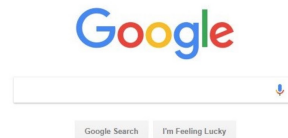


Solutions to Week 1 Assignment

1. Which of the following are the components of the HCI approach to design?
 - a. **Tasks**
 - b. Usability
 - c. **Humans**
 - d. **Technology**
2. HCI draws which fields of the fields together?
 - a. **Psychology**
 - b. Literature
 - c. **Design**
 - d. **Computer Science**
3. Which of the following is the most likely interface metaphor used by a smartphone calendar?
 - a. Take-out Menu
 - b. **A paper diary**
 - c. Mobile Technology
 - d. A touchscreen



4. What is the major difference between the two websites?
 - a. Background color
 - b. The first website provides control over number of results
 - c. **The second website only contains UI components which are essential**
 - d. The second website has a better color scheme
5. Which one of these would not be found in a good HCI?
 - a. Icons that can have specific meanings
 - b. Common shortcuts, like CTRL+Z for undo.
 - c. Sounds that convey meanings.

d. A long command line to achieve a function

6. What is the principal interaction mode for a Microsoft Kinect?
- a. Haptic Interface
 - b. Mouse Pointer
 - c. Exploring and Browsing
 - d. Gesture and Body Movements**
7. "Good Design is just cool graphics".
- a. True
 - b. False**
 - c. May be
8. Which of the following statements is true?
- a. A good UI design doesn't save money as it is expensive
 - b. Bad UI design doesn't really affect the reputation of the company
 - c. A good UI design saves time and effort**
 - d. The UI design doesn't matter as long as the product is great
9. Which of the following is not true of a good design:
- a. Everything designed has an explicit criteria such that the design is useful and usable
 - b. Everything is designed keeping a vague context in mind**
 - c. Both of the above
 - d. None of the above
10. Identify the "interaction" component out of the HCI components (i.e. humans, computer, and interaction) in the following scenario:
- "A doctor performs an ultrasound on the ultrasound machine using the handheld device."*
- a. A doctor
 - b. performs an ultrasound**
 - c. the ultrasound machine
 - d. the handheld device
11. What are the goals of a good design?
- a. Safety
 - b. Utility
 - c. Effectiveness
 - d. Efficiency
 - e. All of the above**

12. Observe the image below and select the best corresponding option:



- a. This is good design because the keyboard is compact
- b. This is bad design because it easy to press the power off switch while trying to increase the volume**
- c. This is good design because the logos are aesthetically appealing
- d. This is bad design because the buttons are too small

13. Observe the image below and select the best corresponding option:



- a. This is good design because this arrangement is aesthetically appealing
- b. This is bad design because the buttons are too big
- c. This is good design because the placement of OTIS improves the functionality
- d. This is bad design because it is unintuitive and confusing**

14. Observe the image below and select the best corresponding option:



- a. This is good design because the layout is original and new
- b. This is bad design because the direction keys are unaligned with the actual directions**
- c. This is good design because the arrangement makes the keyboard compact
- d. This is bad design because it is aesthetically unappealing

15. Observe the image below and select the best corresponding option:



- a. This is good design because it easy to see where to hold the scissor from and not grab the blade**
- b. This is bad design because the handle is too big
- c. This is good design because the colour scheme is soothing
- d. This is bad design because it is easy to mistake the blade for the handle and injure our hand

Solutions to Week 2 Assignment

1. Which of these tools is/are used for selecting any part of the canvas on Photoshop?

a.  **Marquee tool**

b.  **Lasso tool**

c.  **Pen tool**

d.  **Crop tool**

2. What does the Eyedropper tool do?

- a. Paints a single dot of color
- b. **Picks/Selects the color at the cursor**
- c. Creates a histogram of the area around the cursor
- d. Fades the colors of an area centered on the cursor

3. Which of the following techniques can teach you a few things about a thousand people?

- a. Cognitive walkthrough
- b. **Market Research**
- c. Affinity Diagram
- d. Contextual inquiry

4. Which of the following is true for contextual inquiry?

- a. With contextual inquiry, you learn a few things about a thousand people
- b. **With contextual inquiry, you learn a thousand things about a few people**
- c. Focus is on what people say
- d. **Focus is on what people do**

5. Which of the following things does Market research helps you learn?

- a. Why are users doing something
- b. A large variety of things about a thousand people
- c. How people do something

d. **What people say**

6. Which of the following statements are true?
 - a. Users may sometimes do things without any reason
 - b. Nothing a user does is for no reason**
 - c. Users do not always know what they want**
 - d. Sometimes the behaviour of users can be unique to them
7. Contextual Inquiry requires the HCI expert to:-
 - a. Intervene the user when he does something incorrect
 - b. Make sure the user doesn't think aloud while using the product
 - c. Ask the users to summarize their reactions
 - d. Steer the conversation to stay on relevant topics**
8. Contextual inquiry is a quick form of which of the following techniques?
 - a. Psychology
 - b. Ethnography**
 - c. Focus Group Discussions
 - d. None of the above
9. Which of the following are a part of the general process of making an affinity diagram?
 - a. One key concept or observation per sticky note**
 - b. Cluster similar items as you go**
 - c. Label emerging themes**
 - d. Decide the themes of clusters in the beginning
10. Choose the option with the correct order.
 - a. Cognitive walkthrough -> Affinity diagram -> Contextual inquiry
 - b. Cognitive walkthrough -> Contextual inquiry -> Affinity diagram**
 - c. Contextual inquiry -> Affinity diagram -> Cognitive walkthrough
 - d. Affinity diagram -> Contextual Inquiry -> Cognitive walkthrough
11. Which of the following is an aspect of conducting a Contextual Inquiry?
 - a. Using recording techniques
 - b. Taking permission from the Institutional Review Board
 - c. Having the users sign a consent form
 - d. All of the above**
12. To reposition a layer in the image, you would click the layer listing on the Layers panel, then drag the image with which tool?
 - a. Selection tool
 - b. Hand tool

- c. **Move tool**
- d. None of the Above

13. Understanding why a user does things in a certain way by asking them questions related to the use case of the application, signifies which of the following?

- a. Focus Group Discussion
- b. **Contextual Inquiry**
- c. Market research
- d. Affinity Diagram

14. Which of the following is true about the process of drawing Affinity Diagrams?

- a. It is immersive
- b. It is persistent
- c. It involves brainstorming
- d. **All of the above**

15. Clicking and holding the mouse button or Right-clicking on a toolbar icon does what?

- a. Increases the size of that tool
- b. Locks that tool as the default action
- c. Reveals help text for that tool
- d. **Shows additional tools related to that tool**

Solutions to Week 3 Assignment

1. If a user is in your lab and you need to use lookback.io for user testing, you will use:
 - a. Live Moderated Testing
 - b. Unmoderated Self-Testing
 - c. In-Person Testing**
 - d. None of the above
2. If you need to perform a interactive Task Analysis of your app and you need to use lookback.io for user testing, you will use:
 - a. Live Moderated Testing**
 - b. Unmoderated Self-Testing
 - c. In-Person Testing
 - d. None of the above
3. If you need to give the user some fixed context and then let them understand your app themselves, and you would use _____ on lookback.io :
 - a. Live Moderated Testing
 - b. Unmoderated Self-Testing**
 - c. In-Person Testing
 - d. None of the above
4. Using lookback.io, you can:
 - a. Have an interactive call**
 - b. Rewatch previous interviews**
 - c. Conduct interviews without consent
 - d. Invite collaborators to join the interview**
5. An IRB proposal allows the committee to check which of the following:-
 - a. Will the study lead to a feasible result
 - b. What kind of data is being collected**
 - c. Are the researchers qualified to conduct the study
 - d. Who are the participants in the study**
6. On the basis of which of the following would you reject an IRB proposal
 - a. The amount being paid to the subjects is not reflective of their effort
 - b. The gender distribution of the study is not equal
 - c. There might be a degree of psychological risk to the participants**
 - d. All of the above

7. Which of the following requires explicit signature of the IRB?
- Flier
 - Consent Form**
 - Both a & b
 - Neither a, nor b
8. Which of the following information you should include in an IRB proposal?
- How will the subjects be recruited for the study**
 - What is the long-term goal of the research
 - A summary of the study**
 - How will the data collected in the study be useful**
9. Which of the follow is/are **not** an important part of the IRB proposal?
- Goals of the research
 - Biographies of the researchers conducting the study**
 - Confidentiality of the data
 - Results of the pre-experimental questions**
10. Which of the following discussed in the lecture is analogous to an end user license agreement?
- IRB proposal
 - IRB application
 - Flier
 - Pre and Post experimental questions
 - Consent Form**
11. Why are pre-experiment questions important in a study?
- They allow debriefing the user about the goals of the study
 - They help decide if your participant is feasible for the study**
 - They help ascertain if the subject is just doing the study for the money
 - None of the above
12. Which of the following buttons can be found in the Material Design Library of proto.io:
- Action Button**
 - Raised Button**
 - Round Button
 - Icon Button**
13. To add resources like images to proto.io project, it must be dragged and dropped into the _____ window
- Project Asset**
 - Layers

- c. Images
- d. Inspector

14. Proto.io does not have default preset option to create prototypes for:

- a. Smart Phone
- b. Smart TV**
- c. Smart Watch
- d. Web Desktop

15. Which of the following tools/services are not compatible with proto.io:

- a. Photoshop
- b. Dropbox
- c. Illustrator**
- d. Lookback

Solutions to Week 4 Assignment

1. Which of the following should an HCI expert take care of while designing a product?
 - a. You can make as many assumptions as possible
 - b. If it's not obvious to the users, it's always their fault
 - c. You should not think yourself as a typical user**
 - d. The end user is never a beginner
2. An HCI expert needs to be careful about which of the following
 - a. Users hijacking a discussion during an interview
 - b. Users deliberately providing incorrect information during a survey
 - c. Users hijacking a discussion during an FGD**
 - d. All of the above
 - e. Both a and c
 - f. None of the Above
3. Why do we need a Survey?
 - a. To narrow down the data collection for your problem
 - b. Collecting qualitative data
 - c. To understand the needs of a large set of users**
 - d. Statistical representation of the population of interest**
4. Which of the following is a mode of conducting surveys?
 - a. Telephone
 - b. Web
 - c. Hybrid
 - d. All of the above**
5. Which of the following issues occur in personal surveys?
 - a. Surveys are unnecessarily long
 - b. Time consuming**
 - c. Low response rate
 - d. Users may be biased due to the presence of the interviewer**
6. Which of the following survey techniques has the lowest response rate
 - a. Email**
 - b. Telephone
 - c. Personal
 - d. Web
7. Which of the following is true about closed questions?
 - a. Closed questions are easy to code because they are not mutually exclusive

- b. **They might introduce bias in the study**
 - c. **Closed questions are time saving**
 - d. They allow for greater creativity than open ended questions
- 8. Which of the following is **not** true about open-ended questions?
 - a. **They are easy to analyze**
 - b. Allow users to express their ideas without restriction
 - c. They incur greater time cost, compared to closed questions
 - d. All of the above
- 9. Which of the following questionnaire designs are particularly useful for exploratory studies?
 - a. Closed questions
 - b. Hypothetical questions
 - c. Questions with mutually exclusive options
 - d. **Open-ended questions**
- 10. Which of the following techniques can be used to understand the needs of a user?
 - a. **Focus Group Discussions**
 - b. **Interviews**
 - c. TV advertisements
 - d. None of the above
- 11. Which of the following can help you understand the mistakes that you've made in questionnaire design as well the mistakes users are making in providing responses to the questions?
 - a. Focus Group Discussions
 - b. Cognitive walkthrough
 - c. Survey
 - d. **Pilot study**
- 12. Choose the option with the most optimal order.
 - a. Focus Group Discussions -> Interviews -> Surveys
 - b. Surveys -> Focus Group Discussions -> Interviews
 - c. Surveys -> Interviews -> Focus Group Discussions
 - d. **Interviews -> Focus Group Discussions -> Survey**
- 13. Which of the following factors **does not** govern the choice of the survey mode?
 - a. Time and budget constraints
 - b. **Quality of the experts that will evaluate the survey**
 - c. The response rate desired

- d. The complexity of the questions to be asked
14. Which of the following instances illustrates 'cognitive walkthrough'?
- a. Talk to the users about their needs
 - b. Consult the experts
 - c. Imagine yourself as the user and think from their perspective**
 - d. None of the above
15. What type of questions should one avoid in a questionnaire?
- a. Double negatives**
 - b. Leading questions**
 - c. Demographic questions
 - d. Overlapping response categories**
16. What is/are the goal/s of Task Analysis?
- a. To determine the tasks that the actual users of the product are most likely to perform**
 - b. To determine how often are the tasks performed**
 - c. To identify the tasks that the developers of the product designed into the product
 - d. To identify the time constraints on the tasks**
17. Which of the following can be classified as a difficult task while navigating on an e-commerce website?
- a. Create an account/Login
 - b. Cancel a purchase**
 - c. Find a product and add to cart
 - d. Checkout and proceed to purchase
18. Which of the following was one of the problem with the Stanford Prison Experiment?
- a. Violation of participants' privacy
 - b. Ethical issues - severe repercussions on the participants**
 - c. Participants were not given enough time for the task
 - d. Participants found the task very easy
19. Which of the following could be an example of a question in task analysis?
- a. What is your occupation?
 - b. Under what situations will you use an app like this?
 - c. Have you used a similar app?
 - d. How would you change your profile picture in this app?**

20. What is an ideal composition of tasks in a task analysis?

- a. All easy tasks
- b. All difficult tasks
- c. A mix of easy, moderate and difficult tasks**
- d. More easy tasks and less difficult tasks