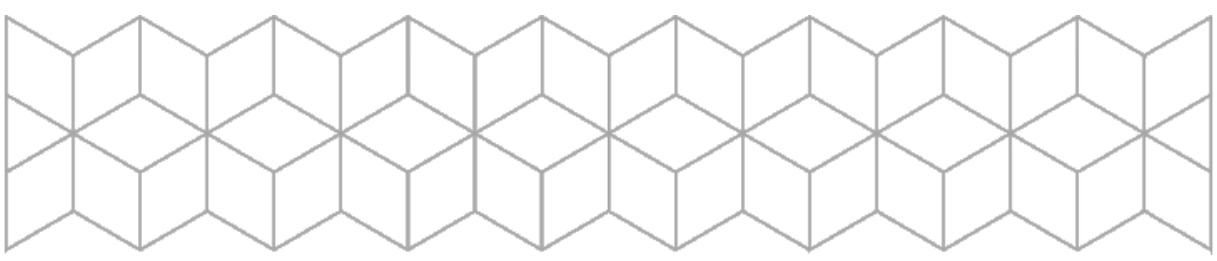
Høgskolen i Østfold

ASSESSMENT GUIDELINES

Course code:	ITM11318-1
Course name:	18H Designmetoder
Form of examination:	40% Digital exam Inspera 60% Group project report delivered in Canvas
Date:	27th November 2018 10th December 2018
Lecturer(s):	Klaudia Carcani

Comments:

Digital Exam Inspera: The questions are distributed in Sections. In total there are 21 Sections. 19 Sections have two questions from which only one question is pulled out randomly. 2 Sections have only one question.
The answers to each of the questions is included below in this document. The questions that have automatic answers are already automatically included in inspera, thus are excluded from this document (section 20 has some variation from the automatically registered answers which I have included below for the sensor to consider)



Assessment of Digital Exam Inspera

Section 1 - 1p

Q1: What is Interaction Design? 1p

Interaction design is about…SHAPING DIGITAL TOOLS FOR PEOPLE NEEDS

Q2: Where are design opportunities found?

Design opportunities are found in the intersection of desirability (human), feasibility (technical), viability (fiscal). 1p

Section 2 – 2p

Q1: What is design thinking? Definition 2p

Design Thinking is a design methodology that provides a solution-based approach to solving problems. It's extremely useful in tackling complex problems that are ill-defined or unknown, by understanding the human needs involved, by re-framing the problem in human-centric ways, by creating many ideas in brainstorming sessions, and by adopting a hands-on approach in prototyping and testing.

Q2: List the phases of the design process model by H. Simson. List the phases of the design process model proposed by the Hasso-Plattner Institute of Design at Stanford. 2p

Understand, Observe, Define, Ideate, Prototype, Test

Empathy, Define, Ideate, Prototype, Test

Section 3 – 3p

Q1: List and explain the roles that you can have during testing (3p)

- Host: You help transition the user from reality to your prototype situation and give them the basic context they need to understand the scenario (don't over-explain it, let the user discover through the experience). As the host, you will also likely be the lead questioner when the time comes.
- Players: You often need to play certain roles in the scenario to create the prototype experience.
- Observers: It is very important to have team members who are solely observers, watching the user experience the prototype. If you don't have enough people to run the prototype and observe, videotape the testing.

Q2: List and explain the three ways on how to test (3p)

- Show don't tell. Put your prototype in the user's hands – or your user within an experience. And don't explain everything (yet). Let your tester interpret the prototype. Watch how they use (and misuse!) what you have given them, and how they handle and interact with it; then listen to what they say about it, and the questions they have.
- Create Experiences. Create your prototypes and test them in a way that feels like an experience that your user is reacting to, rather than an explanation that your user is evaluating.
- Ask users to compare. Bringing multiple prototypes to the field to test gives users a basis for comparison, and comparisons often reveal latent needs.

Section 4 – 4p

Q1: List the things that you need to consider while testing to create an experience. (4p)

- your **prototype** - consider what can be done or not with your prototype
- the **context and scenario** in which you are testing,
    - What are the main functionalities you want to test
    - Make a list of task that the users should complete by using your solution
    - Write a scenario (as you did earlier in the project)
- **how you interact** with the user during testing and
- how you **observe and capture** the feedback.

Q2: Define testing. (1p)

List and explain the reasons why we need testing in design thinking.(3p)

Definition: Testing is an opportunity to learn about your solution and your user by soliciting feedback from your users

Why:

- **To refine prototypes and solutions.** Testing informs the next iterations of prototypes. Sometimes this means going back to the drawing board.
- **To learn more about your user.** Testing is another opportunity to build empathy through observation and engagement—it often yields unexpected insights.
- **To refine your "Definition of the Problem".** Sometimes testing reveals that not only did you not get the solution right, but also that you failed to frame the problem correctly.

Section 5 – 4p

Q1: Describe the four categories of prototype presented in the model shown in the picture below?

(4p)

- To ideate and problem-solve. Build to think.
- To communicate. If a picture is worth a thousand words, a prototype is worth a thousand pictures.
- To start a conversation. Your interactions with users are often richer when centred around a conversation piece. A prototype is an opportunity to have another, directed conversation with a user.
- To fail quickly and cheaply. Committing as few resources as possible to each idea means less time and money invested up front.
- To test the possibilities. Staying low-res allows you to pursue many different ideas without committing to a direction too early on.

- To manage the solution-building process. Identifying a variable also encourages you to break a large problem down into smaller, testable chunks.

Q2: Prototypes categories - Describe the four categories of prototype presented in the model? (4P)

- Implementation - Prototypes that answer technical questions about how a future artifact might actually be made to work.
- Role - Prototypes that describe functionality, that a user might benefit from. (Storyboarding, Video prototypes, user stories, wireframes, enactment)
- Look and Feel - Prototypes that explore and demonstrate options for the concrete experience of an artifact. What it would be like to look at and interact with an artifact.
- Integration - Integration prototypes are built to represent the complete user experience of an artifact.

Section 6 – 1p

Right/Wrong question- Automatic reply registerd in inspera

Section 7 – 5p

Q1: Define personas (1p)

Explain which are the elements to consider when writing a scenario (4p)

Personas are fictional characters, which you create based upon your research in order to represent the different user types that might use your service, product, site, or brand in a similar way.

Elements to consider in writing s scenario:

- Setting – where, when
- Actors - who
- Goals or objectives – what, why
- Action and events - how

Q2: What is Storyboard? (1p)

List the reasons why storyboarding is important. (4p)

A storyboard is a technique for illustrating an interaction between a person and a product

- It is the best way to share the vision, invite stakeholders to collaborate
- It facilitates to refine the idea
- It makes production easier
- It saves time later

Section 8 – 4p

Q1: The Ideate Phase it's not about coming up with the 'right' idea it's about generating the broadest range of possibilities . (2p)

The ideation phase has two phases: (2p)

1. Initially generate ideas
2. then select ideas

Q2: Design games should have the following characteristics: (4p)

- fun
- hands-on
- planned and structured
- useful

Section 9 – 4p

Q1: Explain how to apply the following methods: (4p)

- Bingo selection
- Now, Wow, How

Bingo Selection

- split ideas according to a variety of form factors, such as their potential applications in a physical prototype, a digital prototype, and an experience prototype.

Now, WOW, How

- Now: ideas that can be implemented immediately but which lack novelty.
- Wow: ideas that can be implemented *and* are innovative.
- How: ideas that could *possibly* be implemented in the future.

Q2: Explain how to apply: (4p)

- Post it voting
- Four categories method

Post-it Voting or Dot Voting

- Ideas that are generated in the Ideation sessions are written down on individual post-its, and members can vote by using stickers or a marker to make a dot on the post-it note corresponding to the ideas they like.

Four Categories Method

- The four categories method involves dividing ideas according to their relative abstractness, ranging from the most rational choice to the 'long shot' choice.

Section 10 – 5p

Q1: Mention at least five brainstorming rules (5p)

- Set a time limit
- Start with a problem statement, point of view, possible questions, a plan, or a goal and stay focused on the topic.
    - **How might we**

- Defer judgement or criticism, including non-verbal
- Encourage weird, wacky and wild ideas
- Aim for quantity
- Build on each other's ideas
- Be visual
- One conversation at a time

Q2: Which are the steps to apply reverse brainstorming? (5p)

- Step 1: Clearly identify the problem that needs to be solved by the end of the group meeting
- Step 2: Reverse the expected process. For example, ask the stakeholders questions such as “how can we make the problem worse?” instead of “How can we solve it?”
- Step 3: Collect all the reversed solutions. All the ideas are acceptable without no criticism
- Step 4: After reaching the cases that make the problem worse, flip these cases to reach the best fixes for the problem.
- **Step 5:** Judge and evaluates the results to reach one best solution.

Section 11 – 5p

Q1: Define content analysis 1p

Which are the steps of doing content analysis? Explain each step 4p

Definitions possible:

- the process of developing a representative description of text or other unstructured input
- a systematic , replicable technique for compressing many words of text into fewer content categories based on explicit rules of coding
- any technique for making inferences by objectively and systematically identifying specified characteristics of messages

1. Condensations – shortening text while preserving the core information
2. Codes – label representing what the condensed unit is about
3. Categories – group codes that are connected through content or context
4. Theme – expressing an underlying meaning in two or more categories

Q2: What is grounded theory? Define 1p

How to apply grounded theory? Steps 4p

a qualitative research method that seeks to develop a theory that is “grounded in data systematically gathered and analyzed”.

The grounded theory method generally consists of four stages:

1. open coding;
    - read through, trying to identify the patterns, opinions, behaviours, or other issues that sound interesting
    - In vivo codes vs researcher denoted codes
2. development of concepts;
    - collections of codes that describe similar contents
3. grouping concepts into categories;
    - Axial coding
4. formation of a theory

It should be an iterative process - Iterative review of the data is often a key part of the process, as identification of new codes and categories might lead you to rereview documents from the perspective of codes identified in later documents.

Section 12 – 2p

Q1: Explain what Reliability and Validity mean in content analysis. 2p

- validity means that we use well-established and well-documented procedures to increase the accuracy of the findings. More strictly speaking, validity examines the degree to which an instrument measures what it is intended to measure.
- Reliability refers to the consistency of results if different researchers working on a common data set come to similar conclusions, those conclusions are said to be reliable.

Q2: Explain what is emergent coding and what is apriori coding. 2p

- A priori coding involves the use of an established theory or hypothesis to guide the selection of coding categories. These categories might come from previously published work in related areas, or from your own prior investigations of the topic at hand.
- Emergent coding refers to the qualitative analyses conducted without any theory or model that might guide your analysis—you simply start by noting interesting concepts or ideas and continually refine those ideas until you are able to form a coherent model that captures the important details.

Section 13

Q: What categories of content do we target with content analysis?

The target of content analysis usually covers two categories:

- media content - can be any material in printed publications (e.g., books, journals, magazines, newspapers, and brochures), broadcast programs (e.g., TV or radio programs), websites (e.g., news websites, web portals, personal websites, or blogs), or any other types of recording (e.g., photos, films, or music).
- audience content is feedback directly or indirectly collected from an audience group. A variety of methods such as surveys, questionnaires, interviews, focus groups, diaries, and observations.

- Text
- Multimedia

Section 14-16 automatic reply registered in inspera

Section 17 – 5p

Q1: List five things that you should consider in creating interview questions. 5p

- No ambiguous or misleading questions
- No multiple questions or question alternatives
- Use simple word choice
- Adapt your vocabulary to the interviewee
- No closed questions (yes\no)
- No judgmental or aggressive-sounding questions
- Do not hint expectations
- No direct, suggestive questions
- No shame and guilt-inducing questions
- No emphatic comments (exception are affirmations to continue the conversation)
- Offer no interpretation
- No questions which insist on clarification
- No closed questions, to check your understanding
- Address sensitive subjects cautious and more likely at the end of an interview

Q2: List and explain briefly five types of interview questions. 5p

- Introductory question
    - Can you tell me ... What happened when ...
- Follow-up question, to concretize general statements
    - Interested listening and monitoring
- Probing questions
    - Can you say more about this? More detailed examples
- Specified questions
    - What were your thoughts at that point?
- Direct questions
    - The interviewer introduces central topics and dimensions
- Indirect questions or sensitive issues

        - How do you think the other students perceived the…
- Silence
    - Getting time to associate and reflect
- Interpretative questions, ascertain questions
    - Do you mean that ... Can the expression .. Surface?

Section 18 – 3p

Q1: Usually we use interviews to talk to users. What are some other methods that can be used to talk to users? List and shortly explain three of them.

- Direct Storytelling – ask users to tell stories about specific issues that you would like to explore further
- Unfocused groups – use this method to get an atypical view on the subject. Assemble a group of experts on the field and discuss viewpoints
- Role Playing – it can trigger emotions and attitudes, "I am going to pretend I am a customer and I am going to interact with you"
- Extreme Users Interview – Interviewing users in the out-edge of the subject
- Desk/purse/briefcase tour

Q2: List at least three observation methods in a non-participant observer role. 3p

- Fly on the wall – go to a location and unobtrusively observe what goes on there. A shopping mall for a shopping experience
- Shadowing – Follow subjects as they go about their routine
- Contextual Inquiry – going to the subject location and asking questions about their behaviours
- Undercover agent – observe people by interacting with them covertly, posing as someone normal in the environment

Section 19

Q1: What are cultural probes? Definition

List the goals of cultural probes

"simple objects or prototypes of a design, which are placed in person's environment to find out about their habits, patterns of communication, and so forth, and hopefully return with interesting data"

- Get to know
  gain insights, understand background, learn technology affinity
- Provocation
  Participants responses, ideas, wishes or problems
- Inspiration
  collect hints and "inspirational data" for design, interaction, requirements, product development, stimulate imagination

Q2: What is empathy phase and what is needed for success?

is the work you do to understand people and relate to them emotionally, within the context of your design challenge.

- Behaviours are never right or wrong, but they are always meaningful.
- Understanding peoples values and beliefs
- “converting need into demand.”

Section 20 – 12p

Automatic reply registered in Canvas. Need a manual check-in of some methods where the check in one of the below-mentioned phases would be considered right:

Personas - Ideate, Prototype

Storyboard – Ideate, Prototype

Scenarios – Ideate, Prototype

Wizard of Oz – Prototype, Testing

Section 21 – 7p

Q1: Which are the steps to apply affinity diagraming? 7p

- 1. Write each piece of data on a note card or post-it note.
- 2. Once the cards have been individually generated, spread them out randomly on a surface.
- 3. Now, begin to physically move the cards around, looking for patterns and groupings.
- 4. As you work through the entire set of cards, patterns and groups can become large
- Consider breaking a pattern of eight or more notes into separate, smaller, and more defined groups.
- 5. Once all of the notes have been placed in groups, conduct a focusing exercise. Label each group on a larger, alternate-coloured card.
- 6. Next, develop and articulate a two- or three-sentence description of the category.
- 7. Finally, put the entire effort into a document in an outline format, including the name, the description, and the individual content elements.

Q2: List in order and describe shortly the cultural probes design activities. (5p)

List the activities that should be considered in the planning phase. (2p)

1. Planning
    1. Determining Goals
    2. Developing the probes
    3. Planning Follow Up
2. Recruiting participants and selecting volunteers
3. Assembling probes
4. Distribute, allow the users to use their senses – use images, sounds etc.

5. Retrieving and analysis

GRADING

A	71-80
B	61-70
C	52-60
D	42-51
E	32-41
F	0-33

Assessment of the Group Project Report

Exam requirements

The final report must be at max. 5000 words, (excluding reference list).

Structuring the report:

1. Introduction

Here you should include a general description of your project. The concept that you are have been working on and some justifications on why the topic was relevant and how you are contributing in it. The assignment on literature search should help you build your arguments in this section.

At the end, you include a short description on what will be presented in the rest of the paper.

2. Design Thinking Process

Include a short description of the design thinking process, how you understand design thinking.

2.1 Investigate

Empathy and Problem Definition

- Start with a description of your initial ideas, how did they evolve until a first 'project definition.'
- Which was your target group
- Design methods that you used for empathizing the target group
- Why you chose those methods
- How you analysed the data for defying the problem
- Describe the final definition of your project
- Include pictures
- Quote users

2.2 Design

Ideate and Porotype

- Describe the design methods used for ideating
- Showcase some of the ideas discussed in the group and how they further evolved
- Describe the idea and choices that advanced into prototyping
- Describe how you evolved from personas, scenarios, storyboards, sketches, wireframes and finally the mock-up
- Describe your prototype
- Include pictures

2.3 Evaluate

Test

- How you conducted tests?
- What was the feedback that you got from users?

3. Discussion

The discussion will be divided into two parts:

1. Critically discuss the design process by using arguments from the lectures
   - Which were some of the critical moments that led forward your design?
   - How you navigated through the design thinking process. Was the process linear or iterative at some point?
2. Critically discuss your solutions.

- Which are the strengths and the weaknesses of the solution?
- How can your project be brought ahead?
- Further explorations

Give a good description of your project so that an outsider can understand what you have done and why. Include pictures and illustrations, making it easier for the reader.

Deadline: 10th December at 14:00.

The report should be uploaded in CANVAS before the deadline together with a pdf or balsamiq\axure or paper copy of your prototype.

(Reference Style: Harvard Author-Year or AP6, whatever you are familiar with but be consistent and use that correctly)

GRADING

A - Excellent - An excellent performance, clearly outstanding. The candidate demonstrates excellent judgement and a high degree of independent thinking — the format of an accepted paper at a student conference. Each step of the project has been done in an excellent way. There is a clear description of the choices, and there is an exceptional analysis of decisions in terms of methods, by arguing through the course literature. Also, the report has an outstanding discussion which reflects a very well-articulated critical thinking toward the design process and the solution itself.
B - Very good - A very good performance. The candidate demonstrates sound judgement and a very good degree of independent thinking — the format of a paper accepted with minor revisions. Each step of the project has been done in a good way. There is a clear description of the choices, and there is a good analysis of decisions in terms of methods, by arguing through the course literature. Also, the report has a very good discussion which reflects a well-articulated critical thinking toward the design process and the solution itself.
C - Good - A good performance in most areas. The candidate demonstrates a reasonable degree of judgement and independent thinking in the most important areas — the format of an accepted paper with major revisions. Each step of the project has been done in a good way. There is a clear description of the choices, and there is a satisfactory analysis of decisions in terms of methods, by arguing through the course literature. Also, the report has a satisfactory discussion which reflects an articulated critical thinking toward the design process and the solution itself.
D - Satisfactory - A satisfactory performance, but with significant shortcomings. The candidate demonstrates a limited degree of judgement and independent thinking. The students only describe the project in a clear way that shows a connection between the phases of the design thinking process.

E - Sufficient - A performance that meets the minimum criteria, but not more. The candidate demonstrates a very limited degree of judgement and independent thinking. The students just describe the steps taken in every project but lacks a clear connection of the choices in each step which should guaranty the success of the project.
F - Fail - A performance that does not meet the minimum academic criteria. The candidate demonstrates an absence of both judgement and independent thinking.