

Quiz 6: Data Gathering in HCI.

1. The process of looking at data from multiple perspectives as well as collecting more than one type of data, both quantitative and qualitative, is called \_\_\_\_\_. In the space below, please provide your answer.  
Answer: Triangulation
2. In data gathering based on observation, the process of tracking users' activities through diaries, interaction logs, videos and photographs collected from their activities in using the system is called \_\_\_\_\_. In the text area below, please provide your answer.  
Answer: Indirect
3. In data gathering, a \_\_\_\_\_ observer is a researcher who will attempt at various levels, depending on the type of study, to become a member of the group he/she is studying. In the text area below, please provide your answer.  
Answer: Insider (or) Participant
4. In data gathering, choosing the appropriate and best technique for data gathering depends on the following. Name one relevant criteria in the text area below.  
Answer: Any one of the following:
  - Focus of the study
  - Participants involved
  - Nature of the technique(s)
  - Resources available
  - Time available
5. In data gathering by interviewing, the technique of asking participants questions without a script that might start with open ended, exploratory questions, which then might go into depth regarding the system is called \_\_\_\_\_. In the text area below, please provide your answer.  
Answer: Unstructured interviewing
6. True or False: In questionnaire design, it is recommended to keep questions very compact without any white spaces. In the text area below, please provide your answer.  
Answer: False
7. A usability researcher observe how participants learn a mechanical assembly task in a virtual reality system. The study is conducted in the researcher's laboratory, where the researcher observes the participant from another room via a video camera. In this type of study, the observer is a \_\_\_\_\_. In the text area below, please state your answer.  
Answer: Outsider
8. A usability consultant explores an unfamiliar city with a participant to find interesting museums and art exhibits using a mobile augmented reality (AR) information system. While exploring with the participant, the observer takes note of the challenges the user has with the AR information system's usage. In this type of study, the observer is a \_\_\_\_\_. In the text area below, please state your answer.  
Answer: Insider
9. The technique of participant observation and interviewing that involves researchers immersing themselves in the culture or situation that they are studying, where the researcher's degree of participation can vary along the scale from "outsider" to "insider" is called \_\_\_\_\_. In the text area below, please provide your answer.  
Answer: Ethnography
10. The response format of a question that explores a range of bipolar attitudes about a particular item, where each pair of attitudes is represented as adjectives is called \_\_\_\_\_. In the text area below, please provide your answer.  
Answer: Semantic Differential Scale or Semantic Differential.

### Quiz 7: The Process of Interaction Design

1. The usability goal of how safe a product is for the customer is called \_\_\_\_\_. In the text area below please state your answer. (1 point)

Answer: Safety

2. The usability goal of creating appropriate support mechanisms for users to complete the task successfully, and providing adequate information is called \_\_\_\_\_. In the text area below please state your answer. (1 point)

Answer: Effectiveness

3. The usability goal of insuring that the time taken learn a system's functionality is acceptable to users is called \_\_\_\_\_. In the text area below please state your answer. (1 point)

Answer: Learnability

4. The usability goal of ensuring that infrequent users remember how to use the system and achieve their goals is called \_\_\_\_\_. In the text area below please state your answer. (1 point)

Answer: Memorability

5. According to Eason (1987) users who use the system occasionally or via someone else are called \_\_\_\_\_ users. In the text area below please state your answer. (1 point)

Answer: Secondary

6. True or False: Those who use a competitor's project are also considered stakeholders. In the text area below please state your answer. (1 point)

Answer: True

7. In separate lines in the text area below, please state the four basic activities of the Interaction Design process. Please state your answer in the text area below. (4 points)

Answer:

Establishing Requirements

Designing Alternatives

Prototyping

Evaluating

## Quiz 8: Establishing Requirements

1. A requirements statement that attempts to formalize requirements for an intended product with description, product rationale, source and fit criterion is called a \_\_\_\_\_. In the text area below, please state your answer.

Answer: Volere shell or Volere process or Volere

2. The kind of requirements that describes what the "system should do" is called \_\_\_\_\_ requirement. In the text area below, please state your answer.

Answer: Functional

3. The kind of requirements that describes requirements such as the "look and feel of the system," "usability and humanity requirements," "operational and environmental requirements," as well as "security and multi-platform support" is called \_\_\_\_\_ requirement. In the text area below, please state your answer.

Answer: Non-functional

4. \_\_\_\_\_ are rich descriptions of typical users of the product under development that the designers can focus on and design the product for. They capture a set of user characteristics or user profiles. These profiles do not represent real people, but idealized and synthesized from real users. In the text area below, please state your answer.

Answer: Persona

5. True or False: Researching similar products is good for prompting requirements for a future product. In the text area below, please state your answer.

Answer: True

6. True or False: Involving only one representative from each stakeholder group, especially when the group is large, is considered a recommended approach to data gathering for establishing requirements. In the text area below, please state your answer.

Answer: False

7. A technique of analyzing tasks completed by users that involves breaking a task down into sub-tasks, then sub-sub-tasks, where the tasks are grouped plans which specify how the tasks might be performed in practice is called a \_\_\_\_\_. In the text area below, please state your answer.

Answer: Hierarchical Task Analysis

8. A \_\_\_\_\_ is a task description that involves an informal narrative or story, which is simple, "natural," personal, but not generalizable. It describes human activities or tasks in a story that allows exploration and discussion of contexts, needs and requirements. In the text area below, please state your answer.

Answer: Scenario

9. A type of task description that focuses on user goals, with an emphasis on the user-system interaction rather than the user's task itself, with specific importance to the user (called an actor) and stresses the user's perspective and not the system's perspective is called \_\_\_\_\_. In the text area below, please state your answer.

Answer: Use Case

10. A type of task description that is a structured narrative consisting of three parts, name, user intention and system responsibility. The stepped down descriptions of the user intentions and stepped down descriptions of the system's responsibility are also provided in a table. This type of task description is called a \_\_\_\_\_.

Answer: Essential Use Case

## Quiz 9: Designing and Prototyping

1. \_\_\_\_\_ is often used with scenarios, bringing more detail, and a chance to role play. It is a series of sketches showing how a user might progress through a task using a device. In the text area below, please state your answer.

Answer: Storyboards

2. In \_\_\_\_\_ prototyping, the user thinks they are interacting with a computer, but a developer is responding to output rather than the system. In the text area below, please provide your answer.

Answer: Wizard of Oz

3. In an experience map drawn as a \_\_\_\_\_, the interaction phases are more important than the interaction points. It shows the phases of the user experience, tasks performed and the emotions involved. In the text area below, please state your answer.

Answer: Wheel

4. An experience map drawn as a \_\_\_\_\_ emphasizes the user experience as interaction points in a linear continuum with a start point, intermediate points, and end point. In this visualization the interaction point is more important than the interaction phase. In the text area below, please state your answer.

Answer: Timeline

5. \_\_\_\_\_ are programming tools, components and functions to develop for a specific platform, e.g. iOS or Windows PC. In the text area below, please state your answer.

Answer: Software Development Kits or SDK

6. \_\_\_\_\_ toolkits enable constructing prototypes via building and coding using electronics. Examples of these toolkits include Arduino, Lilypad, Senseboard and MaKey MaKey. In the text area below, please state your answer.

Answer: Physical Computing

7. A \_\_\_\_\_ is an outline of what people can do with a product and what concepts are needed to understand and interact with it. In the text area below, please state your answer.

Answer: Conceptual Model

8. When designers consider dimensions such as interface widgets or information displays and the relationship between them, then they are considering the \_\_\_\_\_ filtering dimension of prototyping. In the text area below, please state your answer.

Answer: Spatial Structure

9. \_\_\_\_\_ prototyping uses materials such as paper, cardboard to rapidly and cheaply prototype interface screens, some task lists, and storyboards. In the text area below, please state your answer.

Answer: Low-fidelity

10. \_\_\_\_\_ prototyping may look more like the final system and is developed using existing hardware and software components. One disadvantage of this type of prototyping is that potential users may think that they are interacting with the final system. In the text area below, please state your answer.

Answer: High-fidelity

## Quiz 10 Evaluation Part 1 and 2

1. An inspection evaluation technique in which experts guided by usability principles, evaluate whether user interface elements, such as dialogue boxes, menus, navigation structures conform to tried and tested principles. The usability principles resemble that of high-level design principles. In the text area below, please name this type of evaluation.

Answer: Heuristic Evaluation

2. This is a type of evaluation technique that consists of a carefully managed team of users, developers and usability experts working together to step through a task scenario, discussing usability issues associated with dialog elements involved in the scenario steps. In the text area below, please name this type of evaluation.

Answer: Pluralistic Walkthrough

3. True or False: Usability tests are used to test hypotheses and discover new knowledge in a research investigation. In the text area below, please state your answer.

Answer: False

4. True or False: Usability testing includes recording the performance of typical users of a system performing typical tasks in controlled settings towards improving products. In the text area below, please state your answer.

Answer: True

5. List three types of data that you would gather from a usability testing session. In the text area below, please state your answer.

Answer: Any three of the following –

- Time to complete a task
- Time to complete a task after a specified time away from the product
- Number and type of errors per task
- Number of errors per unit of time
- Number of times online help and manuals are accessed
- Number of users making an error
- Number of users successfully completing a task

6. A usability testing kit consisting of a smart phone, camera, microphone, mini laptop or PC, and other computational, observation and data recording components that pack into a heavy duty padded flight case is called \_\_\_\_\_. In the text area below, please state your answer.

Answer: Lab-in-a-box

7. An experimental design in which participants are allocated randomly to different experimental conditions uses the \_\_\_\_\_ design. In the text area below, please state your answer.

Answer: Between subjects or Different participants.

8. An experimental design in which all participants appear in all conditions of the experiment uses the \_\_\_\_\_ design. In the text area below, please state your answer.

Answer: Within subjects or Repeated measures or Same participants.

9. An experimental design in which participants are matched based on either demographics, expertise, gender, age or some other key characteristics, and each participant in the pair is

allocated to a different experiment condition is called the \_\_\_\_\_ design. In the text area below, please state your answer.

Answer: Matched participants.

10. \_\_\_\_\_ type of studies are done in natural settings where the aim is to understand what users do naturally and how technology impact them. This type of study is used in product design to identify opportunities for new technology, determine design requirements, and evaluate technology in use in natural settings. In the text area below, please state your answer.

Answer: Field studies or In the wild studies.