UiA
University of Agder
Norway

IS-104: Digital Interaction Design

Lecture 10: Wrap-up

Geir I. Hausvik & Mohammad Tafiqur Rahman

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Goals for today

A. Assessment

B. Types of exam questions

C. Some advices for the exam

D. Brief recap of some topics

A. Assessment

Assessment

Grade	Description
A – Excellent	An excellent performance, clearly outstanding. The candidate demonstrates excellent judgement and a high degree of independent thinking.
B – Very good	A very good performance. The candidate demonstrates sound judgement and a very good degree of independent thinking
C - Good	A good performance in most areas. The candidate demonstrates a reasonable degree of judgement and independent thinking in the most important areas.
D – Fairly good	A satisfactory performance, but with significant shortcomings. The candidate demonstrates a limited degree of judgement and independent thinking.
E - Sufficient	A performance that meets the minimum criteria, but no more. The candidate demonstrates a very limited degree of judgement and independent thinking.
F - Fail	A performance that does not meet the minimum academic criteria. The candidate demonstrates an absence of both judgement and independent thinking

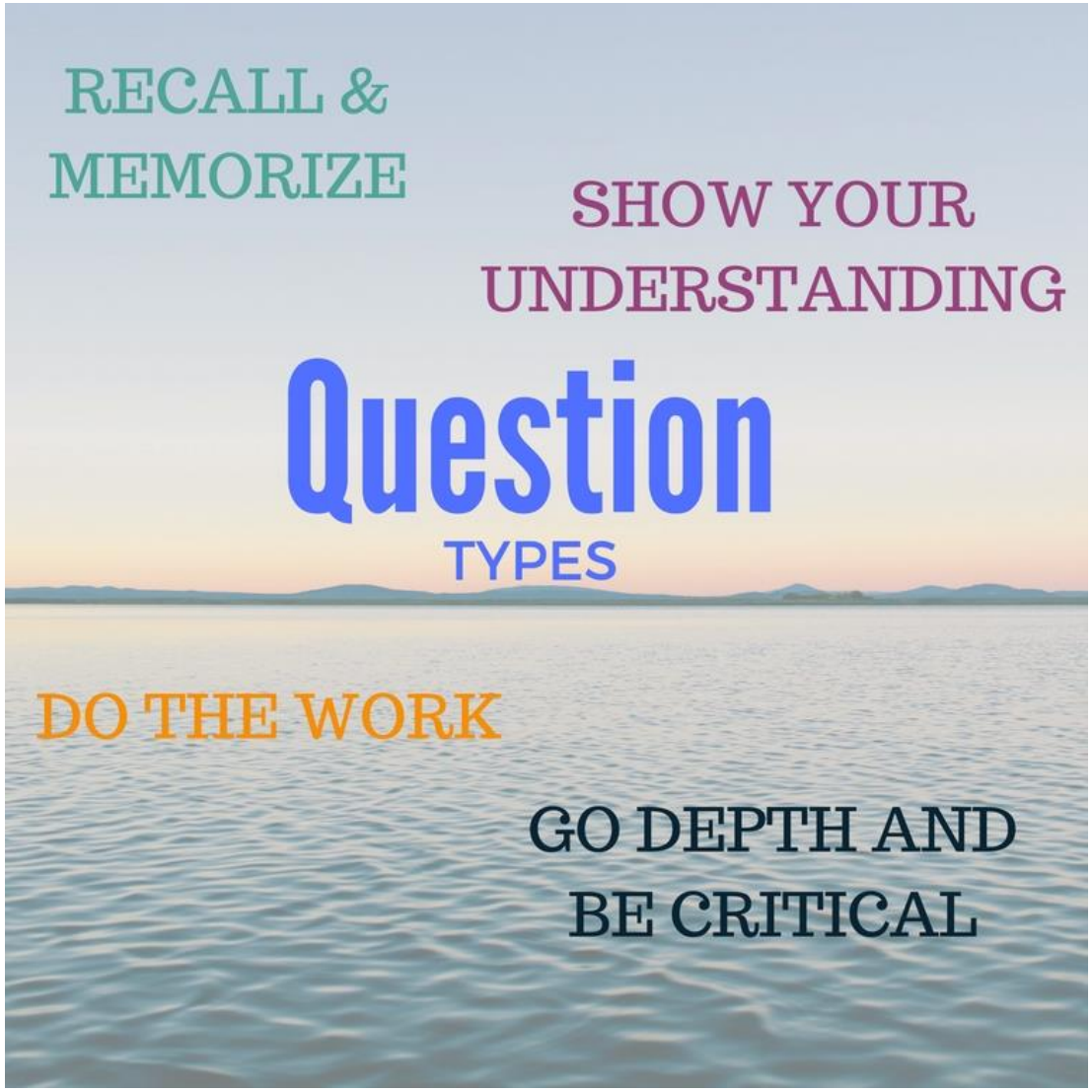
Assessment

- 40% group project
  - All deliverables have to be completed to take the exam
- 60% individual written exam

B. Types of exam questions

Types of questions

- Multiple Choice Questions
- Identify and explain what is incorrect
- Statement falsification/verification
- Provide explanations, definitions, and examples
- Working on a case



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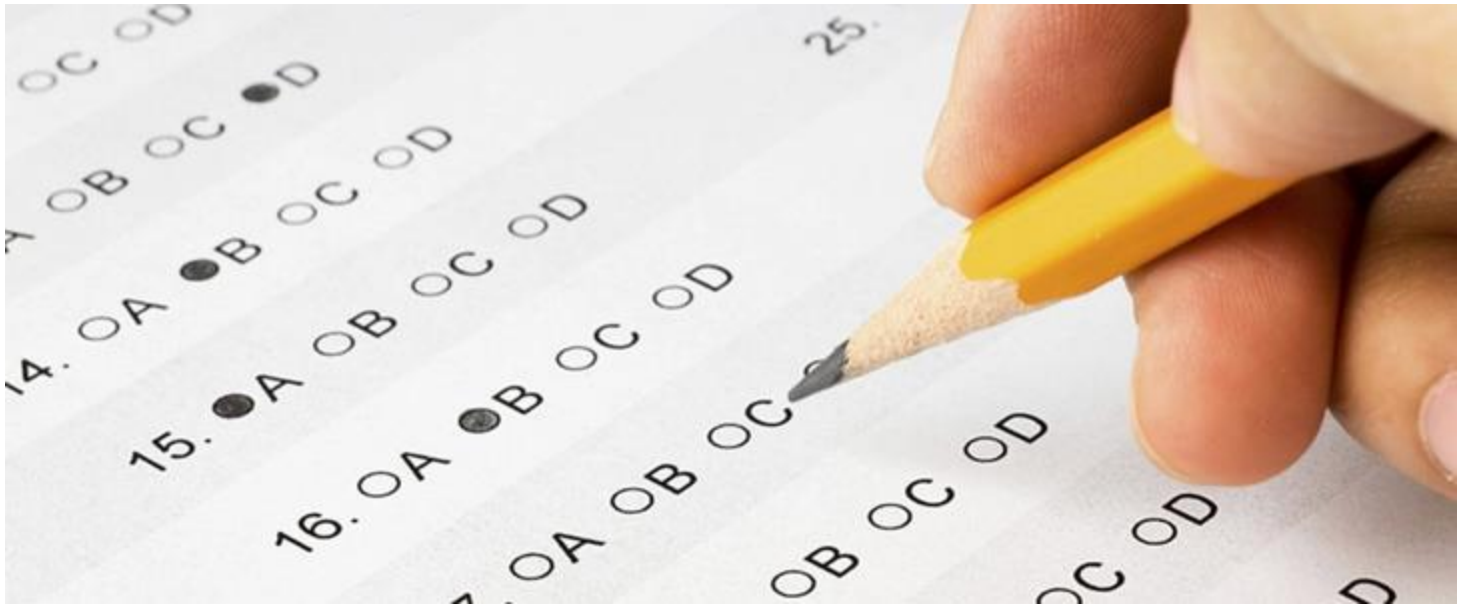
MULTIPLE CHOICE QUESTIONS (MCQ)

- Which is the centered technique of UX design

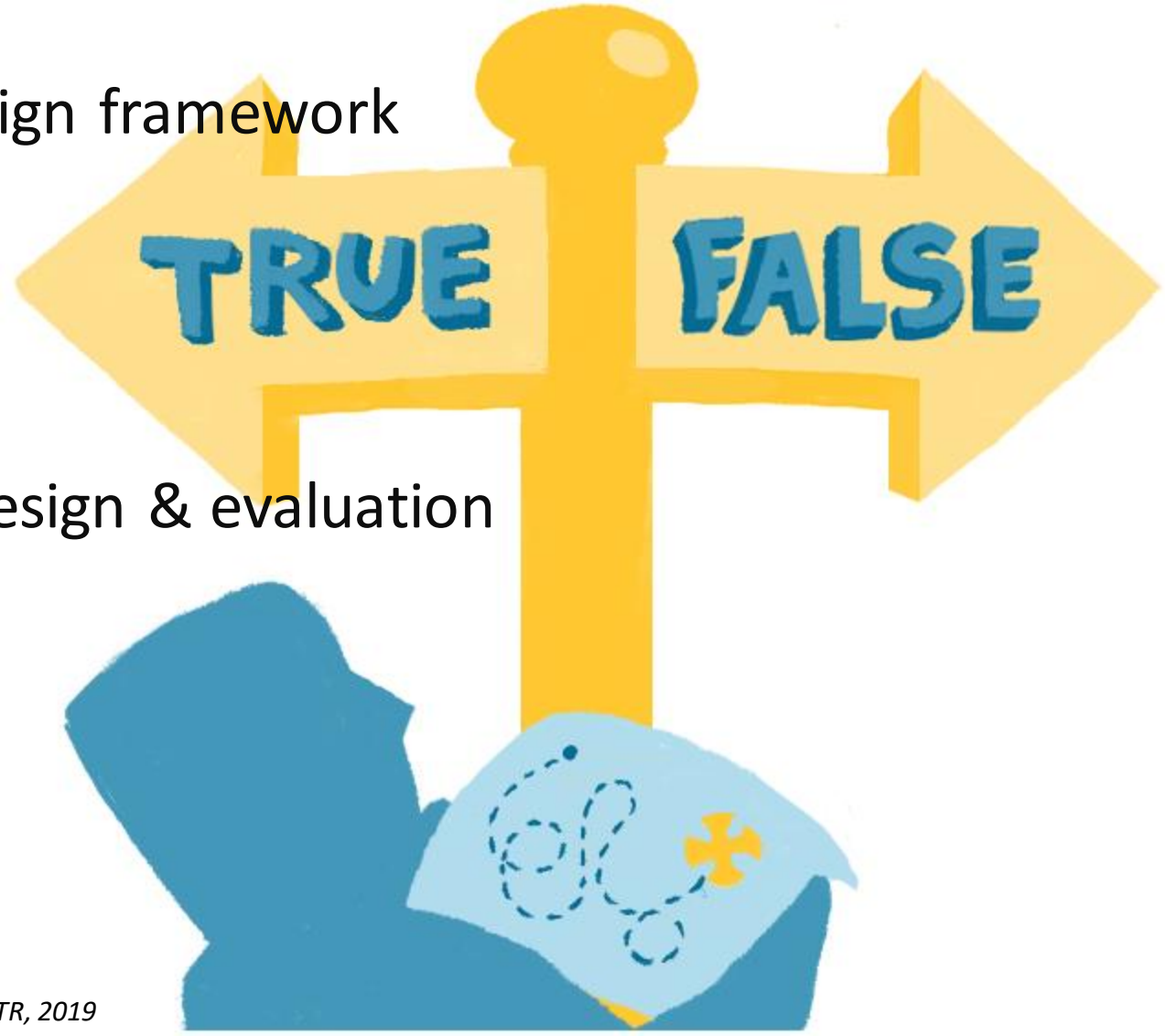
a) Understanding
b) Envisionment
c) Design
d) Evaluation



MULTIPLE CHOICE QUESTIONS (MCQ)

- What is not included in the UX design framework

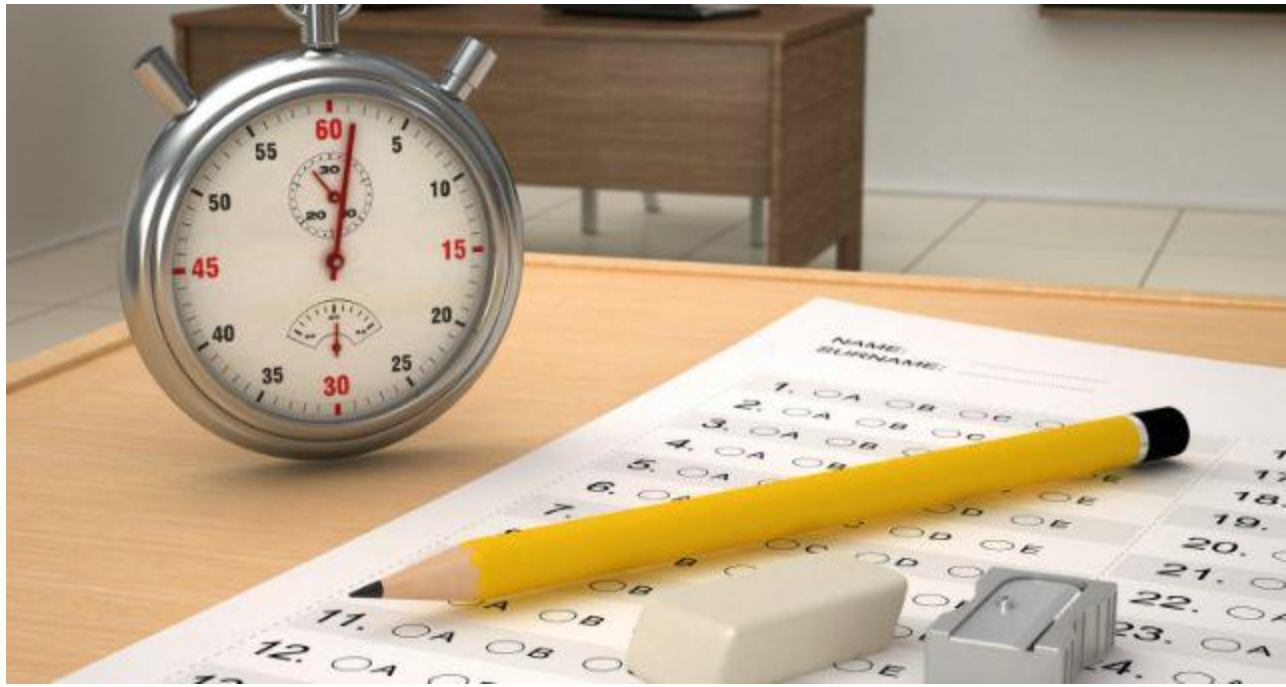
a) People & their activities
b) Contexts & utilized technologies
c) Understanding, envisionment, design & evaluation
d) All of the above



Multiple Choice Questions (MCQ)

- What are the key concerns of task analysis

a) Goals
b) Tasks
c) Action
d) All of the above



Multiple Choice Questions (MCQ)

- By using data analytic services, designers can examine design's

a) Visibility
b) Flexibility
c) Navigation
d) None of the above

IDENTIFY AND EXPLAIN WHAT IS INCORRECT

- Identify which of the following is INCORRECT (more than one can be incorrect). In the space provided, first note the incorrect statement(s) (a, b, c, d) and then, briefly, explain what is wrong

Structured interviews:

a) can be used for understanding what people want from a digital solution

b) use predefined questions that need to be followed

c) allow interviewers to follow-up on unexpected responses exploring new topics

d) always take more time to prepare, perform, and process than questionnaire-based surveys

IDENTIFY AND EXPLAIN WHAT IS INCORRECT - EXAMPLE

Identify which of the following is INCORRECT (more than one can be incorrect). In the space provided, first note the incorrect statement(s) (a,b,c,d) and then, briefly explain what is wrong.

Structured interviews:

a) can be used for understanding what people want from a digital interaction solution.

b) use predefined questions that need to be followed.

c) allow interviewers to follow-up on unexpected responses exploring new topics.

d) always take more time to prepare, perform and process than questionnaire-based surveys.

Fill in your answer here

Format | B I U x_2 x^2 | I_x | | | | | | Ω | | | ∑ |

Words: 0/50

Maximum marks: 5

STATEMENT FALSIFICATION/VERIFICATION

- Read the following statement (which is in bold letters). In your answer, first state if the statement is correct or incorrect and the explain your answer briefly.

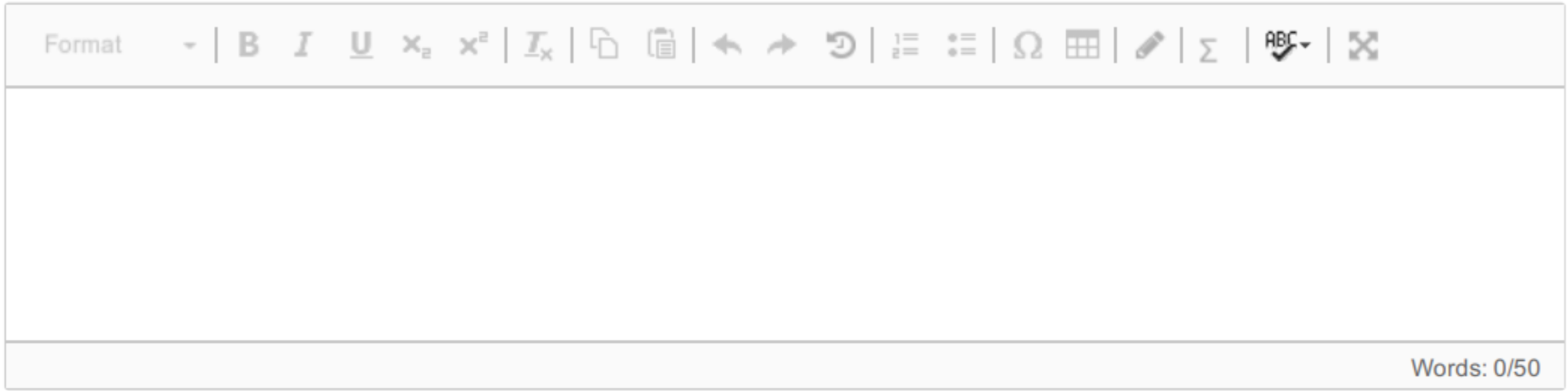
In a controlled experiment where we want to evaluate the impact of alternative button positions on the speed of completing a task, the independent variable ill be the completion time measured, and the dependent variable will be the different positions of the buttons tried out.

Statement falsification/verification - Example

Read the following statement (which is in bold letters). In your answer, first state if the statement is correct or incorrect and then explain your answer briefly.

In a controlled experiment where we want to evaluate the impact of alternative button positions on the speed of completing a task, the independent variable will be the completion time measured and the dependent variable will be the different positions of the button tried out.

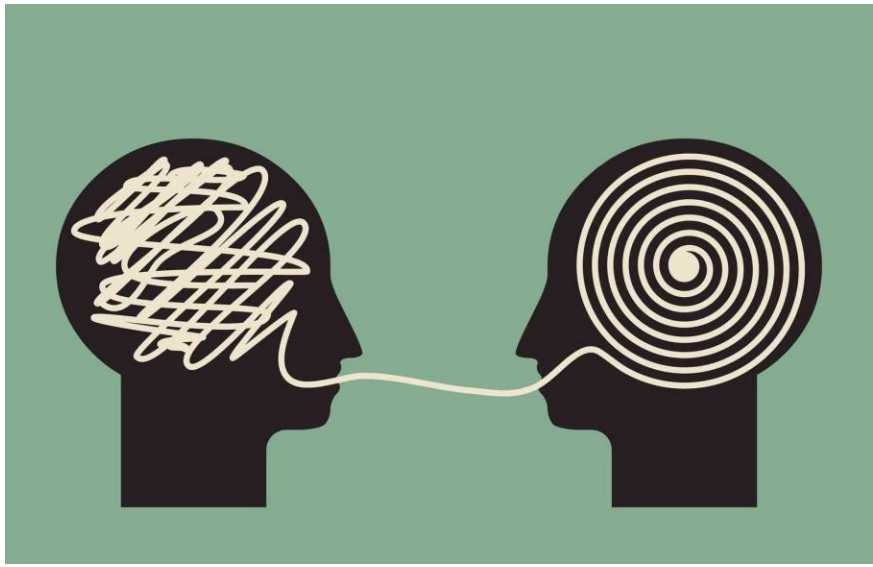
Fill in your answer here



Maximum marks: 5

Provide explanations, definitions, and examples

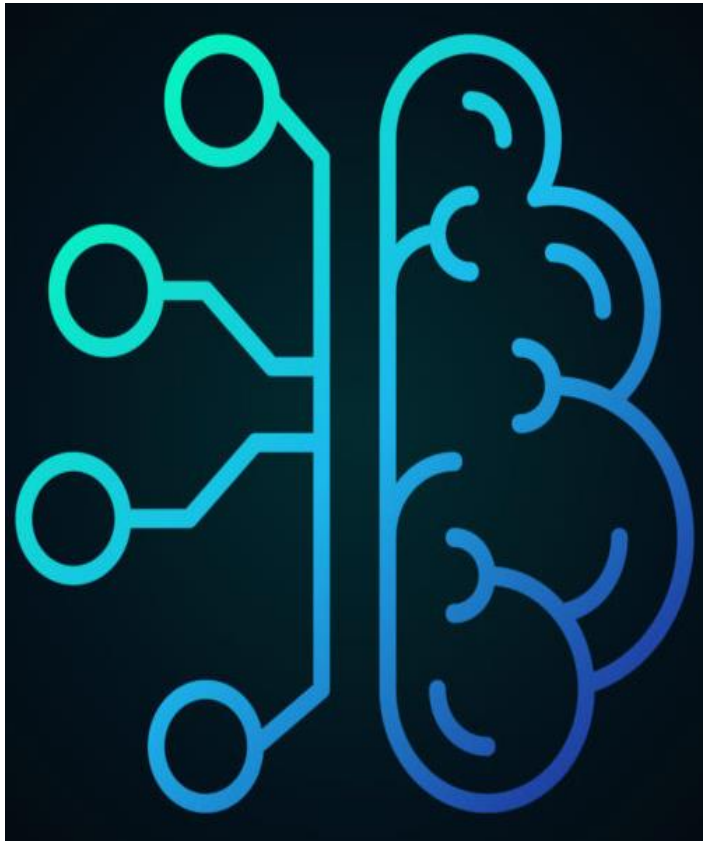
- How can people be restricted from accessing an interactive system? Explain with examples.
- Define the elements of PACT framework? What are their varying criteria? Describe with suitable examples.
- Why design principles are needed? Name and briefly explain each design principle you learned in this course.



Provide explanations, definitions, and examples

- Explain why you need to ensure that the people involved in participant evaluation are representative of the prospective system users. Provide examples of people involved in the evaluation for your semester assignment.

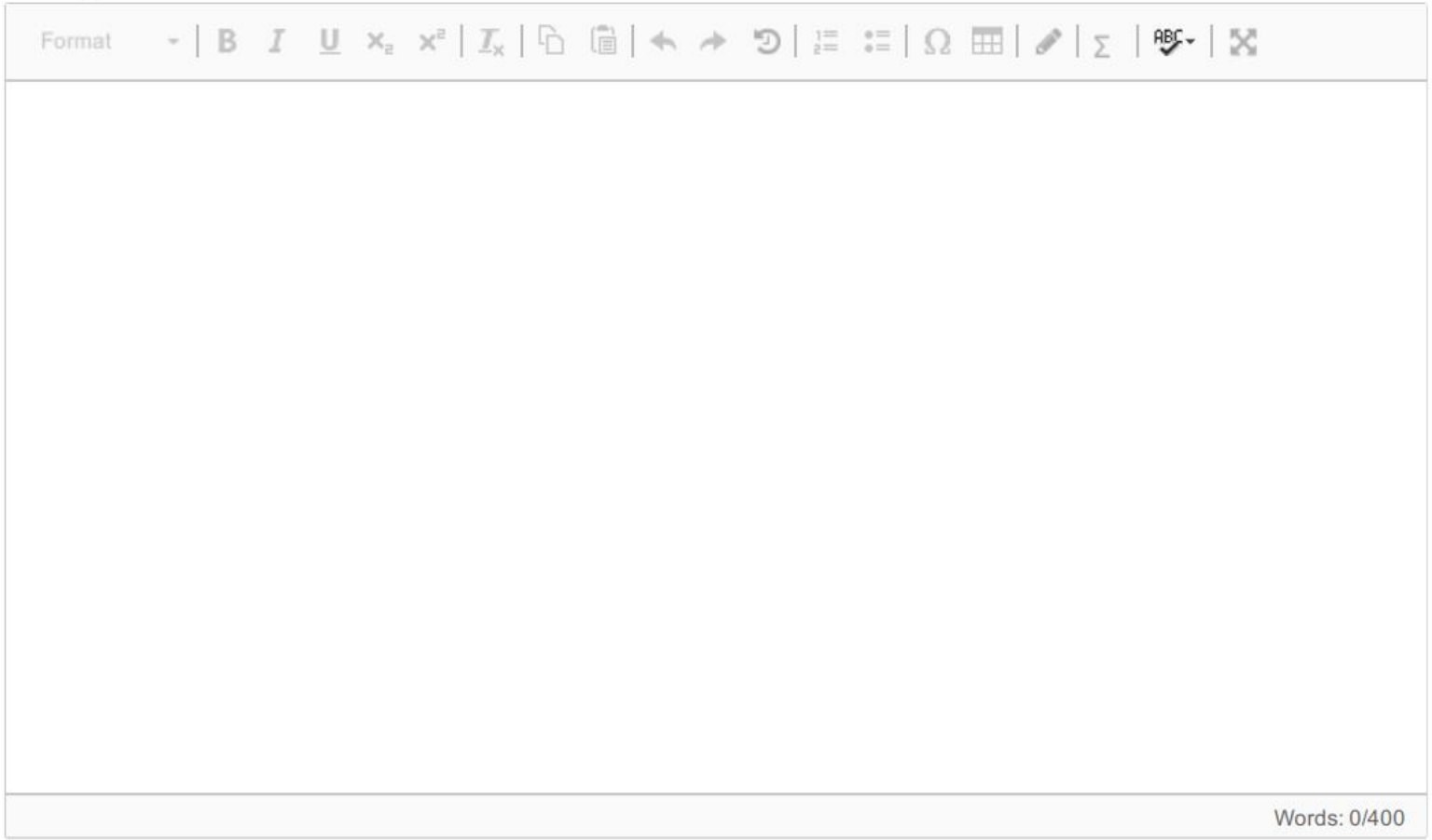
- What are the differences between high fidelity and low fidelity prototypes? Provide one key strength and one key weakness for high fidelity prototypes and one key strength and one key weakness for low fidelity prototypes.



EXPLANATIONS, DEFINITIONS, AND EXAMPLES - EXAMPLE

What are the differences between (a) a Cognitive Walkthrough and (b) a Cooperative Evaluation of a user interface? Describe how you would set up and perform a Cognitive Walkthrough and how you would set up and perform a Cooperative Evaluation of a user interface.

Fill in your answer here

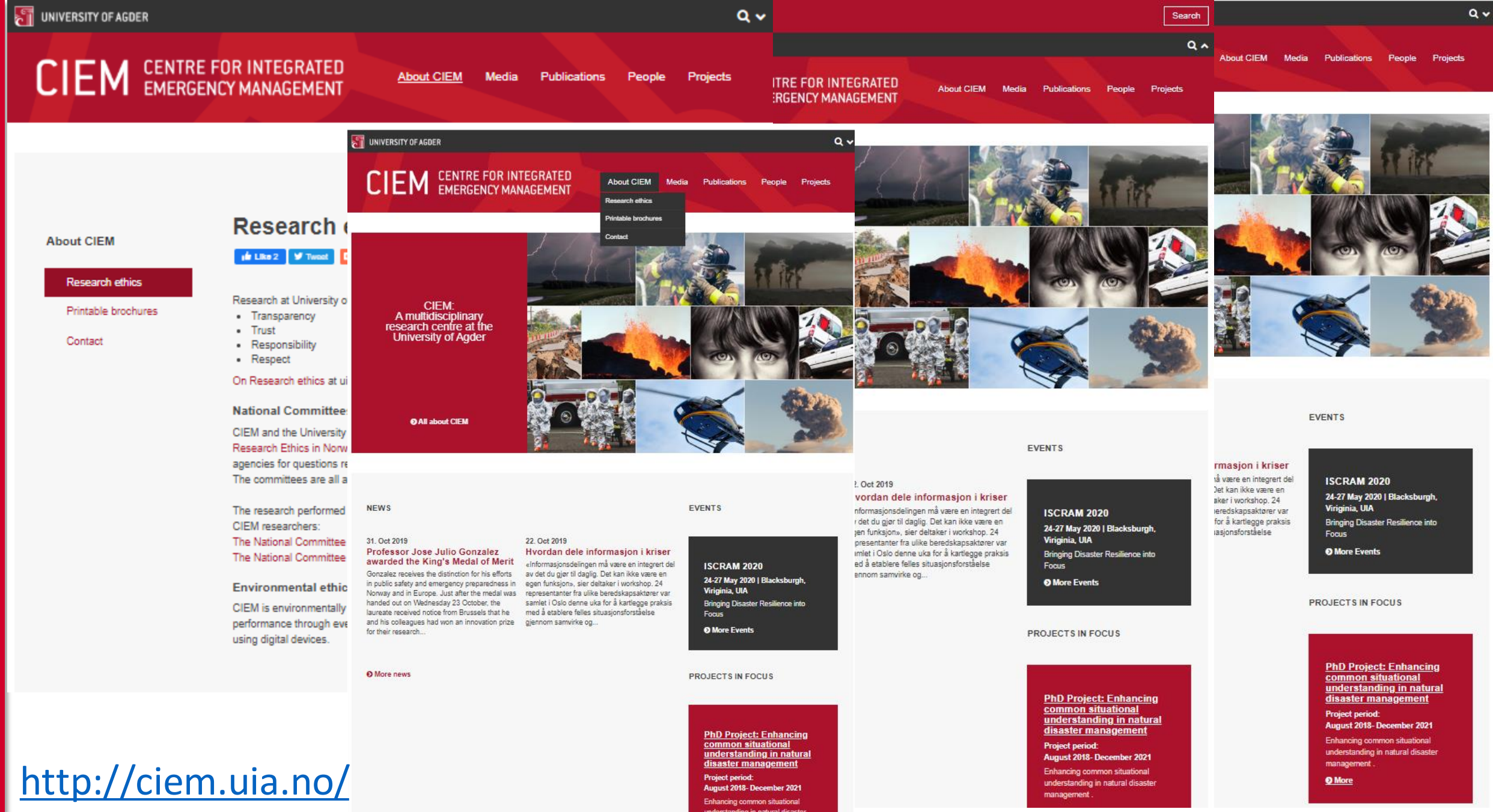


Maximum marks: 15

WORKING ON A CASE

1. You may be provided with a description of scenario and a set of screenshots from a real interface and asked to perform a heuristic evaluation using selected design principles. For example, you can be asked to evaluate the interface depicted in the screenshots in terms of:

   - Visibility
   - Consistency
   - Familiarity
   - Affordance
   - Navigation
   - And so on……..



http://ciem.uia.no/

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Working on a case

2. You may be provided with a description of a design problem and asked to answer questions regarding the process that needs to be followed. For example:

Amazon is an online business giant. It has millions of clients who use amazon.com site for purchasing. To keep its growth in online business, Amazon wants to make the process smoother for purchasing books. You are hired for this project and you are asked to prepare a plan for this. Describe the key activities that need to be performed and their timing. You will also be assessing the usability (how complex/easy) of amazon.com website in order to purchase books.

(in the exam, a more extensive project brief may be provided)

Working on a case - Example

UiA uses an Employee Self Service application to refund expenses for travelling. Employees have access to this application for registering and monitoring travel expenses that are paid back by the University. For each travel, some general data need to be entered first (for instance, the start and end date of the travel, the destination, the reason for traveling). After this first step, the second step is to register specific expenses paid for the travel (e.g. flight tickets, hotel, etc.) and attach scanned copies of receipts.

Figure 1 shows the screen of this application that is used for registering specific expenses related to a selected trip. Users can register a new expense by selecting “ny post” and then adding information about the expense (e.g. the expense type (utgiftstype), amount (bilagsbeløp), currency (bilagsvaluta), date (bilagsdato), etc.). Figure 2 shows how the screen looks like after registering information about three expense bills. To upload scanned copies of the expense receipts, the users have to click on the number that appears in a parenthesis in the column labelled "arkiverte bilag". When clicking there, a pop-up window appears (Figure 3) for uploading the files of the scanned receipts. The users have to select the appropriate file and click the text “last opp bilde”.

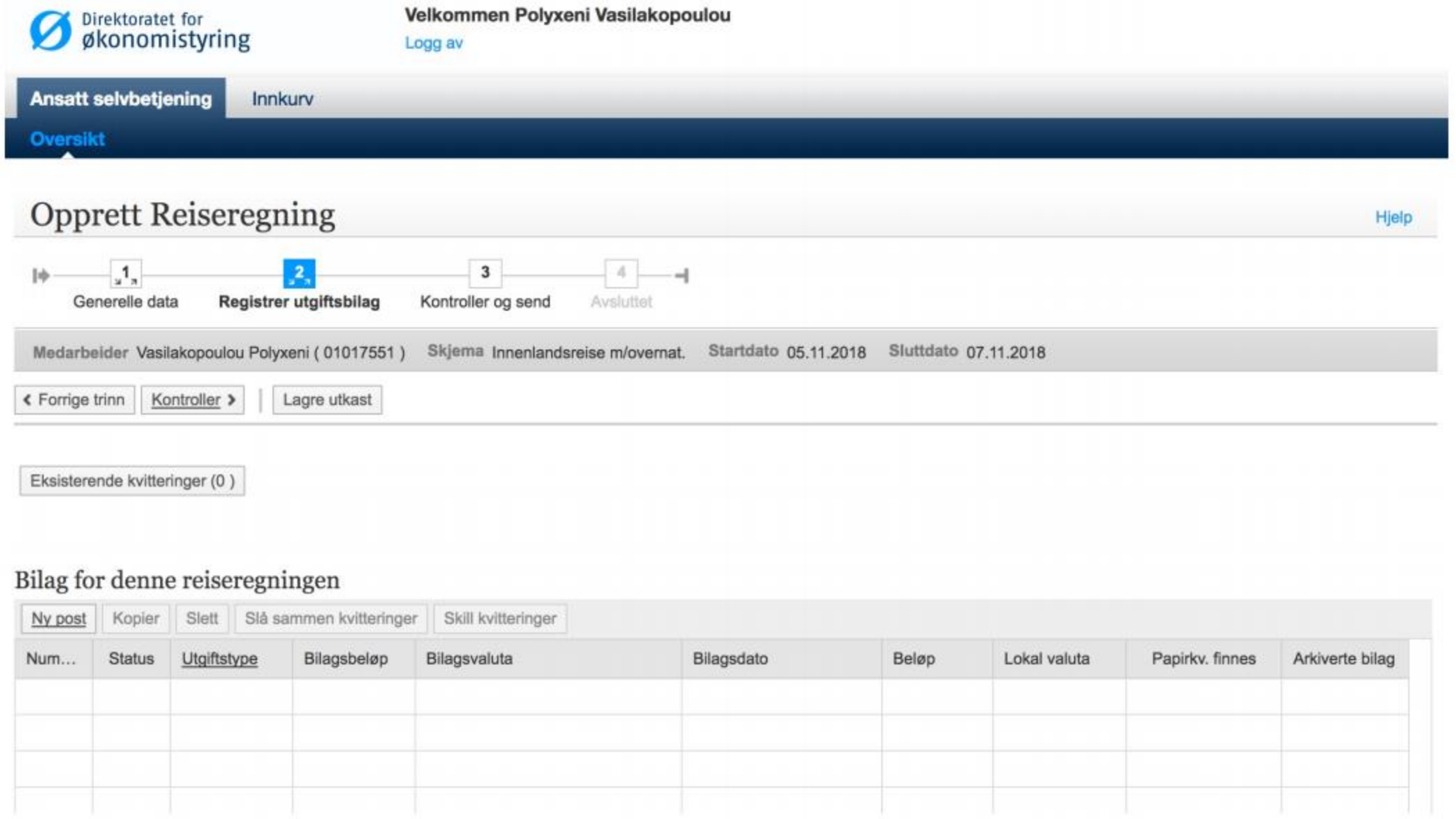
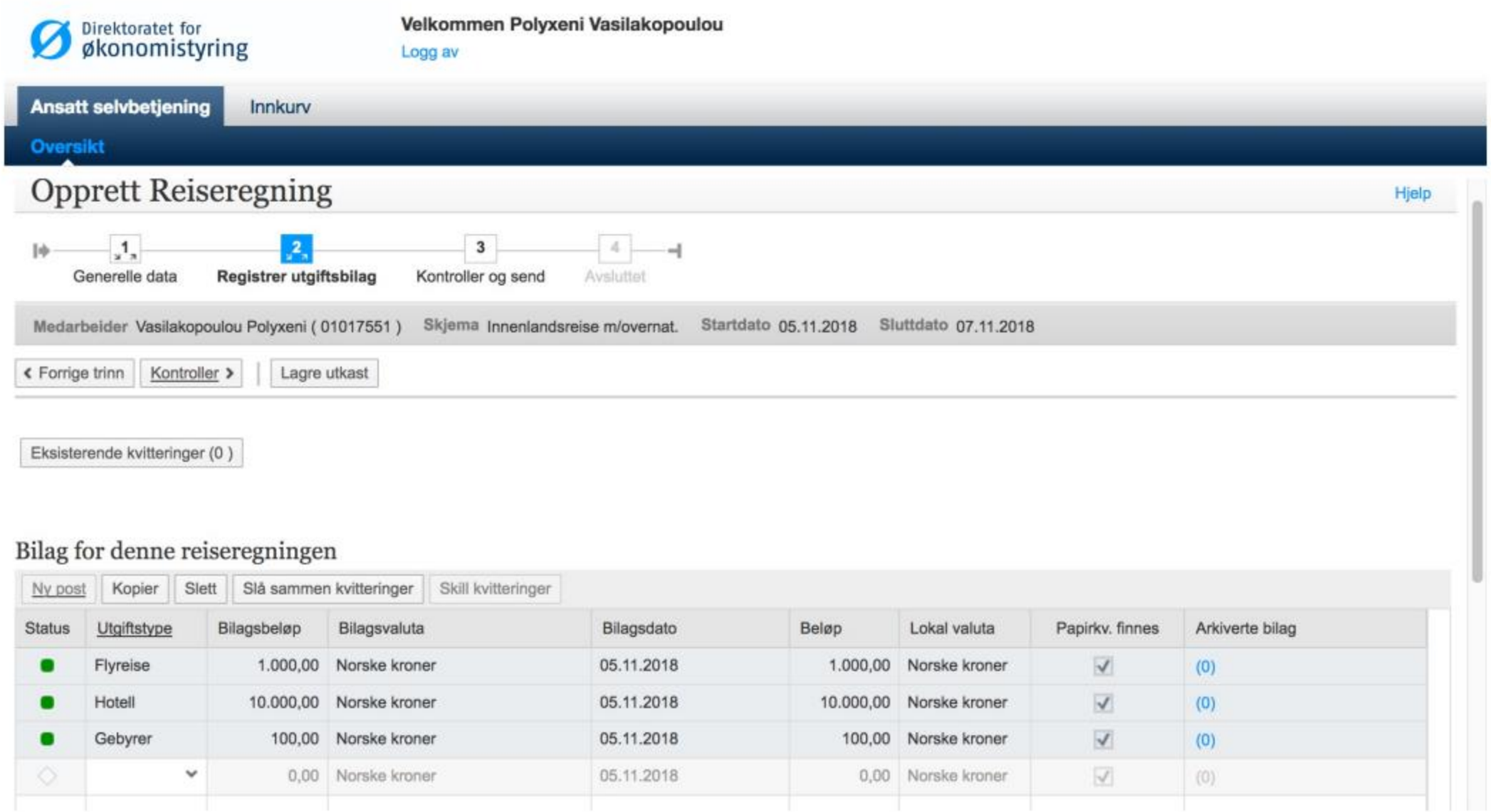

Direktoratet for økonomistyring
Velkommen Polyxeni Vasilakopoulou
Logg av
Ansatt selvbetjening
Innkurv
Oversikt
Opprett Reiseregning
Hjelp
1 Generelle data
2 Registrer utgiftsbilag
3 Kontroller og send
4 Avsluttet
Medarbeider Vasilakopoulou Polyxeni (01017551)
Skjema Innenlandsreise m/overnat.
Startdato 05.11.2018
Sluttdato 07.11.2018
Forrige trinn
Kontroller
Lagre utkast
Eksisterende kvitteringer (0)
Bilag for denne reiseregningen
Ny post
Kopier
Slett
Slå sammen kvitteringer
Skill kvitteringer
Num…
Status
Utgiftstype
Bilagsbeløp
Bilagsvaluta
Bilagsdato
Beløp
Lokal valuta
Papirkv. finnes
Arkiverte bilag

FIGURE 2: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Ny post
Kopier
Slett
Slå sammen kvitteringer
Skill kvitteringer
Status
Utgiftstype
Bilagsbeløp
Bilagsvaluta
Bilagsdato
Beløp
Lokal valuta
Papirkv. finnes
Arkiverte bilag
Flyreise 1.000,00 Norske kroner 05.11.2018 1.000,00 Norske kroner (0)
Hotell 10.000,00 Norske kroner 05.11.2018 10.000,00 Norske kroner (0)
Gebyrer 100,00 Norske kroner 05.11.2018 100,00 Norske kroner (0)
0,00 Norske kroner 05.11.2018 0,00 Norske kroner (0)

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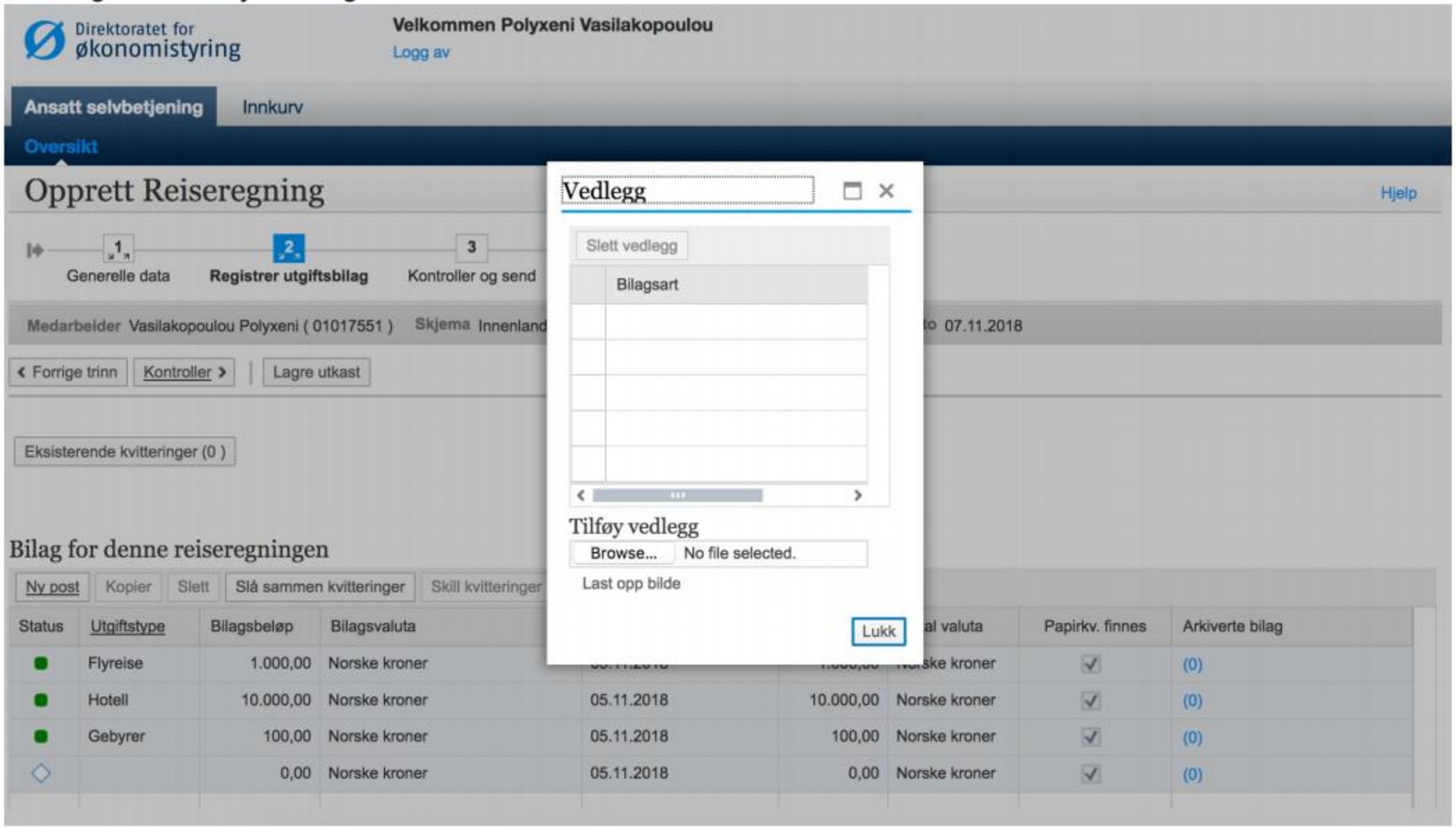


Take some time to study the user interface presented in Figures 1, 2 and 3. Think that you are an employee that wants to use it for the first time without having anyone nearby for help. After studying the user interface you are asked to:

a) Perform a heuristic evaluation using the principles of: Visibility, Familiarity and Affordance. In your answer you will need to be specific about the three principles and identify both positive and negative aspects of the user interface. Positive aspects are examples of the interface that follow a principle and negative aspects are examples of the interface that go against a principle. You can use examples from Figure 1 or Figure 2 or Figure 3 or all of them. The answer needs to include for each of the three principles: a short description of the principle ´s meaning and at least one negative and one positive example from the interface including a brief explanation showing how the principle is followed or not followed.

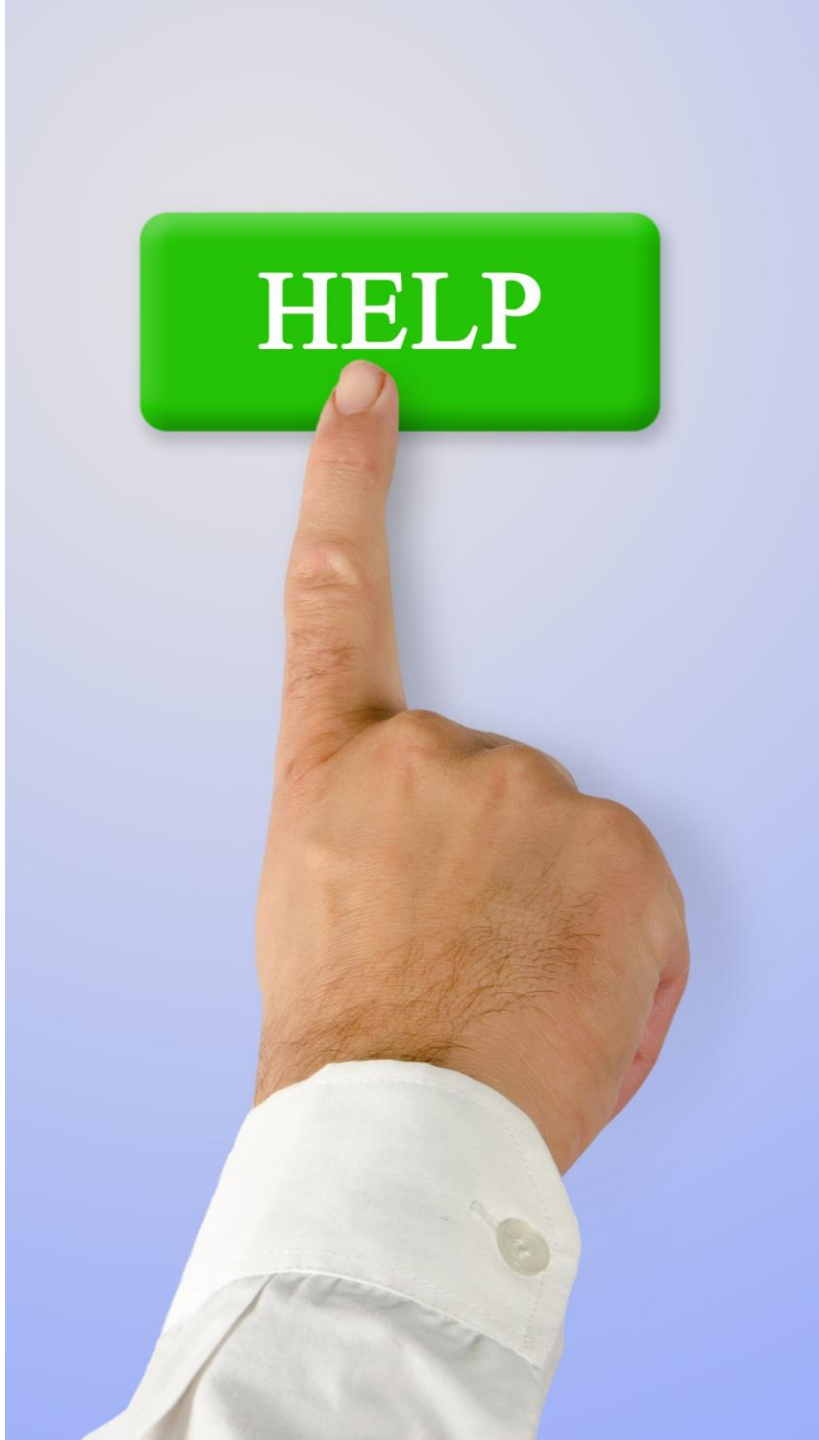
b) Propose a process for improving this user interface (presented in Figures 1, 2 and 3). In your answer you will need to specify what activities will have to be performed and in what sequence. For this, you will have to think in terms of the key activities of understanding, designing, envisioning, evaluating. Furthermore, you will need to specify how the users will be involved during the overall process. Be specific about user involvement explaining in which activities users will have to participate and what methods will have to be used for their involvement.

Fill in your answer here

C. GENERAL ADVICE ABOUT THE EXAM

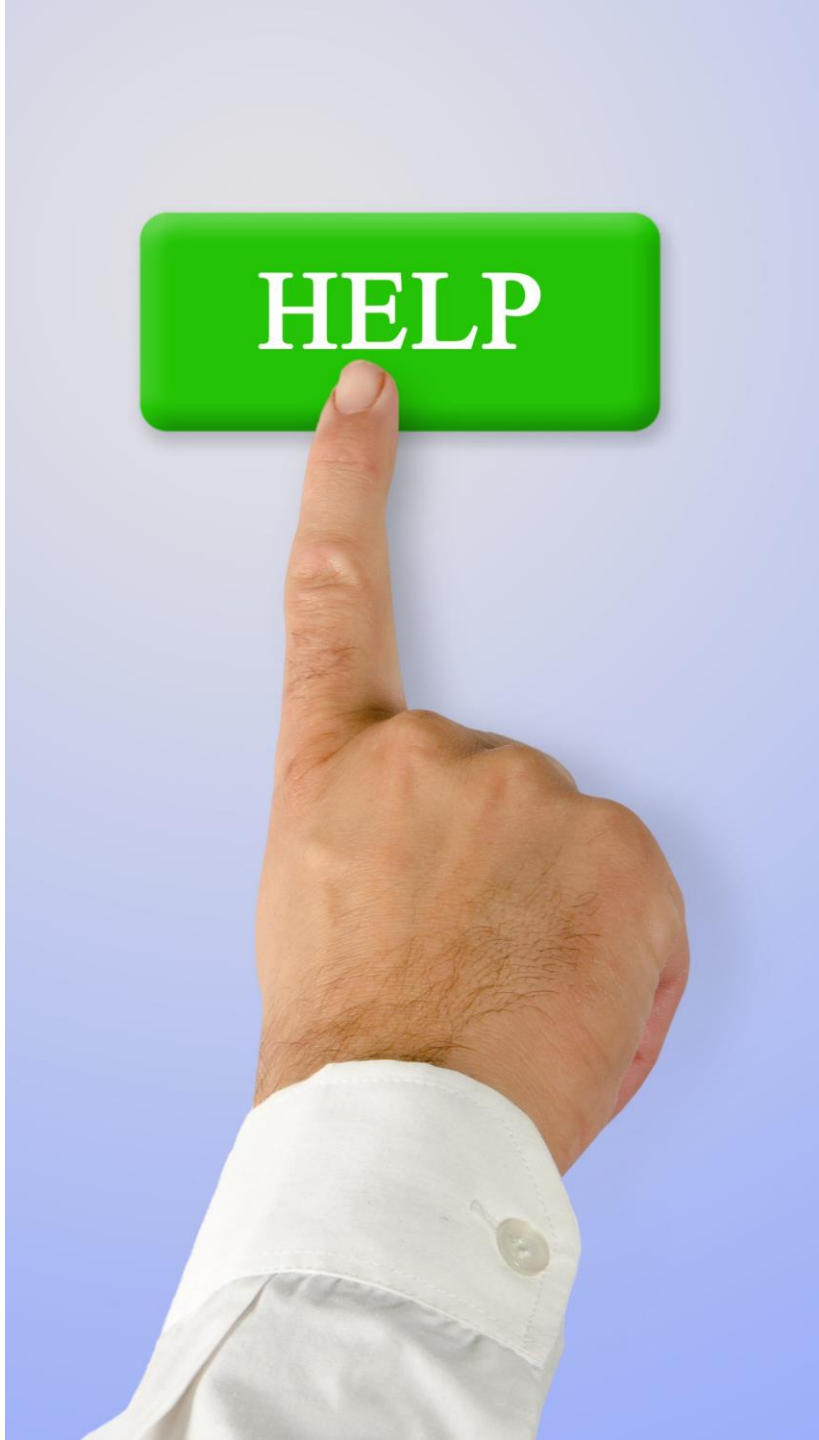
Advices

- Make sure you know where the exam takes place and when you are scheduled. Exam room allocation and candidate numbers will be posted on Studentweb prior to the exam
- You should bring your laptop and a charger
- Remember to bring valid identification (studentcard, driver's license etc.)
- You should be in the exam room 30 minutes before the exam starts. You can find useful information in the UiA exam page: https://www.uia.no/en/student/examinations/written-examinations. If you have further questions, please contact the exam office



Advices

- The exam will be in Inspera, in Norwegian and English - you can bring a dictionary
- If written in English - use Norwegian words when not sure
- If written in Norwegian – you can use English words when difficult to translate
- Even if you don’t know the complete answer, answer as much as you can
- Use examples to explain things
- Read the questions carefully
- Think before you answer
- Prioritize the time



D. BRIEF RECAP

Recap

The questions that follow are for refreshing your memory of past lectures to initiate discussion and clarify things that you are unsure about.

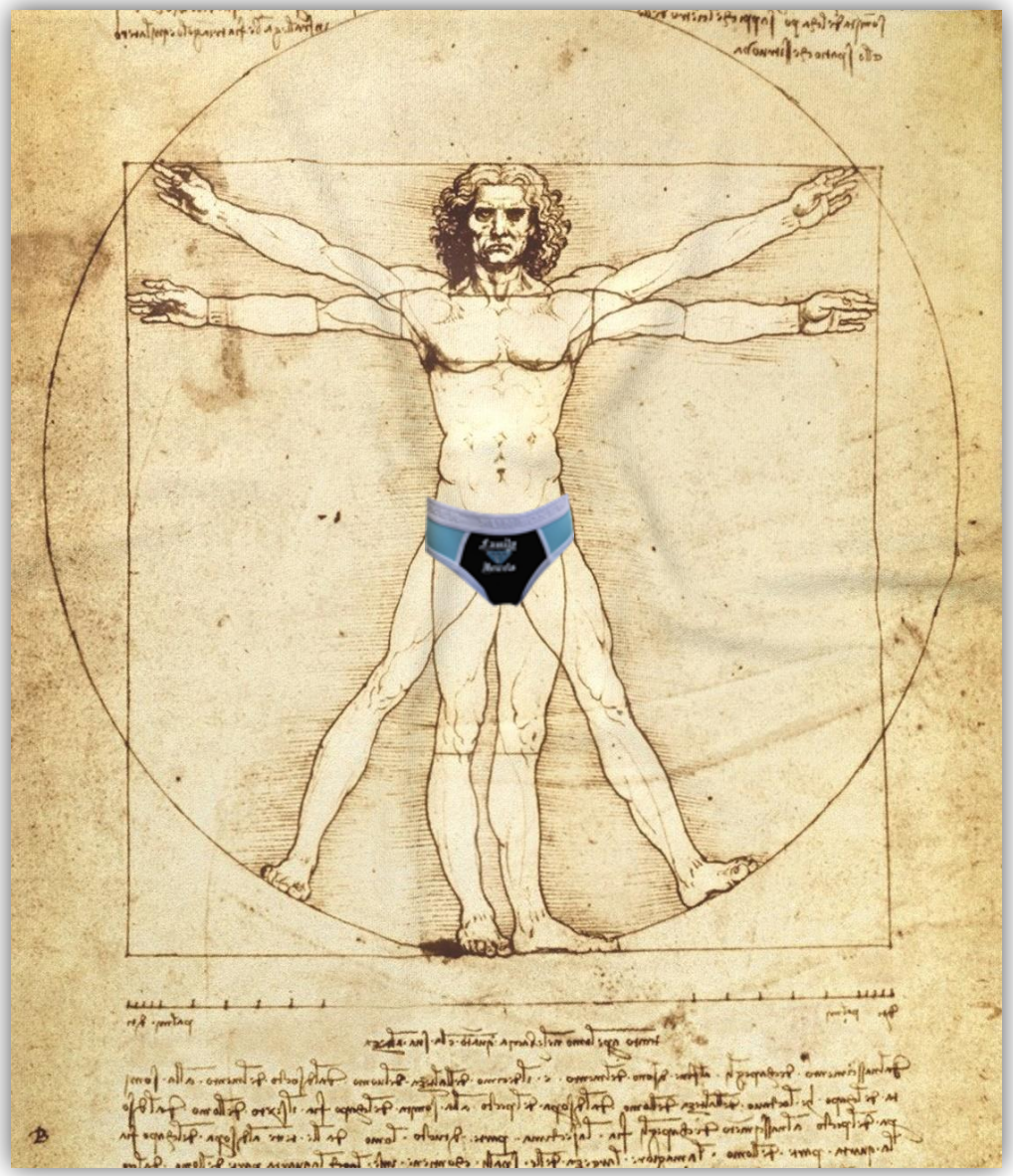
The questions are included to facilitate the repetition in class today. **They are not fully covering all the course content. You have to study the slides and book chapters.**

Note that the actual exam questions will be similar to the styles presented in the first part of the presentation and may require combining knowledge from multiple chapters.

From Chapter 2 - PACT

Q1: Explain what the letters P, A, C, T stand for in PACT analysis

Q2: Provide a PACT analysis for your semester project (explain P, A, C, T in terms of your project)



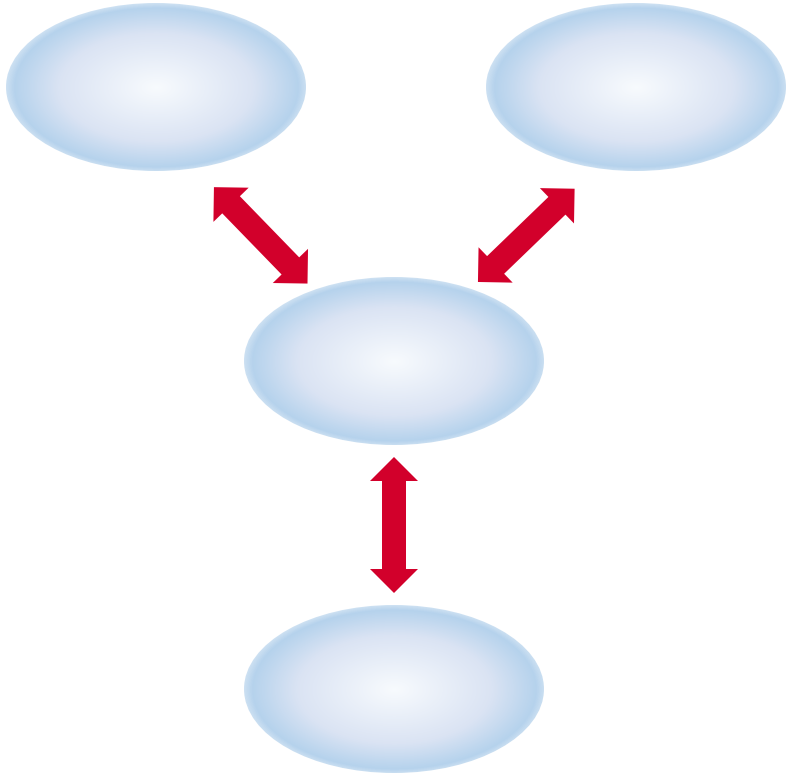
FROM CHAPTER 3 – HUMAN-CENTERED UX DESIGN

Q1: Can you describe the four key activities for designing digital interaction? (name them, briefly describe each one and how they relate to each other)

Q2: Explain how you followed the four key activities in your group project

Q3: Can you describe what are “personas” and how they are developed? In which activities do we use them?

Q4: Can you describe how are personas and scenarios used in the overall process of designing digital interaction? How did you use them in your group project?



From Chapter 5 - Usability

Q1: What do we mean by the term “usability” and what do we mean by the term “accessibility” for user interfaces?

Q2: Explain the principle of “Visibility”. Give an example of good Visibility and an example of bad Visibility in a user interface

The same question holds for Consistency, Familiarity, Affordance, Navigation, Control, Feedback, Recovery, Constraints, Flexibility, Style, Conviviality.

From Chapter 6 – Experience design

Q1: What is the key aim of designing for User Experience?

Q2: Name two different types of pleasure that can be provided to users through the interface.

Q3: How is the design for accessibility different to the design for user experience?

From Chapter 7 - Understanding

Q1: Name three different methods for “understanding” and briefly describe them. Which methods for understanding did you use for your group project and why?

Q2: What are the different types of interviews? Which type of interviews did you perform for your project and why?

Q3: Randi developed a new user interface for a train ticket vending machine and is running a pilot in Kristiansand station. She installs a camera and records the first 100 users. The aim is to analyze the observations to evaluate the interface. She studies the user expressions and the differences in the time needed to complete the task in order to assess user satisfaction. Are there any methodological issues with this approach? Are there any ethical issues with this approach?

From Chapter 7 - Understanding

Q1: Name three different methods for “understanding” and briefly describe them. Which methods for understanding did you use for your group project and why?

Q2: What are the different types of interviews? Which type of interviews did you perform for your project and why?

Q3: Vy plans to develop a new user interface for their train ticket vending machines. They install a camera at Kristiansand train station and record the first 100 users. The aim is to analyze the observations to evaluate the current interface. They study the user expressions and the differences in the time needed to complete the task in order to assess the user satisfaction. Are there any methodological issues with this approach? Are there any ethical issues with this approach?

From Chapter 8 - Envisionment

Q: What is a wireframe?

Q: What is a reason for using both wireframes and navigation maps, what are the limitations of using only one of the two?

Q: Why do we make prototypes? What is the difference between hi-fi and lo-fi prototypes?

FROM CHAPTER 9 - DESIGN

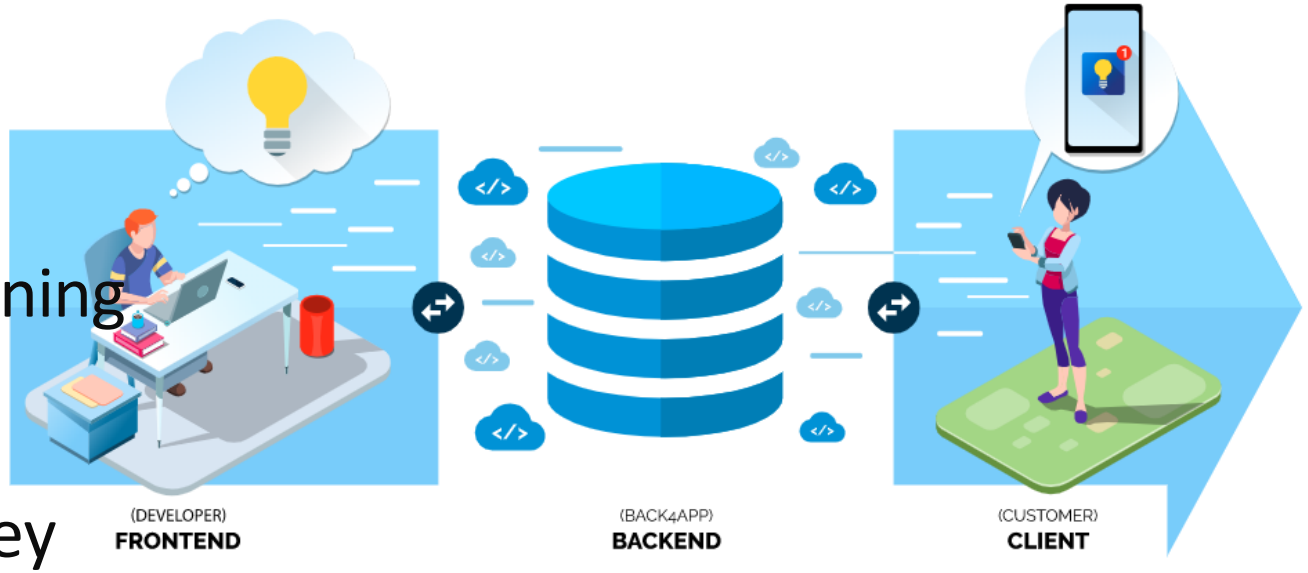
Q: What are the key concerns of UX design?

Q: What is conceptual design?

Q: What is physical design?

Q: How do you conceptualize designing digital interactions?

Q: While designing, what are the key concentrating points?



From Chapter 10 - Evaluation

Q: At which stage during the design of digital interactions do we evaluate?

Q: What do we mean by expert-based evaluation and what do we mean by participant-based evaluation?

Q: What is a Heuristic Evaluation?

Q: What is a Cognitive Walkthrough?

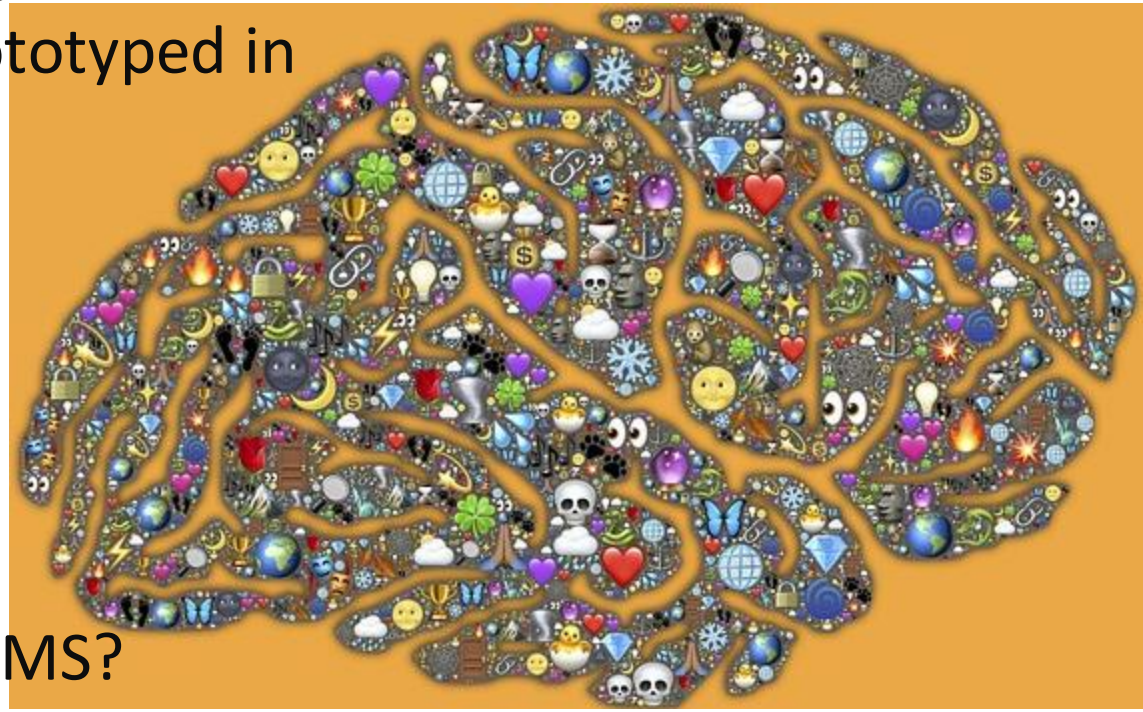
Q: What is a Cooperative Evaluation?

Q: What is an Evaluation through Controlled Experiments?

Q: Propose a controlled experiment to evaluate the impact of input mode to speed of use for elderly: voice input or touchscreen. What are your dependent and independent variables?

From Chapter 11 – Task analysis

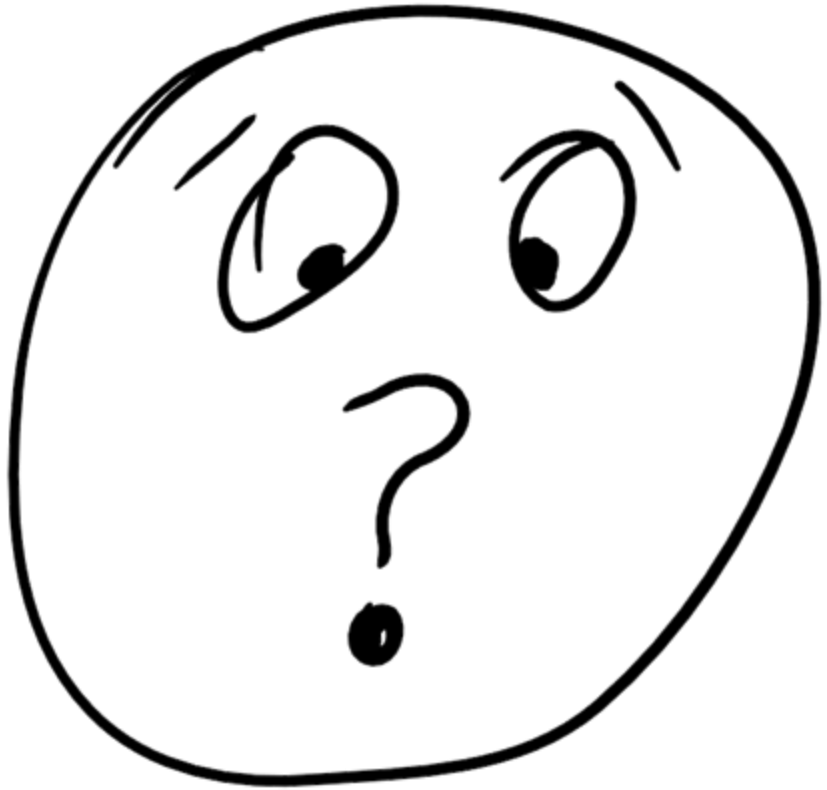
Q: Think of task analysis. Give examples of goals, tasks, subtasks and actions for the system you prototyped in your group project



Q: Name two key methods for task analysis and differentiate them.

Q: For what kind of purposes do we use GOMS? What are the words that constitute the GOMS acronym?

Questions?



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