provided below. Make sure, you name and describe at least 2 activities, procedures (incl. collaboration patterns), tools and collaborative behaviors (incl. thinklets). You are allowed to make assumptions but please explicitly mark them as an assumption. You can use the list of thinklets provided with this exam.

Why	**1. Collaboration Goals**
	2. Group Products
What	**3. Group Activities**
How (Logical Design)	**4. Group Procedures**
How (Physical Design)	**5. Collaboration Tools**
	6. Collaborative Behaviours

Briggs, R.O. et al.: A Six-Layer Model of collaboration for designers of collaboration systems. Appear in: Briggs et al: Advances in Collaboration Systems. Armonk, NY: M.E. Sharpe, Inc. 2016

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

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