

Started on	Wednesday, October 13, 2021, 1:46 PM
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Time taken	45 mins

Question **1**  
Complete  
Points out of 1.00

Which of the following is/are the factor(s) that affect user experience?

- Select one:
- ☐ a. Useful
  - ☐ b. Desirable
  - ☐ c. Credible
  - ☒ d. All of the above

Question **2**  
Complete  
Points out of 1.00

Which of the following usability principles describe the multiplicity of ways the user and system exchange information?

- Select one:
- ☐ a. Learnability
  - ☐ b. Visibility
  - ☒ c. Flexibility
  - ☐ d. None of the above

Question **3**  
Complete  
Points out of 1.00

Which of the following is NOT a technique to describe Tasks?

- Select one:
- ☐ a. Narratives
  - ☐ b. Flow chart
  - ☐ c. Entity-relationship diagram
  - ☒ d. Ethnography

Question **4**  
Complete  
Points out of 1.00

Which type of retina cells that are sensitive to entire visible light spectrum?

- Select one:
- ☐ a. Fovea
  - ☐ b. Cones
  - ☐ c. Epithelial
  - ☒ d. Rods

Question **5**  
Complete  
Points out of 1.00

Which of the following is NOT true about User Analysis?

- Select one:
- ☐ a. A persona is a fictitious character used as a specific representative of a user class.
  - ☐ b. Questionnaire is a useful technique for user analysis.
  - ☐ c. It might be costly to talk to some users for User Analysis.
  - ☒ d. User analysis is about analysing how people do their jobs.

Question **6**

Complete

Points out of  
1.00

Which of the following is the author who invented Sketchpad?

Select one:

- ☒ a. Ivan Sutherland
- ☐ b. Steve Jobs
- ☐ c. Bill Gates
- ☐ d. Don Norman

Question **7**

Complete

Points out of  
1.00

For e-commerce websites, the credit card numbers are usually presented with 4 digits in a group. Which of the following human capabilities is this presentation based on?

Select one:

- ☐ a. Abductive reasoning
- ☐ b. Deduction reasoning
- ☒ c. Cognitive chunking
- ☐ d. Long-term memory

Question **8**

Complete

Points out of  
1.00

Which of the following is correct about applying waterfall model for UI design?

Select one:

- ☒ a. Choosing waterfall model for UI design is risky as it is hard to predict if the designed UI will succeed or not.
- ☐ b. The users are engaged in the requirement analysis and testing process and thus it can capture all the requirements.
- ☐ c. Waterfall model is clearly structured and easy to implement. Therefore, it is suitable for UI design.
- ☐ d. There are feedbacks between stages in waterfall model. Therefore, it can completely and efficiently accommodate the changes.

Question **9**

Complete

Points out of  
4.00

User centered design has been widely deployed in UI and UE design. In the space, please list two characteristics of user centered design and briefly elaborate your answers.

The two characteristics are:

1. Early focus on users and tasks. Remain structured and systematic information gathering such as getting user analysis and the task analysis such that knowing who the user of the user interface are and what they have to do to carry out the task. In addition, approach users early and often such as the evaluators, consultant, etc.
2. Constant Evaluation. Keep users in touch in every iteration so that every prototype is being evaluated and corrected at the early stage

Question **10**

Complete

Points out of  
4.00

You have a new job at McDonald's, and your first assignment is to design a kiosk that will allow customers to place their orders. Your supervisor asks you how you will go about doing requirements analysis for this task.

(a) You suggest starting with User Analysis and your supervisor agrees with it. Please list two methods that you would like to conduct the User Analysis.

(b) You notice another restaurant has already developed and implemented an ordering kiosk. Which technique would you choose to conduct the Task Analysis? Briefly elaborate how the technique can be conducted.

a) The two methods to conduct the user analysis are through Personas and categorizing my users.

b) The two techniques i would choose to conduct the task analysis are through observations and interviews.

Through observation, I can watch the user on how they use the ordering kiosk from a distance. I can record it with a videotape, taking down specific task relevant behaviours in notes and sketches, then convert it into abstract subtasks.

Through interviews, i can conduct semi-structured which are a good balance between structured and unstructured interviews that is appropriate to be used in this senario. I would predetermined data of interest and plan for effective question types such as how do they place their order from the ordering kiosk, etc.

Question **11**

Complete

Points out of  
6.00

List and give a life example for each of the "affordance" in Norman's Usability Principles. Please note the examples given in the lecture will not be counted for the mark.

There are 3 types of affordance in Normans's Usability Principle, false affordance, perceived affordance and hidden affordance.

One example of false affordance is pressing a button on my remote control to turn on the TV, but it does not turn on.

One example of perceived affordance is opening a bottle cap with indicated direction on it.

One example of hidden affordance is a paper clip can use to open a safe locks.

Question **12**

Complete

Points out of  
4.00

A company has just designed a user interface that was a total disaster. You have been brought in as a UI consultant to diagnose what they have done wrong. Below shows the quotes from the company's engineers. For each of the quotes below, please explain which of the Shneiderman's 8 gold rules is violated.

(a) "All of us felt that OK and Cancel buttons in the lower right corner were boring and we want to do something new to differentiate our design with others. So instead, if you click at the top of the dialog box, it closes as if you did with 'OK' button and if you click at the bottom, it closes as if you clicked 'Cancel' button."

(b) "The user mentioned that they could not close the application. Actually it is very simple. They could just press 'Ctrl + Q'. We do not understand why they could not figure out by themselves."

a) It violated the rule of striving for consistency. There are multiple exit points and inconsistency in dialog box. Users will be confused on which dialog box to be used and they will feel trapped within the user interface. Dialog boxes should have the same "closure" options.

b) It violated the rule of minimising user's memory load. This is because the users may not remember the command of pressing ctrl + Q, developers should make the exit visible instead of expecting users to remember such commands.

Question **13**

Complete

Points out of  
4.00

Explain what is meant by the "gulf of execution" and the "gulf of evaluation". Give a life example to illustrate how the "gulf of execution" and the "gulf of evaluation" are solved. Please note the examples given in the lecture will not be counted for the mark.

Gulf of execution is the amount of effort a person must use to instruct the system.

Gulf of evaluation is the amount of effort a person must use to interpret the system.

One life example of gulf of execution is going to shower. The goal is to shower by entering the bathroom, remove clothing, turning on the tap, shampoo and clean ourselves.

One life example of gulf of evaluation is the sound of water droplets in the shower, feeling warmth from the hot water within the shower and smell from using the shampoo.