Exam Two – Home Exam HCI 2021

Course code: DAT420 / TIG095

Full Name:

Project Group Number:

Student ID:

How to submit the exam

Answers must be written in English.

Submit your hand-in as a .PDF document.

Rename the exam using the following format: "Exam2_FirstName_LastName.pdf".

Grading

The final grade for the course is calculated based on the scores of Exam One (30 points) and Exam Two (70 points – this exam) together. The total amount of points is 100. Your final grade is the percentage of points you have scored during both exams combined.

 $Final\ grade\ (\%) = score\ Exam\ One + score\ Exam\ Two$

Final grading Chalmers students	Final grading GU students
U: 0 – 44%	U: 0 – 44%
3: 45 – 59% (pass)	G: 45 – 74% (pass)
4: 60 – 74%	VG: 75 – 100%
5: 75 – 100%	

Exam questions and answers

Each question has a word limit that cannot be exceeded. For each question, there is a maximum number of points (indicated between parentheses). References do not count as part of the word limit.

The final page of the document contains a rubric that you can consult for the overall grading of each question. The rubric provides an indication of the level of answering that is expected in order to receive a certain grade (U, 3/G, 4/G, 5/VG).

Support

For assistance during the exam you can send an email during office hours (8-17): Sjoerd (henricus@chalmers.se), Mohammad (henricus@chalmers.se), or Sara (sara.ljungblad@chalmers.se).

Your answers are judged based on your ability to provide insightful, reflected, and well-structured answers. Be sure to back up your reasoning with references, whenever possible. Provide your answers in a structured way; figures and images are helpful. You are welcome to relate insights/learnings/ideas to other courses, course literature, etc. to support your discussion. Try to think about the big picture as well as necessary steps to take along the process.

Good luck!

1. Data Gathering and User Requirements (16 points total)

a) What method(s) did you use to gather data to develop your user requirements in your project? Motivate and reflect on **why** the method(s) were selected for your group's project? (250 words max)

(8 p)

- Describing your method(s) (2 points)
- Providing a reflective explanation of why the method(s) was chosen (6 points)

Replace this text with your answer

b) Provide a reflective explanation on what are the advantages and disadvantages of your data gathering method(s)? (250 words max)

(8 p)

- Explaining advantages (4 points)
- Explaining disadvantages (4 points)

2. **Prototyping** (15 points total)

 a) What prototyping method(s) did you use for your project? Explain and reflect on why you have selected this/these prototyping method(s) for your project. (250 words max)

(8 p)

- Prototyping method(s) (2 points)
- A reflective explanation on why (6 points)

Replace this text with your answer

b) If you would do yet another iteration of your project, what prototyping method(s) would you apply? Provide a reflective explanation to your answer. (250 words max)

(7 p)

- Prototyping method(s) (2 points)
- A reflective explanation on why (5 points)

3. Evaluating (12 points total)

a) Reflect on why you chose the evaluation method(s) you used to assess your prototype. (200 words max)

(6 p)

- Given a reflective explanation of the selected evaluation methods (6 points).

Replace this text with your answer

b) Explain how user feedback impacted your design process. Support your explanation with at least one example of a design decision made based on the user feedback received during your design process. (200 words max)

(6 p)

- Explaining the impact that the evaluations had on the design process (3 points)
- Supporting the explanation with an example (3 points)

4. Inclusive Design (9 points total)

Exemplify permanent, temporary and situational disabilities and how this may affect use situations (the use situations examples do not have to be connected to your project's prototype). In your answers, exemplify how a designer's decision can impact the use situation for each disability. (350 words max)

(9 p)

- Providing an explanation for each disability (3 points, 1 point each)
- Reflecting on the designer's impact per disability (6 points, 2 points each)

5. Overall Process (18 points total)

The following three questions are about your personal reflections on the project and course in general. In your reflections, please include examples from your project's work during the course. You are encouraged to strengthen your argumentation with sketches and/or images.

a) Reflect on the value of applying a user-centered design approach in a project. (200 words max)

(6 p)

- Mentioning the value of applying a user-centered design approach (3 points)
- Reflecting upon the value of applying a user-centered design approach (3 points)

Replace this text with your answer

b) Reflect on the value of teamwork in your HCI project. (200 words max)

(6 p)

- Mentioning the value of teamwork (3 points)
- Reflecting upon the value of teamwork (3 points)

Replace this text with your answer

c) Reflect on your personal development and learning process throughout the HCI course. (200 words max)

(6 p)

- Demonstrating self-development (3 points)
- Providing an example that demonstrates self-development (3 points)

References

Please use this space to list your references. You are free to choose your preferred reference style. Use established guidelines for references in text and in the reference list here, e.g. the <u>APA</u>, <u>Harvard</u>, or <u>IEEE</u> style.

Preece, J., Rogers, Y. & Sharp, H. (2019). *Interaction design : beyond human-computer interaction*. Indianapolis, IN: Wiley.

Overall Grading Rubric

Question	Fail/U (<%45)	Grad 3 (G) (%45-59)	Grad 4 (G) (%60-74)	Grade 5 (VG) (%75-100)
Question 1: Data Gathering and User Requirements	There is little evidence of independent reflective answers. Connection to the relevant theory and literature is absent in the writing. Source material is not referred to or misinterpreted and not referenced or referenced incorrectly.	Minimal evidence of reflective answers present. Many of the sources are simplistic and minimal in-depth explanation. Referencing is present but incorrect or inconsistent.	The topic is adequately identified and there is evidence of independent reflective explanation. The range of sources are appropriate and relevant. Referencing is present and follows the expected style.	Evidence of independent critical reflections and careful selection of relevant information. Use of significant breadth and depth of sources that are integral to understanding the topic. Sources are integrated into the writing and the referencing style is accurate and consistent.
Question 2: Prototyping	There is little evidence in the answer on the relationship between theory and the prototyping process.	The explanation addressed a relationship between theory and prototyping process. Some prototyping theories are explored.	The prototyping process is articulated in a clear manner. A connection to the theory is identifiable.	A clear explanation that highlights a range of prototyping methods are creatively explored. A connection to the theory is analytically reflected upon.
Question 3: Evaluating	The answers on the evaluation methods are poorly described. There is no explanation.	The evaluation method(s) and process are defined but do not articulate on the appropriateness of testing the prototype.	The evaluation method(s) are explained with a clear articulation on the appropriateness to measuring and testing the prototype.	A clear explanation of the evaluation methodology is carefully researched and articulated in relation to the user and its effectiveness of measuring and testing the prototype.
Question 4: Inclusive Design	The reflection on the inclusive design aspects is not present or is incomplete and unfocused.	A brief reflection on the inclusive design aspects is given but it does not clearly explain the purpose in relation to accessibility and interaction design.	A reflection on the inclusive design aspects is present, clearly indicating the purpose of accessibility in relation to interaction design.	A well-formed reflection on the inclusive design aspects with a strong base in existing theory is given. The answer clearly articulates on accessibility in relation to interaction design in an innovative and realistic way.
Question 5: Process	There is limited evidence of iterative and reflective answers of the processes in the creation of the design solution(s). Self-development reflections are limited.	There is adequate evidence the reflective answers address the iterative processes in the creation of the design solution(s). Selfdevelopment reflections are present.	There is sound evidence of the reflective answers on the processes in the creation of the design solution(s). A clear self-development reflection is present and articulated well.	There is outstanding evidence of reflective answers on the iterative processes in the creation of the design solution(s). A clear self-development reflection is present and articulated well in connection to theory.