Midterm Sample Test

Since there are no answers on the midterm sample I thought we could share our thoughts on the test.

here are my answers for the class's review

1. (Process) 18 points. Each letter of PRICPS describes part of the process we have been following throughout the course.

a. Describe each step of the process up to the “S”. (You may ignore the “S”.) About 1 sentence for each letter is expected.

b. What does each step deliver to the next step? (For example, what is the connection between what you do in “C” to what happens in the second “P”?)

c. Provide a very brief example illustrating each step named in part a. (1 sentence each)

* Pre-Disposition
  + These are what you DO know and what you DON'T know. This is also the only step that can't be returned to.
* Research
  + Studying the issues that your system is facing. Doing observations of someone preforming a task, reading articles/books on the topic, etc.
* Insights
  + What you learned form the Research. Your insights could change what you thought about your predispositions or could warrent new research or that more research needs to be done.
* Concepts
  + brief sketches or summaries of what your system wants to do or the problems that your system is suppost to solve.
* Prototypes
  + Gives a working model for the designers and users to use. This allows the designers to explore and change ideas with little capital investment. This phase includes low & high fidelity prototypes
* Evaluate
  + Did your system solve the problems or provide the service? Evaluate should be done at each step of the process.

b)

* Pre-disposition
  + Your pre-disposition influences how to start your research which will lead into your insights and concepts. For example if you are making an application for best bars to drink in you might assume your target user is between the ages of 21 and 30. After doing your research you might find that your typical bar goers range in age from 21 to 50. This would make users change their research.
* research
  + Research effects how to proceed. The research will lead into insights which will effect how the designers move forward. The data returned by the research will effect how the designer will move forward.
* Insights
  + Insights is what knowledge is gained by the research and what pre-dispositions were true. The insights gained by the research might make the design team reevaluate the team's inital pre-disposition. The insights also might tell the design team to do more or change the research. The insights gained by the research will influence the concepts and prototypes.
* Concepts
  + The concepts should be looked at thru the insights that were gained by the research. The concepts should address issues that were rised by the insights. If the insights gained by the researched showed that many users are older and have poor dexterity then the concepts should address these issues.
* Prototypes
  + The prototypes allows the design team to evaluate their work. A prototype should be able to show if a user would have difficulties operating the system. A prototype might give new insights into how users interact with the system. The prototype could also make the design team go back to research because some of the insights didn't address new problems.
* Evaluation
  + This effects every step. The designers should be asking them selves how this step is helping the system move forward and what questions/concerns are being addressed.

c)

Drinking app for bars

* Pre-Disposition
  + A pre-disposition for a drinking app might be: Users are older than 21 and own smart phones.
* Research
  + Research could be observing patrons at a bar and asking them questions like age, or how they choose where to go out to drink
* Insights
  + Insights gained could be that many bar goers like to attend places they heard by word of mouth or that the ages of people at bars are older than previously thought.
* Concepts
  + some concepts might be an app for a smart The prototypes might be a story board showing how the app is suppose to function
* Evaluate
  + This could be a congivate walk though with a user to see how a user would interact with the application.

2. (Design guidelines) 6 points. Example: Suppose in a UI, you have just dragged a folder to make a copy of its contents. An animation appears on the screen, showing files moving from one folder to another. Which of the following is illustrated by this example?

a. visibility

b. mapping

c. an affordance

d. feedback

I would say that a) visibility is incorrect because the function or option of moving a file isn't shown to the user

b) I'm not sure what mapping is in design sense and mapping isn't in the index of our book

c)I would say that affordance doesn't apply to moving a folder. Affordance says that users would understand that a folder should store files not move files

so I would choose d because

the screen giving the animation of the file moving informs the user that the files are being moved.

3. (Cognition): 12 points.

a. Briefly describe (or sketch if you want) one example of something a UI can do that will help people use it better, due to some characteristic of human memory. About 1 sentence.

b. Say what characteristic of human memory you are referring to, and how the UI example in part a is taking advantage of this aspect. About 2 sentences.

a) one example could be a drop down menu. A drop down menu would encourage recognition over recall.

b) The example I gave would focus on memory. Humans are much better at recognition than recall. People might have a hard time remembering a name from months or years ago but being given a list of options would help the user recognize the answer.

4. (Perception): 12 points.

a. Sketch one example of a portion of a UI that is consistent with a characteristic of the human visual system.

b. Say what characteristic of the human visual system you are referring to, and how the UI example in part a is consistent with this aspect. About 2 sentences.

a) something that is grouped together by color or borders.

b) this would help the user more easily see groups of words or words. Grouping words with borders help users find certain words faster than if there were no borders or backgrounds

5. (Interviews). 20 points. Here are some interview questions. Assume that the research goal of this interview is: Interview goal: to learn the student participant’s interest in power usage.

a. List a strength or weakness of each question, (accordance with the characteristics we have discussed about how to design interviews).

b. Say whether the question could be in a structured, unstructured, and/or semi-structured interview

What is your name?  
-S, could help build relationship with the interviewee

-W, wouldn't give any insight to the system

-could be used with any interview type

How many kwh do you think your dorm uses every day?

-S gain insight on what the interviewee thinks about kwh or power consumption

-S gain a piece of data that is empiecal and can used to easly compared with other answers

-W Not open ended.

-W May not give insight to the interviewee mental model on power consumption

-most likely used with semi-structured or structured

Suppose you were given the option to control how much power your dorm used, and further that you had been given a lot of data about how much each room and wing made use of, and had been given plenty of time to study all of that data. Based on all of this history, what kinds of decisions would you like to be able to make about future use of power by the rooms and wings in the dorm?

-S this question would give a lot of sights to how the interview makes decisions and their mental model on how power is given out in the forms

-W The questions isn't suitable for comparing and would be difficult to compare answers between interviewees

-Most likely for an unstructured but a semi-structured and structured could be used.

Why do you think <insert>?

-S could be used to gain bigger insight into a interviewee's answer.

-S could be used to avoid yes and no questions

-W could derail the interview if taking a structured appoarch

-most likely for a semi-structured interview or possibly even a unstructured to get the interviewee talking about about a topic

How many lights do you usually keep on when you are in your room at night?

-S answer is easy to compare to with other interviewess

-W is that the question can be answered with 1 word

-this is most likley for a structured interview but could be used with the other types

6. (Observations) 12 points. Write a fake VERY SHORT observation of a user. For example, it could be a 30-second portion of an observation of Justin’s in-class basketball demo, or anything else. The grade for this question comes from whether it has all the elements that should be in field observations of users. (Expected length: about 5-10 sentences, or use a sketch if you prefer).

Justin's inclass basketball demo

Justin gave a demonstration on basketball. The classroom was roughtly 30x30 feet. All of the tables and desks were push along the walls to allow students to sit along the wall. Justin was dressed in slacks, button down shirt and confidently carried a basketball. After the desks and tables have been moved Justin began to speak to the class about the basic principles of ball handling in basketball. He spoke to the class by moving around the classroom. Justin seemed to be trying to avoid having his back exposed to any one group of students for an extended period of time.

7. (Interface types, concepts). 20 points.

a. Sketch concepts for two interface types for a meeting room scheduler.

b. Choose the one you think is best and give two justifications why.

a)

So sketch one is touch screen next to the meeting room that users can touch and interact with to schedule the meeting room.

sketch two is a Web app that hows times available for meeting and allows users to schedule the room.

Sketch two is better of the two.

justification 1)

The web app would allow users to log in to the website from anywhere. A user that is away from the office could log into the company's website, see what times are availables and schedule the meeting room. Sketch one requires that users be in the same office and have access to the room. Any time a user wanted to make a change users of sketch one would have to walk over to the meeting room and make the changes but sketch 2 give this ability to the user anywhere there is access to the internet.

Justification 2)

 the resource cost for sketch 1 is much higher than sketch 2. Sketch 1 would require a surface tablet to be bought and build just for one meeting room. sketch 2 could be hosted on the company's existing website and no new hardware would have to be purchased. There is also a risk that sketch 1 could be damage and would have to be replaced but sketch 2 is unlikely to be damage or have to be replaced.

[**Frank Brasington**](https://piazza.com/class/im6or7k66k31lg?cid=13) [7 days ago](https://piazza.com/class/im6or7k66k31lg?cid=13)

I think we might as well start a discussion so we can build on each other.

I've been taught to believe in the Swiss Cheese effect of learning in that all of have holes in our learning but if you stack enough pieces of Swiss cheese on top of each other you'll cover up the holes.

I don't have my book with me but I plan on reviewing the again when I get home. If you have thoughts please post so we can all have a better understanding of the topics.

So Here's week 1's learning objectives

* Explain the difference between good and poor interaction design.
* Explain the relationship between the user experience and usability.
* Describe what and who is involved in the process of interaction design.
* Evaluate an interactive product and explain what is good and bad about it in terms of the goals and core principles of interaction design.
* Explain how to conceptualize interaction.
* Describe what a conceptual model is and how to begin to formulate one.
* Outline the core interaction types for informing the development of a conceptual model.

And my thoughts on them

* Explain the difference between good and poor interaction design.
  + Good interaction design would give the user a positive experience. Good interaction design would keep the following in mind
    - Effectiveness at task
    - safety
    - utility
    - learn ability
    - memorability
    - efficiency
    - Visibilitiy of User's options
    - feedback
    - constrain
    - Internal Consistency
    - Affordance
  + Poor interaction design would fail at one of the following above. For example a software program that has poor affordance and no internal Consistency would leave a user confused on how to interact with the software. The poor affordance would confuse the user on what actions can be done with objects and poor internal consistency would change how each object acts on different parts of the app leading to frustration
* Explain the relationship between the user experience and usability
  + The User's experience is impacted by the usability. A self-checkout machine for subway tickets for example would need a high learnability. If the checkout machine had poor learnability then users would be hesitance to use the machines. If the machines had good visibility of options then users's would clearly understand how to purchase subway tickets between routes.
* Describe what and who is involved in the process of interaction design.
  + This would be PRICE
  + Also include
    - Identiying needs/requirements
    - Developing many alternative design ideas
    - building interactive versions of the designs
    - evaluating
* Exaluate an interactive product and explain what is good and bad about it in terms of the goals and core principles of interaction design.
  + That would be our 1st homework. And the list of items from the first topic
    - I think we should be able to go to a Website like Piazza for example and gives pros/cons to it
      * Piazza's has constraints put on it that force users to post topics under threads so user's can't post threads to the abyss.
      * Piazza's Effective I find to be low because I find it difficult to search thru the threads to find the topic I'm looking for.
* Explain how to conceptualize interaction.
  + Chapter 2.2 in book
  + examples given in the book include
    - Requiring a design team to think through how their ideas will support or extend the way people communicate and interact in their activities
    - Make explicit underlying assumptions and claims
    - Core questions for conceptualizing interaction
      * Are there problems with an existing product or user experience?
      * Why do you think there are problems?
      * How do you think your proposed design ideas might overcome these?
    - Have a good understand of the problem space
    - Benefits include
      * Orientation
      * Open-mindedness
      * Common ground
* Describe what a conceptual model is and how to begin to formulate one.
  + Conceptual models provide a working strategy and a framework of general concepts and their interrelations.
  + The text book gives the example of saving files in folders, using a shopping cart for online shopping to mimic a mall
  + Chapter 2 of the text book
* Outline the core interaction types for informing the development of a conceptual model.
  + Core concepts are
    - Metaphors and analogies that convey to people how to understand what a product is for ad how to use it for an activity
    - The Concepts that people are exposed to through the product including the task-domain objects they create and manipulate, their attributes and operations that can be preformed.
    - The relationships between those concepts (e.g. whether one Object contains another, the relative importance of actions to others, and whether an object is part of another)
    - The mapppings between the concepts and the user experience the product is designed to support or invoke (e.g. one can revisit through looking at a list of visited sites, most frequently visited or saved websites)

https://d1b10bmlvqabco.cloudfront.net/photos/i0ntc8k11qw22d/1413340930_35.png

[**Zac Carlson**](https://piazza.com/class/im6or7k66k31lg?cid=13) [5 days ago](https://piazza.com/class/im6or7k66k31lg?cid=13)

For the interactive design process, third main bullet, for the what is involved, the design principles:

* visibility
* feedback
* constraints
* consistency
* affordance

Resolved Unresolved



[**Frank Brasington**](https://piazza.com/class/im6or7k66k31lg?cid=13) [6 days ago](https://piazza.com/class/im6or7k66k31lg?cid=13)

Week 2 Overview:

* Explain some advantages of involving users in development.
* Explain the main principles of a user-centered approach.
* Present a simple lifecycle model of interaction design.
* Consider how interaction design activities can be integrated into the wider product development cycle

Here are some of my thoughts

* Explain some advantages of involving users in development.
  + User's tasks and goals are the driving force behind the development
  + Understanding user behavior will highlight user priorities, preferences and implicit intentions
    - "... if something is designed to support an activity with little understanding of the real work involved, it is likely to be incompatible with current practice ad users don't like to deviate from their learned habits if operating a new device with similar properties:
  + Captures characteristics of users pg 328-329
* Explain the main principles of a user-centered approach.
  + User-centered approach means the users and their goals not the technology is the driving force behind the product developent
  + 3 Principles page 327-328
    - Early focus on users and tasks
    - Empirical measurements
    - Iterative design
* Present a simple lifecycle model of interaction design.
  + Pages 331-333
  + a lifecycle mode is a simplified version of reality and is intended as an abstraction
  + figure 9.2 is a simple interaction design lifecycle mode
    - Establishing requirements -> designing alternatives
    - Designing alternatives-> Prototyping, AND Establishing requirements
    - Prototyping -> Designing alternatives AND Evaluating
    - Evaluating -> Establishing requirements AND Designing alternatives AND Final Product
* Consider how interaction design activities can be integrated into the wider product development cycle
  + Any thoughts?

https://d1b10bmlvqabco.cloudfront.net/photos/i0ntc8k11qw22d/1413340930_35.png

[**Zac Carlson**](https://piazza.com/class/im6or7k66k31lg?cid=13) [4 days ago](https://piazza.com/class/im6or7k66k31lg?cid=13)

For "Consider how interaction design activities...", look at page 342, 9.3.5. It talks about integrating by using agile software development.

Reply to this followup discussion

Resolved Unresolved



[**Frank Brasington**](https://piazza.com/class/im6or7k66k31lg?cid=13) [4 days ago](https://piazza.com/class/im6or7k66k31lg?cid=13)

Week 3

After successful completion of this week, you will be able to:

* Explain what cognition is and why it is important for interaction design.
* Discuss what attention is and its effects on our ability to multitask.
* Describe how memory can be enhanced through technology aids.
* Explain what mental models are.
* Try to elicit a mental models and be able to understand what it means.

Here are my thoughts on week 4

* Explain what cognition is and why it is important for interaction design.
  + Cognition and specific kings of processes
    - Attention
    - perception
    - memory
    - learning
    - reading, speaking and listening
    - problem solving, planning, reasoning, and decision making
  + Fast/reflective Thinking
    - State of mind in which we perceive, act and react to events around us intuitively
  + Slow Thinking
    - mental effort, attention, judgement and decision making
  + pg 66-67 of text
* Discuss what attention is and its effects on our ability to multitask.
  + The process of selecting things to concentrate on at a point in time from the range of possibilities available
  + attention allows us to focus on information that is relevant to what we are doing.
  + Taken form box on page 70
    - Make information salient when it needs attending to at a given stage of a task
    - use techniques like animated graphics, color underlining, ordering of items, sequencing of different information and spacing of items to achieve this
    - Avoid cluttering the interface with too much information. This especially applies to the use of color, sound and graphics, it is tempting to use lots, resulting in a mishmash of media that is distracting and annoying rather than helping the user attend to relevant information.
    - Search engines and form fil-ins that have simple and clean interfaces are easier to use.
* Describe how memory can be enhanced through technology aids.
  + people are better at recognizing things than remembering them
  + Memory and Search pg 74
    - Recall-directed
      * using memorized information about the required content to get as close to it as possible
      * like knowing the URL of a website
    - recognition-based scanning
      * example: scanning a list and finding the desired content
  + example in book includes Pinterest and how data is stored on it
  + The book also goes into details like passwords on page 77
* Explain what mental models are.
  + Pages 86-66
  + Internal constructions of some aspect of the external world that are manipulated, enabling predictions and inferences to be made
  + Thermostat Homework was on this (also our last quiz)
* Try to elicit a mental models and be able to understand what it means.
  + Thoughts on this?

https://d1b10bmlvqabco.cloudfront.net/photos/imbcd5zr0LB/1459182682_35.png

[**Thomas Salata**](https://piazza.com/class/im6or7k66k31lg?cid=13) [8 minutes ago](https://piazza.com/class/im6or7k66k31lg?cid=13)

For the last bullet, refer to activity 3.4 on page 86.  It also mentions the mental model that some people share regarding thermostats (they have an incorrect understanding of how they work, and thus an incorrect understanding of how to use them).  Also, I think the slides/lecture give a definition that is a little easier to relate to: "Mental models = how to use the system (and how the system works)" (Unit 4.6: Lecture: Mental Models).  The lecture also states that a "mental model is an explanation."  So for eliciting a mental model, you can just think of any activity (a system) and then the *explanation* for how to use it and how it works.  If the model is incorrect, it may mean that there are issues regarding the gulf of execution and/or the gulf of evaluation.  Also, a correct mental model would mean that the user has an easier time using that system.

Reply to this followup discussion

Resolved Unresolved



[**Frank Brasington**](https://piazza.com/class/im6or7k66k31lg?cid=13) [3 days ago](https://piazza.com/class/im6or7k66k31lg?cid=13)

Week 4

Learning objectives

After successful completion of this week, you will be able to:

* Provide an overview of the many different kinds of interfaces.
* Highlight the main design and research issues for each of the interfaces.
* Describe prototyping and different types of prototyping activities.
* Produce simple prototypes from the models developed during the requirements activity.
* Produce a conceptual model for a product and justify your choices.
* Explain the use of scenarios and prototyping in design.

My Thoughts

Learning objectives

After successful completion of this week, you will be able to:

* Provide an overview of the many different kinds of interfaces
  + The book and lectures go into detail about a lot of stuff, but it's mostly things that the class is dealing with in the design projects
    - some of my thoughts
      * Mobile Devices
        + Hit area for touching the screen
        + small screen require change in looks
      * Simple appliances
        + Users want simplicity and visibility. Toasters and ovens don't need touch screens
      * How users interact with interfaces
        + How is window management?
        + Is the screen cluttered?
        + can the user easily interact with the surface
* Highlight the main design and research issues for each of the interfaces.
  + This is a huge topic but I think it's about applying our knowledge like recognition vs recall
    - Recognition tends to be better than recall
      * Humans are able to recognize things easier than recall information.
      * Text book uses example when Recall is preferable to recognition
        + page 164 online shopping
* Describe prototyping and different types of prototyping activities.
  + Prototyping is a way for designers/users/stakeholders to interact with a design and make changes and explore it's suitability
  + Low-Fidelity Prototyping
    - does not look or act like final project
    - examples of low-fidelity prototypes
      * using paper sheets as webpages
      * piece of wood as black berry
    - Storyboarding
      * consists of a series of sketches showing how a user might progress though a task using the product
      * page 390 shows an example
    - Sketching
      * More about design than about drawing
      * using symbols and shapes to help progress a storyboard or design
    - Wizard of Oz
      * Software-based prototype
        + The user interacts with a screen and person simulates the responses that the user would get
  + High-Fidelity Prototyping
    - Looks and acts like a final product or provides more functionality (than a low-fidelity prototype)
    - Using Visual basic over paper, building a working model with old parts.
* Produce simple prototypes from the models developed during the requirements activity.
  + I think this is what we did for our assignments (first one was due may 1st)
* Produce a conceptual model for a product and justify your choices.
  + Questions the book says are useful
    - Which interface metaphors would be suitable to help users understand the product?
    - Which interaction type(s) would be best support the user' activities?
    - Do different interface types suggest alternative design insights or options?
  + I think this applies mostly to our group project
  + Interface metaphors
    - The example the book provides is that of a electronic brochure.
    - A metaphor should answer the following questions
      * How much structure does the metaphor provide? A good metaphor will provide structure and preferably familiar structure
      * How much of the metaphor is relevant to the problem? One of the difficulties of using  metaphors is that users may think they understand more than they do and start Appling inappropriate elements of the metaphor to the product leading to confusion or flase expectations
      * Is the interface metaphor easy o represent? A good metaphor will be associated with particular visual and audio elements, as well as words
      * Will your audience understand the metaphor?
      * How extensible is the metaphor? Does it have extra aspects that may be useful later?
* Explain the use of scenarios and prototyping in design.
  + Scenarios allows the designers to see how a user interacts with a product and if the user has any difficulties or frustrations trying to accomplish given goals of the product.

Reply to this followup discussion

Resolved Unresolved



[**Frank Brasington**](https://piazza.com/class/im6or7k66k31lg?cid=13) [2 days ago](https://piazza.com/class/im6or7k66k31lg?cid=13)

Week 5

After successful completion of this week, you will be able to:

* Describe a range of different types of evaluation methods.
* Show how different evaluation methods are used for different purposes at different stages of the design process and in different contexts of use.
* Discuss some of the practical challenges that evaluators have to consider when doing evaluation.

Here are some of my thoughts on the topic

* Describe a range of different types of evaluation methods.
  + Heuristic Evaluation
    - in Heuristic Evaluation experts guided by a set of usability principles known as heuristics, evaluate whether user-interface elements, such as dialog boxes, menus, navigation structure, online help and so on conform to tried and tested principles.
      * Visibility of system status
        + system keeps user informed about what is going on, through appropriate feedback within reasonable time
      * Match between system and the real world
        + System should speak the same language and use words and phrases that are familiar to the user.
      * User Control and freedom
        + Users often choose system functions by mistake and will need a clearly marked emergency exit to leave the unwanted state without having to go through an extended dialog. Support undo and redo
      * Consistency and standards
        + system should follow naming conventions. Actions, words and situations should all do the same thing
      * Error Prevention
        + Remove error-prone conditions or check for them. Present users with a confirmation option before they commit to the action
      * Recognition rather than recall
        + Minimize user's memory load.
      * Flexibility and efficiency of use
        + Allow users to tailor frequent actions
      * Aesthetic and minimalist design
        + Don't contain information that is irrelevant or rarely needed.
      * Help users recognize, diagnose and recover from errors
        + Error messages should be expressed in plain language (no codes), precisely indicate the problem and constructively suggest a solution
      * Help and documentation
  + Cognitive Walkthroughs page 511 in the text book
    - Cognitive walkthroughs are simulations of a user's problem-solving process at each step in the human-computer dialog.
    - For first-time users
      * evaluating ease of learning
    - Steps involved in a cognitive walkthroughs
      * Characteristics of typical user are identified and documented and sample tasks are developed that focus on the aspects of the design to be evaluated. A description, mockup, or prototype of the interface to be developed is also produced, along with a clear sequence of the actions needed for the users to complete the task.
      * A designer and one or more expert evaluators come together to do the analysis.
      * Evaluators walk through the action sequences for each task placing it within the context of a typical scenario, and as they do this they try to answer the following questions
        + Will the correct action be sufficiently evident to the user?
        + Will the user notice that the correct action is available?
        + Will the user associate and interpret the response from the action correctly?
        + As the walkthrough is being done, a record of critical information is compiled in which:

The assumptions about what would case problems and why are identified

Notes about side issues and design changes are made

A summary of the results is compiled

* + - * + The design is then revised to fix he problems presented
    - Document the process and make notes on what works and what doesn't work
  + GOMS
    - Analytical - based on data
    - for skilled users, no errors
      * evaluating efficiency of regular use
    - Predict user performance
    - useful for predicating actual time and skilled user will take in UI
      * Goal, Operators, Methods, Selection rules
      * Goal: What
      * Method: How (learned)
      * Operators: Cognitive processes + physical actions to do it
      * Selection rules: rules saying which method to select
    - Example at 4:04 of Lecture 6.1
  + KLM
    - Analytical
    - starts at 5:34 of lecture 6.1
    - Keystroke Level Model
      * skilled user
      * doing tasks error-free
      * using a specific method in a UI
    - User Operators
      * K (keystroke)
      * P(point)
      * H (homing)
      * D (drawing)
      * M (mental)
    - System Operator
      * r (respond)
    - Example at 7:06 of Lecture 6.1
* Show how different evaluation methods are used for different purposes at different stages of the design process and in different contexts of use.
  + Heuristic Evaluation would be used in the beginning before interacting with a user
  + Cognitive Walkthrough would be used while developing to have interaction and feedback from a user.
  + GOMS/KLM would be used later to study how quickly/easily a skilled user could interact with the system.
* Discuss some of the practical challenges that evaluators have to consider when doing evaluation.
  + I think this is pretty open ended.
  + Some examples might be
    - Ability to simulate actions that a users tasks (using paper slides isn't the same as using a real mobile app for example)
    - The researcher could influence the user by leading or suggesting like in interviews