**INTERACTION DESIGN**

1. What do you think are the key usability goals and user experience goals for: A video computer conferencing system that allows students to learn at home?
   * Such a learning device should be easy to learn, ecient, motivating and rewarding.
2. Give an outcome of poor interaction design
   * A workbench, for assembling electrical items, is being repainted in red with special acrylic paint that is washable. At the end of each working day, the bench is being washed down with a bucket of water. However, since the surface is not quite even, this creates small puddles which do not dry entirely during the night. If the bench is used the next morning without being wiped dry it still has small wet patches.
3. Rewarding is a user experience goal.
   * True
4. What matters should be considered when designing usable interactive products?
   * All of the answers.
5. Mapping is the art of making sure that the user understands every interaction of a product
   * False
6. One reason for involving users in interaction design is expectation management. Which statement about expectation management is false?
   * Expectation management is a marketing hype
7. Name 3 principles for creating well-designed interactive products:
   * feedback, consistency and aordance
8. We can \_\_\_\_\_\_\_\_\_\_\_
   * design for a user experience
9. Name 3 usability goals
   * effectiveness, efficiently, safety
10. Name 4 user experience goals:
    * supportive of creativity, rewarding and emotionally fullling, motivating
11. Which statement about Interaction design as a process is true?
    * All of the above
12. Which statement about user-centered design is true?
    * In user-centered design, the user knows best and is the guide to the designer; the designer’s role is to translate the users’ needs and goals into a design solution
13. The double diamond of design has four phases:

• Develop: Solutions or concepts are created, prototyped, tested, and iterated.

• Dene: Designers develop a clear brief that frames the design challenge.

• Discover: Designers try to gather insights about the problem.

• Deliver: The resulting project is nalized, produced, and launched. Which is the correct sequence of phases?

* Discover-Dene-Develop-Deliver

1. Main aim of interaction design is:

(i) To reduce the negative aspects (e.g. frustration, annoyance) of the user experience

(ii) To enhance the positive ones (e.g. enjoyment, engagement)

* + Both (i) and (ii)

1. Interaction design is a process for designing interactive \_\_\_\_\_\_\_ to support the way people communicate and interact in their everyday and working lives.
   * Products
2. Interaction design is:
   * Shaping artefacts, usually digital or technical for people's use.
3. Design principles are used by interaction designers to aid their thinking when designing for the user experience.
   * True
4. What is good ID?
   * Good ID encourages an easy, natural and engaging interaction between a user and an interactive product, and allows the user to carry out the tasks required.
5. Select correct answer:
   * Interaction Design is wider than HCI.
6. Select correct order of activities in process of Interaction design:

(1) Developing alternative design that meet user’s requirements.

(2) Identifying needs and establishing requirements for the user experience.

(3) Building interactive versions of the designs.

(4) Evaluating what is being built.

* + 2-1-3-4

1. What is NOT component of conceptual model?
   * The problem space
2. What is NOT benefit of using interface metaphors?
   * Forces users to only understand the system in terms of the metaphor
3. Select the components of conceptual models

1. The relationships between concepts and mapping the concepts with user experience

2. The concepts

3. The problem space

4. The major metaphors and analogies

* + 1,2,4

1. A conceptual model is a detail description of a product.
   * False
2. A \_\_\_\_\_\_\_\_\_\_\_\_ is a high-level description of how a system is organized and operates.
   * conceptual model
3. How many fundamental types of interaction?
   * 5
4. According to Liddle, the most important thing to design is the user's conceptual model.
   * True
5. Select correct statements about conceptual models
   * It is a structure outlining the concepts and the relationships between them
6. To understand the problem space we need to ask the following questions
   * All of the others
7. Conceptual models can help the design team to:
   * orient themselves towards asking questions about how the conceptual model will be understood by users
   * become narrowly focused early on
   * establish a set of common terms they all understand and agree upon
8. Which mode of interaction involves users moving through virtual or physical environments?
   * Exploring
9. What is NOT benet of using interface metaphors?
   * Forces users to only understand the system in terms of the metaphor
10. Conceptual models can help the design team to: (there can be more than one answers in this question)
    * establish a set of common terms they all understand and agree upon
    * orient themselves towards asking questions about how the conceptual model will be understood by users
    * become narrowly focused early on
11. After understanding of the problem space, the next step in design process is \_\_\_\_\_\_\_\_\_\_
    * Developing a conceptual model
12. Which type of interaction describes how users carry out their tasks by telling the system what to do?
    * Conversing
13. Match each denition with the instruction type.
    * Where users interact with objects in a virtual or physical space by manipulating them (for instance, opening, holding, closing, and placing). Users can hone their familiar knowledge of how to interact with objects.
      + **Manipulating**
    * Where users move through a virtual environment or a physical space. Virtual environments include 3D worlds and augmented and virtual reality systems. They enable users to hone their familiar knowledge by physically moving around. Physical spaces that use sensor-based technologies include smart rooms and ambient environments, also enabling people to capitalize on familiarity.
      + **Exploring**
    * Where users have a dialog with a system. Users can speak via an interface or type in questions to which the system replies via text or speech output.
      + **Conversing**
    * Where the system initiates the interaction and the user chooses whether to respond. For example, proactive mobile location-based technology can alert people to points of interest. They can choose to look at the information popping up on their phone or ignore it.
      + **Responding**
    * Where users issue instructions to a system. This can be done in a number of  ways, including typing in commands, selecting options from menus in a windows environment or on a multitouch screen, speaking aloud commands, gesturing, pressing buttons, or using a combination of function keys.
      + **Instructing**
14. Select the good implications (Select one or more answers)

Chọn một hoặc nhiều câu trả lời

* + Make information salient when it needs attending to
  + Use techniques that make things stand out like colour, ordering, spacing, underlining, sequencing and animation
  + Speech output should enable users to distinguish between the set of spoken words
  + Icons and other graphical representations should enable users to readily distinguish their meaning

1. When setting the thermostat to warm up the house on a cold winter’s night, people tend to set it at the highest to get the house to warm up as quickly as possible? They think it will heat the room up quicker. The reason people use erroneous mental models is because of the underlying principle of more is more.
   * True
2. Why do we need to understand users? Select incorrect answer
   * Understanding users is a obligation of each contract
3. When creating an interface, the designer should NOT …
   * Display only as many icons on a tool bar as he/she could not
   * Display only 7 + or - 2 icons on a tool bar
   * Display more than 7 icons on a tool bar
4. Which one of these is a good reason to include sounds in an HCI?
   * Users react more quickly to sounds than to visual signals
5. Which is the process of selecting things to concentrate on at a point time, from the range of possibilities available?
   * Attention
6. Select correct statement
   * 1 trong 3 đáp án sau sẽ đúng ☹
     + In design we should promote recall rather than recognizing.
     + All of the others.
     + **People are much better at recognizing things than recall things.**
7. The context is one of the most important things for \_\_\_\_\_\_\_\_\_\_
   * 1 trong 3 đáp án sau sẽ đúng ☹
     + Attention
     + Learning
     + Memory
8. Which type of external cognition is used in case of using pen and paper to solve a math problem?
   * computational offloading
9. Select the correct statement for reading, speaking, and listening:
   * Listening requires less cognitive effort than reading or speaking
10. Attention, perception and recognition, learning, .... are the specic kinds of processes of \_\_\_\_\_\_\_\_\_\_.
    * Cognition
11. One of design implication for memory load is: Design interface that promote \_\_\_\_\_\_ rather than \_\_\_\_\_\_\_\_ by using menus, icons...
    * recognition – recall
12. Which type of external cognition is used in case of using calculator for computation?
    * Computational ooading
13. Select the correct statements about memory
    * It involves rst encoding and then retrieving knowledge
14. Which statement about Scenarios, use cases and user stories is NOT correct?
    * All statements are correct
15. Understanding as much as possible about the users, their work and the context of that work, so the system under development can support them in achieving their goals; this we call \_\_\_\_\_\_\_\_\_\_
    * identify needs
16. What is the output of Requirement Gathering?
    * Functional requirements
17. The best way to ensure that developments continues to take users' activities into account is to involve real \_\_\_\_\_ throughout development.
    * Users
18. How many kinds of requirement are identied in software engineering? What are they?
    * 2 kinds: functional and non-functional requirements
19. Scenarios, use cases, essential use cases are three of more common method for \_\_\_\_\_\_\_\_\_.
    * task description
20. A good persona helps the designer understand whether a particular design decision will help or hinder their users. Which statement about Personas’ goals is correct?

(1) To help the designer make design decisions

(2) To remind the team that real people will be using the product

* + (1) true; (2) true

1. Which statement about requirement is NOT correct?
   * All statements are correct
2. Requirement gathering describes \_\_\_\_\_\_\_\_\_\_\_\_\_
   * What the proposed system should do
3. The term 'scenario' cannot be used in context of use cases. Because they are two dierent methods for task description.
   * False
4. What does a scenario describe?
   * A scenario describes human activities or tasks in a story that allows exploration and discussion of contexts, needs and requirements.
5. Which statement about Personas is NOT correct?
   * All statements are correct
6. Which is NOT a guideline when gathering data for requirements?
   * Involve only one representative from each stakeholder group
7. What incorporates data, architectural, interface, and procedural representations of the software?
   * design model
8. What is “Starbuck testing”?
   * A test whereby you ask a few colleagues for some feedback and oer them coee
9. A good specication should be?
   * All of others
10. Which is most important to a UX designer?
    * Pleasing the product user
11. A software engineer designs the user interface by applying an iterative process that draws on predened design principles.
    * 1 trong 2 đáp án sẽ đúng ☹
      + True
      + False
12. A User flow is:
    * The user’s journey through a site when trying to complete a task
13. Select correct statement Select one:
    * People are much better at recognizing things than recall things.
14. What is the dierence between UX and UI?
    * UX is focused on optimization of a product for eective and enjoyable use; UI design is concerned with the look and feel, the presentation and interactivity of a product
15. What is s user persona?
    * A fictional or prototypical individual used to represent the demographics, goals, values and pain points of a large proportion of a product's user group
16. What is “A/B testing”?
    * Conducting a test to understand the responses of two users, user A and user B
17. Which of the following is not a user interface design process?
    * Knowledgeable, frequent users
18. What establishes the profile of end-users of the system?
    * user’s model
19. When users are involved in complex tasks, the demand on \_\_\_\_\_\_\_\_\_\_ can be significant.
    * short-term memory
20. One of design implication for memory load is: Design interface that promote \_\_\_\_\_\_ rather than \_\_\_\_\_\_\_\_ by using menus, icons...

Select one:

* + recognition – recall

1. A software might allow a user to interact via:
   * all of the mentioned
2. What is NOT benefit of using interface metaphors?

Select one:

* + Forces users to only understand the system in terms of the metaphor

1. What is Usability?
   * Usability is concerned with the ease of use with which a user can interact with your site
2. What is the role of Information Architecture?
   * To organize, structure and identify content in a website or other digital environment
3. Which of the following is golden rule for interface design?
   * All of the mentioned
4. Which of the following option is not considered by the Interface design?
   * the design of the interface between two computers
5. UX design process is implemented:
   * Before, during, and after a project and then repeated as many times as neccessary
6. Which of the following is not a design principle that allow the user to maintain control?
   * Show technical internals from the casual user
7. What is user interface design?
   * Designing software around the needs of a user.
8. \_\_\_\_\_\_\_\_\_\_\_  prototypes are most often used during the early stages of analysis. They reflect the breadth of the system without drilling down into too much detail. They are helpful for understanding the range of abilities across a system and how feature sets will be brought together.  They are useful for presenting ideas to stakeholders, facilitating requirements discussions, and gaining buy-in on requirements and design decisions.
   * Horizontal
9. \_\_\_\_\_\_\_\_\_\_\_\_  are used in the later stages of analysis and design to drill down and elaborate on specific features or functions. They are most appropriate when complex features of a system are poorly-understood and are useful in demonstrating that a requirement or set of requirements is technically feasible.  They do not attempt to detail out the entire breath of the application, but focus on implementing a specific feature or feature set in a more complete manner. They demonstrate to the stakeholders that the application works although it might not be fully tuned.
   * Vertical
10. What is the major importance of a prototype?
    * to show how the item works
11. Which is the correct order of phases of prototyping model?
    * quick design, build prototype, customer evaluation of prototype, refine requirements incorporating customer suggestions
12. Why do we use prototype? (Select one or more answers)
    * 2 trong 3 đáp án sau sẽ đúng ☹
      + Stakeholders can see, hold, interact with a prototype more easily than a document or a drawing
      + Stakeholders use the prototype when waiting for real product is released
      + **Team members can communicate effectively**
13. Which is NOT disadvantages of prototyping model?
    * All statements are disadvantages
14. Which of the following statements is true?
    * Prototypes elicit information about the general 'look and feel' of a system
15. Storyboard is one of high-fidelity prototyping method that is often used in conjunction with scenarios.
    * False
16. Which are not best practices of prototyping?
    * All statements are best practices
17. Why should you go to the trouble of creating a prototype of a relatively simple safe item?
    * People relate better to something tangible
18. Which type of prototyping is best described by the following statement: “This technique offers a useful method of exploring ideas and getting customer feedback for each of them. In this method, a developed prototype need not necessarily be a part of the ultimately accepted prototype”?
    * Throwaway
19. Powerpoint is often used for prototyping because it balances the provisionality of paper with the polished appearance of software prototypes.
    * True
20. What is NOT the types of prototype?
    * 1 trong 3 đáp án sau sẽ đúng ☹
      + Exploratory
      + Evolutionary
      + Throwaway
21. What is a prototype?
    * model of a new product
22. Which type of prototyping is best described by the following statement: “the prototype developed initially is incrementally refined on the basis of customer feedback till it finally gets accepted”?
    * Evolutionary
23. A prototype is a limited representation of a design that allows users to interact with it and to explore its suitability.
    * True
24. Which are disadvantages of low-delity prototype? (Select one or more answers)
    * Poor detailed specication
    * 1 trong 3 đáp án sau sẽ đúng ☹
      + Limited error checking
      + Lower development cost
      + Evaluate multiple design concepts
25. What are the major phases a product goes through before appearing on the market?
    * design, prototyping and production
26. What are advantage of high-delity prototype? (Select one or more answers)
    * Fully interactive
    * Complete functionality
27. If you have an idea for a new product, what should the rst stage of the design process be?
    * basic market research
28. To rene requirements for software, prototype model use
    * Feedback