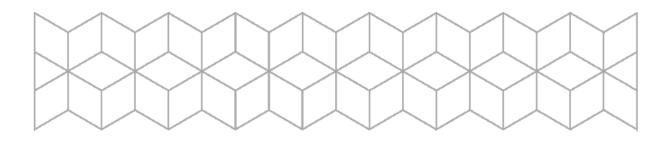


# **ASSESSMENT GUIDELINES**

ITM21619-1 19H
Skisser og prototyper
Mappeeksamen i gruppe bestående av 3-4 leveranser. Mappen vurderes som en helhet og det gis en samlet individuell karakter.
30 April 14:00 (Canvas)
Georgios Marentakis Susanne Koch Stigberg

#### **Comments:**

There have been some difficulties regarding project work, teaching and lab access because of corona lockdown.



# Mappeeksamen – Individuell vurdering

The portfolio consists of 4 parts: Background essay, Sketching, Prototyping, and Evaluation. All assignments must be satisfactory (grade E or better) to pass the course. It should be visible what contributions the individual student provided for each assignment. This can be done by writing down the student name related to the assignment part. In the following a more detailed assessment guideline will be provided for each of the assignments.

## Background essay

Each team member will conduct a background search. This should contain at least two examples of similar interface technologies, existing artworks, commercial products or scientific articles. The review should discuss how these examples can support your project using Norman's design principles for good design. Summarize your findings in 1.5 pages and include proper citations. The team will synthesize the individual reports into one document and upload in canvas. It must be clear which part was written by which team member. There should be no duplicate examples or plagiarism within the group. The group report should include one extra section which defines your project and discuss how it is related to the provided examples. You are allowed to use the individual discussions. The group section should be not more than 1 page. The document should be formatted in 11pt, sans serif, single spaced. English / Norwegian.

### Assessment guidelines

	Α	С	Ε	F
Relevance of the examples	Highly relevant. The student connects two examples to the proposed topic in an excellent way	Relevant. The student connects the two examples to the proposed topic but there are some issues.	The student connects the two examples to the proposed topic in a loose way. Many open questions.	The student does not provide two examples or does not connect them to the proposed topic
Quality of the examples	Clear, comprehensive and understandable description	Clear and understandable description with some open questions	Basic description with major issues and open questions	Description is not understandable or missing
Use of design principles	Design principles are used in a logical and relevant way	At least one design principle is used	-	-
Proper citation	The student uses coherent scientific referencing style (e.g. APA, IEEE)	The student provides references for all examples	-	-
Project description	The group describes their selected topic and summarizing the individual findings in a comprehensive way	The group describes their selected topic and summarizing the main findings	The group described their selected topic	No group description

#### Sketching

In this assignment you will storyboard and sketch alternative interfaces for novel interactive experiences based on Ruby's world. You should explore how the user can interact with the interface using a storyboard and explore and specify alternatives for the interface's form and function using sketches. As seen in the lectures sketches and storyboards can use different media such as graphics, video or sonic elements.

- Each of you should create one storyboard. Storyboards should show the user, setting, goal and interaction without interface details. Remember that storyboards are more than pictures. Use the techniques presented in class (can be on paper, digital or video).
- Each of you should create 2 different sketches to explore form and function alternatives.
   Sketches should be concrete and show and explain your interface ideas. You decide on the level of detail. Remember that sketches are more than pictures. Use the techniques presented in class (can be on paper, digital or video). Use annotations like action elements such as arrows and highlights, comments and annotations that explain your design (what, how, why).
- As a group, create a common presentation with all individual sketches and storyboards, sorted by group member. Don't forget to add your name to your part of the presentation.

	Α	С	Ε	F
Quality of delivery	Clear, understandable and well-illustrated sketches and storyboards	Clear and understandable sketches and storyboards	Difficulties to understand sketches and storyboard	No sketches or storyboards or nonsense
Storyboard	The storyboard shows the user, setting, goal and interaction clearly. The storyline is understandable, and the chosen sketching technique is suitable for the storyboard.	The storyboard shows the user, setting, goal and interaction sufficient. The storyline is understandable but with some open questions.	The student has submitted a storyboard including a storyline.	No storyboard or not understandable
Sketches	At least two sketches that illustrate clearly and detailed two alternative ideas for a chosen interface component. The design annotations are well thought through and the sketching technique is suitable for exploring the ideas.	At least two sketches that illustrate two alternative ideas for a chosen interface component, they include some design annotations.	The student has submitted at least two sketches that show two alternative ideas for a chosen design idea.	Did not submit two sketches or not understandable
Relevance	The groups' design goal and choice of interface type is clearly stated and justified. The individual sketches and storyboard are relevant for the group's design goal and interface type.	The groups' design goal and choice of interface type is stated. The individual parts are relevant for the group.	The individual parts are somehow connected to the group.	The individual parts are missing or not relevant for the group.

#### Prototyping

The purpose of this submission is to prototype one of the ideas your group has developed. The goal of the prototyping process is to increase the fidelity of your sketches to *precisely* specify your solution. There are three things you should specify: role, look and feel, and interaction/implementation. We summarize here:

Role: What is the idea? Why do users interact with the system and what do they gain out of it? Essentially it is an updated storyboard, video story board, or role-play scenario. The role prototype should be a **detailed and precise** graphical storyboard or video storyboard (as an animation or role-play scenario). Max 1 page for the graphical storyboard / max 1 min for the video storyboard.

Look and Feel: The sensation evoked by the system, looks, sounds, haptic feedback. The prototype can be a collection of high-fidelity material such as 3D models, laser cutting files, photoshop or illustrator files of the final visual design, sound files, and instructions for fabrication. Everything required to build your prototype by third parties.

Interaction: The way the system responds to user actions. To specify the interaction model, create a flow diagram that shows the system input and output and the flow between them. Then think which prototyping technique is most appropriate to explore your interaction model: choose among Wizard of Oz, paper (or other material) prototyping, LEGO prototypes, physical prototypes. Create a short video to demonstrate the interaction model. Consider that you will not have access to the school's facilities when making your decision.

#### In summary the group deliverables are:

- 1 graphical or video storyboard. Max 1 page for the graphical storyboard / max 1 min for the video storyboard. (Role)
- minimum 5 files of high-fidelity material as specified in point 2. above (Look&Feel)
- 1 flow / sequence diagram with a short textual explanation (Interaction)
- 1 video of your interaction model. 3-5 minutes (Interaction)

# Assessment guidelines

	Α	С	Ε	F
Individual participation	The student has been participating in the group work in an excellent way	The student has participated in the group assignment a good way	The student has participated in the group work in a satisfactory	No or unsatisfactory participation
Role prototype	High-fidelity graphical storyboard or video storyboard that shows the user, setting, goal and interaction detailed and precise.	Graphical storyboard or video storyboard that shows the user, setting, goal and interaction in an understandable and clear way.	Graphical storyboard or video storyboard with major shortcomings	No or unsatisfactory storyboard
Look & Feel prototype	An entire collection of high-fidelity material needed to create a look&feel prototype of excellent quality.	A collection of high- fidelity material needed to create a look&feel prototype of good quality.	At least 5 high- fidelity material of satisfactory quality.	Less than 5 high fidelity materials
Interaction prototype	An exhaustive description of the interaction model using flow diagrams and video demonstration	A good description of the interaction model using a flow diagram and a video demonstration	Both flow diagram and video have satisfactory quality but are lacking information on the interaction model.	No diagram or video of interaction model
Overall quality	The group delivery is coherent and has an overall high quality.	The group deliver is coherent.	-	

#### Evaluation

In this assignment you will perform an expert evaluation of your prototypes. You can choose between **heuristic evaluation** or **cognitive walkthrough**. Both expert evaluation methods (**heuristic evaluation** or **cognitive walkthrough**) are performed individually and then the findings are summarized in a group report.

Each group member should use the same method for evaluation. The group report should have the following structure:

- Group page with choice of method and user tasks
- Individual expert evaluation student 1
- Individual expert evaluation student 2
- Individual expert evaluation student 3
- Individual expert evaluation student 4
- Individual expert evaluation student 5
- Group summary with recommendations

The document should be formatted in 11pt, sans serif, single spaced. English / Norwegian.

Here is a plan for performing expert evaluation:

#### Heuristic evaluation

- 1. As a group: Select appropriate heuristics. Look in <u>Evaluating Module</u> for explanation. You can choose from:
  - Nielsen heuristics
  - Board game heuristics
  - Ambient display heuristics
  - o Schneiderman 8 Golden Rules
  - o Or a heuristic set that you find in appropriate literature.
- 2. As a group: Create relevant tasks (one per person) for your application based on the prototypes.
- 3. Individually: Apply the heuristics to investigate the performance of the tasks you have created using your prototype and write down your findings (both positive and negative). Use the same finding report template from the presentation or the internet.
- 4. As a group: Summarize the individually findings, order them by severity and provide recommendations for improving the prototype to resolve any negative findings.

#### Cognitive walkthrough

- 1. As a group: create relevant tasks (one per person) for your application based on the prototypes
- 2. As a group: provide the optimal steps that are required to complete the task.

- 3. As an individual: for all tasks go through each step and ask the three cognitive walkthrough questions (found on page 18 in the <u>presentation</u>)
- 4. As an individual: document your findings using a common finding report template.
- 5. As a group: Compile a summary of the individual reports and provide recommendations for improving the prototype to resolve any negative findings.

## Assessment guidelines

	Α	С	Ε	F
Method selection	The method selection is discussed comprehensive providing an excellent argument for the choice	The group provides a good explanation for the method selection	The group has defined what method was selected	No information about chosen method
User Tasks	The group provides meaningful and thoroughgoing tasks for the evaluation	The group provides a set of the major user tasks for the evaluation.	The group provides a set of tasks with essential shortcomings.	No tasks are provided.
Individual report	The evaluation report is excellent.	The evaluation report follows the presented template and documents major findings.	The evaluation report has several shortcomings	No evaluation report or not understandable
Group report	The group report is excellent.	The group report summarizes the major findings and includes a list of recommendations	The group report has several shortcomings	No summary or recommendations