

Started on	Tuesday, December 14, 2021, 9:31 AM
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Question **1**

Complete

Points out of 1.00

Which of the following statements is NOT true about Timely User Experience?

Select one:

- ☐ a. System Response Time refers to the time period from the moment a user initiates an action until the computer begins to present feedback.
- ☒ b. Users prefer to have maximum delays for responses from networked devices.
- ☐ c. User Think Time is the number of seconds from the moment that the computer begins response until a user starts the next action.
- ☐ d. Lengthy system response times are generally detrimental to productivity and decrease satisfaction.

Question **2**

Complete

Points out of 1.00

Which of the following is NOT true about “Strength” in Direct Manipulation?

Select one:

- ☐ a. It refers to the translational distance between users and the representation of the direct manipulation metaphor.
- ☐ b. It covers a continuum from weak to immersive.
- ☐ c. Mouse and joystick are usually found in Direct Manipulation with Weak Strength.
- ☒ d. Gesture recognition with various body parts are normally used in Direct Manipulation with Medium Strength.

Question **3**

Complete

Points out of 1.00

Which of the following is/are principles for graphical UI design?

Select one:

- ☐ a. Contrast
- ☐ b. Simplicity
- ☐ c. Balance
- ☐ d. Alignment
- ☒ e. All of the above

Question **4**

Complete

Points out of 1.00

Which of the following is NOT true about Model-View-Controller pattern?

Select one:

- ☐ a. The “Model” maintains the application data.
- ☐ b. It allows separation of application state from application display and application logic.
- ☒ c. The “Controller” provides methods to access and modify data.
- ☐ d. It can be used for developing programs with modular and reusable components.

Question **5**

Complete

Points out of 1.00

Which of the following is a type of menus?

Select one:

- ☐ a. Pie menu
- ☐ b. Tear-off menu
- ☐ c. Pop-up menu
- ☒ d. All of the above

Question **6**

Complete

Points out of
1.00

Which of the following is NOT true about prototype?

Select one:

- ☐ a. Lo-Fi prototype is fast and easy to implement.
- ☒ b. Users need to focus on unnecessary details with Lo-Fi prototype.
- ☐ c. Prototypes are easy to change.
- ☐ d. Prototypes have no need to be complete.

Question **7**

Complete

Points out of
1.00

Which of the following is NOT true about human's memory?

Select one:

- ☒ a. Short-term memory gets basic recognition from perceptual processors.
- ☐ b. Long-term memory has unlimited storage size.
- ☐ c. Knowing how to use a phone is an example of semantic memory.
- ☐ d. Short-term memory has a shorter access time than long-term memory.

Question **8**

Complete

Points out of
1.00

Which of the following options best represents the core values of user centered design?

Select one:

- ☐ a. Focusing on users and their tasks in the design process
- ☐ b. Measuring progress towards usability goals throughout development
- ☐ c. Developing and testing in several cycles
- ☒ d. All of the above

Question **9**

Complete

Points out of
1.00

Which is the best definition of an interface metaphor?

Select one:

- ☐ a. In broad terms, the kind of technical and software framework within which human computer interaction takes place (e.g., WIMP, mobile, tangible)
- ☒ b. An idea from the world that is used in the interface to help the user understand what to do (e.g., click on tabs to change window contents, use shopping cart to store items to purchase)
- ☐ c. What the human does to make inputs and receive information from the system (e.g., click and drag an object, talk to an object, etc)
- ☐ d. The conceptual model used to guide the design of the interface.

Question **10**

Complete

Points out of
1.00

Which of the following is a design implication of our understanding of human attention?

Select one:

- ☐ a. Tactile feedback should make the same kinds of distinctions that a person would feel in the world (e.g. pushing vs. pulling)
- ☒ b. Text should be legible and distinguishable from its background under different lighting conditions.
- ☐ c. Avoid cluttering the interface with more information than is needed at the present moment for the user.
- ☐ d. Sounds should be audible and distinguishable.

Question **11**
Complete
Points out of 10.00

A software team is asked to develop a video play bar for a customer. The team brainstormed two designs for the video play bar (see the figure below). The team checked with their customer and learned that the most important consideration for the video play bar is to allow the user to control the video play at a faster speed.

Question a: Which design would you recommend to the team? [3 marks]

Question b: Please use Steering Law to justify your recommendation. [5 marks]

Question c: Please elaborate one possible disadvantage for your recommended design. [2 marks]



- A) I would recommend option 2.
- B) Both options has the same amount of distance but option 2 has a larger width of tunnel. Therefore, option 2 will have a lower index of difficulty where users can control the video play easier as it takes shorter time to locate and manipulate the video with larger width of the play bar.
- C) It will take up more video screen space, thus forcing valuable information off-screen.

Question **12**

Complete

Points out of
4.00

What is the difference between formative and summative evaluation?

Formative evaluation is an early, continuous and iterative process to evaluate the design as the project is forming throughout the lifecycle. However, summative evaluation is a process that helps to make judgement about a final product by evaluate the implementation after the system has been finished.

Question **13**

Complete

Points out of
20.00

A modern hotel has installed a sandwich making robot to supply room service sandwiches at any hour of the day. The hotel also has an automated delivery system that will take the completed sandwich to a specified room and the hotel plans to develop a mobile app which allows their guests to order sandwiches. You have been asked to develop the interface for the mobile app.

Question a: Write a short scenario describing how a guest would order a sandwich using your interface. [6 marks]

Question b: List one lo-fi and one hi-fi prototyping technique that you propose to use to gather the feedback. [4 marks]

Question c: The mobile app is developed but has not been evaluated yet. The hotel asks you if a heuristic evaluation or user testing should be conducted first to evaluate the mobile app and you suggest conducting heuristic evaluation first. Please briefly elaborate the 4 phrases for heuristic evaluation. [10 marks]

A) It is 12am in the midnight. My family and I are starving and I decided to order sandwiches for supper. I tap on the hotel mobile application and came into the login screen. I create a login account as a guest setup with a username and a password as I am a first timer. Once I successfully login into the mobile application, I reached the homepage where it shows the images of different types of sandwiches available for delivery such as ham sandwiches, egg sandwiches and etc. I clicked onto the ham sandwich image and a widget for multiple selection is shown to pick on the ingredients I would like to add or remove such as lettuce, tomato, etc. It also shows the amount of quantity I want for delivery. I increased the scale to 5 and clicked on the 'Proceed' button. I reached into the checkout page. It shows my total order in the checked out cart and displays my additional or removed items and the amount of time needed to be delivered. Lastly, I need to key in my room number #02-02 and press on the 'Checkout' button. After I clicked on the checked out button, it displays my confirmed order and I clicked on 'Exit Application' button.

B) One lo-fi prototype technique would be paper prototype.

One hi-fi prototype technique would be computer prototype.

C) The first phase would be pre-evaluation training. I would have to give evaluators the necessary domain knowledge such as what does this application serve, the intended target users, etc to provide a feel and scope of system for the evaluators. I would also need to provide information on the scenarios such as wanting a user to order a sandwich through the application so that they focus on specific elements of this application.

The second phase would be the evaluation. I would have to let the evaluators carry out the task and evaluate by producing a list of problems and explain with reference to heuristic and other information. The evaluators have to be specific and list each problem separately.

The third phase is severity rating. This would determine the severity of each problem based on their priority scale after evaluation such as how frequently does this issue occur, how much does this issue impact the situation. The team would have to allocate resources accordingly to fix problems and estimate the needs for more usability effort.

The fourth phase is debriefing. The team would have to conduct a debrief with the evaluators, observers, and development team mates to guess the general characteristics of the user interface, suggest potential improvements to address major usability problems and brainstorming solutions while the development team rates the efforts to fix the specific issues.

Question **14**

Complete

Points out of
6.00

There are two important factors that need to be considered when assessing the time for the computer to respond to the users before the users become annoyed. Please list these two factors and briefly elaborate each of them.

The two factors are past experiences and individual's tolerance for delay.

Based on the past experiences factor, users established expectations based on their past experiences of the time required to complete a given task. If a task is completed quicker than expected, they would be pleased. If a task is completed much more quickly than expected, they may feel that something is left out, missing or is wrong. However, if a task is completed slower than expected, the users will become annoyed and frustrated.

Based on individual's tolerance for delay factor, there may be a large variation among individuals such as some would enjoy chatting with friends while the pages load but some may start to get annoyed and start hitting onto desk and keyboards to rush the computer along. It varies as users may be influenced by factors like personality, mood, ages and the amount of pressure to complete the task.