| Interaction fi                        | the color scheme of a user interface.  |
|---------------------------------------|--|
|                                       | the reasons why users need particular tasks.                                   |
|                                       | the order of user actions needed for completing a task.                        |
|                                       | which user controls are placed on a user interface.                            |
|                                       |  |
| An icon is:                           | a amall vertical layer may need an a base that at are the aurear               |
| on a comput                           | a small vertical lever mounted on a base that steers the cursor                |
| on a compan                           | a graphical picture that reflects specific functions within a                  |
| system                                |  |
|                                       | a button on the mouse that tells the system when an item is                    |
| selected                              |  |
| computer dis                          | a sphere mounted on a fixed base that steers the cursor on a splay             |
|                                       |  |
|                                       |  |
| What is NOT factors?                  | a feature of technology design in consideration of human                       |
|                                       | Increase in computer speed   |
|                                       | Increase in text size and readability  |
|                                       | Use of images/symbols for quick reference                                      |
|                                       | 3-D images to view terrains and traffic Use of color coding for identification |
|                                       |  |
| How has hur                           |  |
| How has hu                            | Provided an alternate source of energy   |
|                                       | Added more displays to increase information                                    |
|                                       | Improved aircraft performance  |
|                                       | Reduced information clutter; easier to read                                    |
|                                       | Changed flight schedules   |
|                                       |  |
| n a well desi<br>are complete<br>True | gned User Interface, the systems image and the mental image ely different.     |
|                                       |  |
| False                                 |  |
|                                       |  |
|                                       | period of time, we find it easier to remember the string of                    |

numbers 404 894 6743 because

numbers are easier to remember than arbitrary characters. the grouping of the numbers is significant

| working me            | ten numbers is not that many to have to remember from emory.  |
|-----------------------|---|
|                       | a, b and c<br>  |
| the screen,           | folder to make a copy of its contents. An animation appears on showing files moving from one folder to another. This is an which of the following:  visibility  mapping  an affordance  feedback  |
|                       | allows eye to rest between elements of activity Alignment Consistency White space Metaphor  |
| Text legibili         | ity is improved by using only capital letters:  |
| False                 |   |
|                       | allows eye to parse display more easily Alignment Consistency Clarity Metaphor  |
|                       |   |
|                       | how information is provided and captured from users the design of forms and reports the logical design of system files and databases turning design specifications into working computer code ability measures can be collected while observing users interacting |
| with a com            | puter system including down time for the application number of user errors software reliability time spent looking at help materials both b and d   |
| When color preferred: | r is used in a graphical user interface, saturated color pairs are  |

| ن عندك قدعنه يوحش I rue  | حله م  |
|--|--|
| False  |  |
| Which of the following contasks between system and Substitutivity Customizabili Flexibility  Task migratal | ity  |
| Shortcuts enable frequent  | ————- users to perform often-used operations quickly   |
| False  |  |
| Ethnography focus on undo complete social context True   | erstanding the full complexity of behavior, in its   |
| False  |  |
| Structured Interview with g views, not performance True  | <br>roups of individuals focus on preferences and  |
| False  |  |
| Color is not good for supporting   | ———<br>orting visual search  |
| False  |  |
| the reasons w  | cally indicate eme of a user interface. why users need particular tasks. user actions needed for completing a task. controls are placed on a user interface. |
| —————————————————————————————————————  | metry and balance through its use  |

| False  |
|--|
| Be sure to use saturated blues for text or small, thin lines  True   |
| False  |
| <ul> <li>Observation technique focus on specific task-relevant behaviors in notes, but later convert to abstract subtasks.</li> <li>True</li> </ul>                                  |
| False  |
| The Model Human Processor is a theoretical concept not used in the daily practice of User Interface Research and Design.  True   |
| False  |
| In a well designed User Interface, the systems image and the mental image are completely different.  True  |
| False  |
| Informative feedback inform user about what is occurring True  |
| False  |
| Affordances are:  possibilities for using an object or interface. the cost of buying a user interface component. the completion times for a typical task. user settable preferences. |
| Observation technique focus on specific task-relevant behaviors in notes, but  |

Observation technique focus on specific task-relevant behaviors in notes, but later convert to abstract subtasks.

True

| False  |
|--|
| Which of the following concerns the transfer of control for a) execution of tasks between system and user? Substitutivity Customizability Flexibility Task migratability |
| Metaphor enable tying presentation and visual elements to some familiar relevant items   |
| True   |
| False  |
| Be sure to use saturated blues for text or small, thin lines  True   |
| False  |
| Recall is better than recognition to minimize user's memory load True  |
| False  |
|  |
|  |

لسسست مسسؤول عن الاجابات انما هذا اجتهاد شخصي ..اذا فادتكك هات دعوة يوحش .. #قدعنة

In a well designed User Interface, the systems image and the mental image are completely 1-differen

الجواب metaphore

Text legibility is improved by using only capital letters -2

الجو اب : خطأ

When color is used in a graphical user interface, saturated color pairs are preferred-3

الجواب: خطأ

The Model Human Processor is a theoretical concept not used in the daily practice of -4 .User Interface Research and Design

الجواب: صواب

Interaction flowcharts typically indicate -5

الجواب: order

How has human-centered design changed the aircraft cockpit display 6-

reduce information clutter: الجواب

Over a short period of time, we find it easier to remember the string of numbers 404 894 7-6743 because

الجواب : The grouping of the numbers is significant

What is NOT a feature of technology design in consideration of human factors 8-

increase computer speed: الجواب

an icon of a file folder, which users can drop files on in order to move them into the 9folder, is an example of which of the following:

a metaphore : الجواب

You drag a folder to make a copy of its contents. An animation appears on the screen, 10-showing files moving from one folder to another. This is an example of which of the following

الجواب: feedback

:interface design focuses on -11

الجواب: يتضمن provid

Which of the following concerns the transfer of control for execution of tasks between 12?system and user

Task migratability: الجواب

1- Which of the following is not a type of meeting and decision support systems?

Answer: Email

2- Video conferencing system is classified as different time and different place in the time-space matrix?

خطا :Answer

3- Chat system is classified as same time and different place in the time-space matrix? Answer:

4- Which of the following is not a predictive evaluation method?

**Answer: Epirical Evaluation** 

5- Which of the following is a predictive evaluation for usability?

Answer: Usability testing

6- Which of the following is not a physical/movement Mode?

Answer: model human processor

7- Which of the following is not a Prototyping Dimension?

**Answer: Sketches** 

8- Which of the following is not a Cognitive Model?

Answer: power law of practice

9- In Incremental Prototyping the next prototype is an improved version of the current?

صح :Answer

10- Fitts' Law describes the time it takes for a person to make a decision as a result of the possible choices he or she has?

خطأ:Answer

11- Interaction flowcharts typically indicate?

Answer: the order of user actions needed for completing a task.

12- Which of the following concerns the transfer of control for execution of tasks between system and user?

Answer: Task migratability

13- Over a short period of time, we find it easier to remember the string of numbers 404 894 6743 because?

Answer: The grouping of the numbers is significant

14- In a heuristic evaluation?

Answer: a group of usability experts review a user interface according to a small set of principles

15- Which one of these would NOT be found in a good HCI?

Answer: A long command line to achieve a function

- 16- When color is used in a graphical user interface, saturated color pairs are preferred?

  Answer:خطأ
- 17- The Model Human Processor is a theoretical concept not used in the daily practice of User Interface Research and Design?

خطأ:Answer

18- Affordances are?

Answer: possibilities for using an object or interface.

19- which of the following is not a Model human processor?

Answer: the memory system

20- Text legibility is improved by using only capital letters?

خطا :Answer

21- Which of the following does not belong to 9 heuristics?

Answer: Easy to use

22- How has human-centered design changed the aircraft cockpit display?

Answer: Reduced information clutter; easier to read

23- Several usability measures can be collected while observing users interacting with a computer system including?

Answer: both b and d

24- You drag a folder to make a copy of its contents. An animation appears on the screen, showing files moving from one folder to another. This is an example of which of the following?

Answer: feedback

25- The summative evaluation is done on finished (or mostly implemented) project?

Answer: صبح

26- The Power Law of Practice applies to:?

Answer: sensori-motor skilled behavior

27- Which of the following is not a Goal of HCI evaluation

Answer: Gather data

28- How do you get to know the user in the usability engineering lifecycle?

Answer: Draw up a user profile

29- Interface design focuses on:?

Answer: how information is provided and captured from users

30- What is NOT a feature of technology design in consideration of human factors?

Answer: Increase computer speed

31- In a well designed User Interface, the systems image and the mental image are completely different?

خطا :Answer

32- Email system is classified as different time and different place in the time-space matrix.

صىح :Answer

33- The predictive evaluation is used to evaluate the implementation?

خطأ :Answer 34- An icon is

Answer: a graphical picture that reflects specific functions within a system

35- allows eye to rest between elements of activity

White space

36- ..... allows eye to parse display more easily

Alignment

37- Which of the following concerns the transfer of control for a) execution of tasks between system and user?

Task migratability

38- Ethnography focus on understanding the full complexity of behavior, in its complete social context

True

39- Recall is better than recognition to minimize user's memory load.

False

40- White space provides symmetry and balance through its use

True

41- Color is not good for supporting visual search

**False** 

42- Undo is an example of actions reversal

True

43- Shortcuts enable frequent users to perform often-used operations quickly

44- Structured Interview with groups of individuals focus on preferences and views, not performance

True

45- Observation technique focus on specific task-relevant behaviors in notes, but later convert to abstract subtasks.

True

46- Be sure to use saturated blues for text or small, thin lines

False

47- Metaphor enable tying presentation and visual elements to some familiar relevant items

True

48- An icon of a file folder, which users can drop files on in order to move them into the folder, is an example of which of the following:

metaphor

49- Informative feedback inform user about what is occurring

True

# 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:
  - 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:



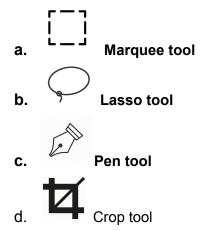
- a. This is good design because the layout is original and new
- b. This is bad design because the direction keys are unaligned with the actual directions
- c. This is good design because the arrangement makes the keyboard compact
- d. This is bad design because it is aethetically unappealing
- 15. 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?



- 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 HCl 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 <u>lookback.io</u> 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 <a href="lookback.io">lookback.io</a> 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 <u>lookback.io</u>:
  - 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? a. Flier b. Consent Form c. Both a & b d. Neither a, nor b 8. Which of the following information you should include in an IRB proposal? a. How will the subjects be recruited for the study b. What is the long-term goal of the research c. A summary of the study d. 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? a. Goals of the research b. Biographies of the researchers conducting the study c. Confidentiality of the data d. Results of the pre-experimental questions 10. Which of the following discussed in the lecture is analogous to an end user license agreement? a. IRB proposal b. IRB application c. Flier d. Pre and Post experimental questions e. Consent Form 11. Why are pre-experiment questions important in a study? a. They allow debriefing the user about the goals of the study b. They help decide if your participant is feasible for the study c. They help ascertain if the subject is just doing the study for the money d. None of the above 12. Which of the following buttons can be found in the Material Design Library of proto.io: a. Action Button b. Raised Button c. Round Button d. Icon Button 13. To add resources like images to proto.io project, it must be dragged and dropped into the window a. Project Asset b. 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 HCl 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?
  - 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

### a graphical picture that reflects specific functions within a system

2-An icon of a file folder, which users can drop files on in order to move them into the folder, is an example of which of the following:

the ?recognition rather than recall? principle

direct manipulation

#### a metaphor

A, B and C

3- allows eye to parse display more easily

### **Alignment**

Consistency

Clarity

Metaphor

4-How has human-centered design changed the aircraft cockpit display?

Provided an alternate source of energy

Added more displays to increase information

Improved aircraft performance

Reduced information clutter; easier to read

Changed flight schedules

5-Interaction flowcharts typically indicate

the color scheme of a user interface.

the reasons why users need particular tasks.

the order of user actions needed for completing a task.

which user controls are placed on a user interface.

| 6-The Model Human Processor is a theoretical concept not used in the daily practice of User Interface Research and Design. |   |
|--|---|
| True   |   |
| False  |   |
| 7-Recall is bette  | er than recognition to minimize user's memory load.                         |
| True   |   |
| <b>False</b>   |   |
| 8-Structured Informance  | terview with groups of individuals focus on preferences and views, not      |
| True   |   |
| False  |   |
| 9-Affordances a  | are:  |
|  | possibilities for using an object or interface.                             |
|  | the cost of buying a user interface component.                              |
|  | the completion times for a typical task.                                    |
|  | user settable preferences.  |
| 10-Over a short<br>6743 because  | period of time, we find it easier to remember the string of numbers 404 894 |
|  | numbers are easier to remember than arbitrary characters.                   |
|  | the grouping of the numbers is significant                                  |
|  | ten numbers is not that many to have to remember from working memory.       |
|  | a, b and c  |
|  |   |
| 11-Which one o   | of these would NOT be found in a good HCI?                                  |
|  | Common short cuts, like CTRL+Z for undo.                                    |
|  | Icons that can have specific meanings.                                      |
|  | A long command line to achieve a function                                   |
|  | Sounds that convey meanings.  |

| 12-Several usability measures can be collected while observing users interacting with a computer system including |  |
|---|--|
| down time for the application   |  |
| number of user errors   |  |
| software reliability  |  |
| time spent looking at help materials  |  |
| both b and d  |  |
| 13 allows eye to rest between elements of activity  |  |
| Alignment   |  |
| Consistency   |  |
| White space   |  |
| Metaphor  |  |
|   |  |
| 14-Undo is an example of actions reversal   |  |
| <b>True</b>   |  |
| False   |  |
|   |  |
| 15-Be sure to use saturated blues for text or small, thin lines   |  |
| True  |  |
| False   |  |
|   |  |
| 16-In a well designed User Interface, the systems image and the mental image are completely different.            |  |
| True  |  |
| <mark>False</mark>  |  |
|   |  |
| 17-White space provides symmetry and balance through its use  |  |
| <b>True</b>   |  |
| False   |  |
|   |  |

| 18-Structured Interview with groups of individuals focus on preferences and views, not performance                   |
|--|
| True   |
| False Palse  |
|  |
| 19-Ethnography focus on understanding the full complexity of behavior, in its complete social context                |
| <b>True</b>  |
| False  |
|  |
| 20-Color is not good for supporting visual search  |
| True   |
| False Palse  |
|  |
| 21-Observation technique focus on specific task-relevant behaviors in notes, but later convert to abstract subtasks. |
| <b>True</b>  |
| False  |
| 22-Metaphor enable tying presentation and visual elements to some familiar relevant items                            |
| True True  |
| False  |
| 23-Shortcuts enable frequent users to perform often-used operations quickly  |
| True   |
| False  |
| 24-White space provides symmetry and balance through its use   |
| True   |
| False  |
| 25-Color is not good for supporting visual search  |
| True   |
| False Palse  |

26-Be sure to use saturated blues for text or small, thin lines

True

## **False**

27-Whencolor is used in a graphical user interface, saturated color pairs are preferred:

## **True**

False

27-Text legibility is improved by using only capital letters:

True

### **False**

28-What is NOT a feature of technology design in consideration of human factors?

## **Increase in computer speed**

Increase in text size and readability

Use of images/symbols for quick reference

3D images to view terrains and traffic

Use of color coding for identification

29-Which one of these would NOT be found in a good HCI?

Common short cuts, like CTRL+Z for undo.

Icons that can have specific meanings.

## A long command line to achieve a function

Sounds that convey meanings.

30-Several usability measures can be collected while observing users interacting with a computer system including

down time for the application

number of user errors

software reliability

time spent looking at help materials

### both b and d

31-Which of the following concerns the transfer of control for a) execution of tasks between system and user?

Substitutivity

# **Customizability**

Flexibility

Task migratability

32-You drag a folder to make a copy of its contents. An animation appears on the screen, showing files moving from one folder to another. This is an example of which of the following:

visibility

mapping

an affordance

#### feedback

33-Interface design focuses on:

# how information is provided and captured from users

the design of forms and reports

the logical design of system files and databases

turning design specifications into working computer code

Which one of these would NOT be found in a good HCI?

Common short cuts, like CTRL+Z for undo.

Icons that can have specific meanings.

A long command line to achieve a function

Sounds that convey meanings.

How has human-centered design changed the aircraft cockpit display?

Provided an alternate source of energy

Added more displays to increase information

Improved aircraft performance

Reduced information clutter; easier to read

Changed flight schedules

Which of the following concerns the transfer of control for execution of tasks between system and user?

Substitutivity

Customizability

Flexibility

Task migratability

Which one of these is a good reason for taking care to design a good computer human interface?

Not every user is a computer expert

Well designed HCIs allow the software to be sold at a better price.

Well designed HCIs use less computer resources.

Well designed HCIs allow the computer to run faster

#### What does HCI stand for?

**Human Computer Interface** 

**Human Computer Interaction** 

**Human Computer Implementation** 

**Human Computer Industry** 

Which of these are attributes of usability?

Learnability.

Usefulness.

Generalisability.

Dialogue

Several usability measures can be collected while observing users interacting with a computer system including?

Down time for the application

number of user errors

software reliability

time spent looking at help materials

both b and d

What is NOT a feature of technology design in consideration of human factors?

# Increase in computer speed

Increase in text size and readability

Use of images/symbols for quick reference

3-D images to view terrains and traffic

Use of color coding for identification

| Which of the following is not measurable dimension of usability?   |
|--|
| Learnability   |
| Efficiency   |
| Price  |
| Error rate   |
| Response time  |
| Satisfaction   |
|  |
| What is not an area of study within Human Factors research?  |
| Human performance  |
| Human and technology interaction   |
| Human anatomy  |
| Cognitive research/ human processing   |
| Technology design  |
|  |
| Which of the following is NOT a measureable human factor to facilitate the evaluation of a specific user interface design? |
| Ratio of completed tasks to incomplete tasks.  |
| Rate of error.   |
| Retention over time.   |
| Subjective satisfaction.   |
| Time to learn.   |
|  |
| The main goal of HCI is to:  |
| Identify problems and tasks that can be addressed with software products   |
| Create usable software-enabled products and user-interfaces  |
| Enhance the usability of existing software products  |
| a, b and c   |

The field of HCI is concerned with: The design of interactive computing systems a, c, and d The evaluation of interactive computing systems The implementation of interactive computing systems The Human Computer Interaction is: Mediates the communication between human and computers Studies the styles of interaction between human and computers Studies the styles of user interfaces All of the above Safety and Security issues are considered: Goals of HCI Dimension of usability in HCI Characteristics of user interface None The sequence of interaction between a user and a system refers to: Interface Discussion Dialogue Session The dialog between user and system is influenced by the style of interface the used programming language a computer engineering none of the above

HCI is considered to be:

a computer science discipline

a computer engineering discipline

a psychology and cognitive science

all of the above

The action of dragging a file into the trash on a desktop on-screen is an example of which usability paradigm

Use of real-world metaphor

Windowing system

Agent-based interface

Multi-modality

When color is used in a graphical user interface, saturated color pairs are preferred:

#### False

The Model Human Processor is a theoretical concept not used in the daily practice of User Interface Research and Design:

#### False

Text legibility is improved by using only capital letters:

False

Interaction flowcharts typically indicate the color scheme of a user interface. the reasons why users need particular tasks. the order of user actions needed for completing a task. which user controls are placed on a user interface. An icon is: a small vertical lever mounted on a base that steers the cursor on a computer display a graphical picture that reflects specific functions within a system a button on the mouse that tells the system when an item is selected a sphere mounted on a fixed base that steers the cursor on a computer display What is NOT a feature of technology design in consideration of human factors? Increase in computer speed Increase in text size and readability Use of images/symbols for quick reference 3-D images to view terrains and traffic Use of color coding for identification How has human-centered design changed the aircraft cockpit display? Provided an alternate source of energy Added more displays to increase information Improved aircraft performance Reduced information clutter; easier to read Changed flight schedules in a well designed User Interface, the systems image and the mental image are completely different. True False Over a short period of time, we find it easier to remember the string of numbers 404

894 6743 because

numbers are easier to remember than arbitrary characters.

the grouping of the numbers is significant

ten numbers is not that many to have to remember from working

memory.

a, b and c

You drag a folder to make a copy of its contents. An animation appears on the screen, showing files moving from one folder to another. This is an example of which of the following: visibility mapping an affordance feedback ..... allows eye to rest between elements of activity Alignment Consistency White space Metaphor Text legibility is improved by using only capital letters: True False ..... allows eye to parse display more easily Alignment Consistency Clarity Metaphor Interface design focuses on: how information is provided and captured from users the design of forms and reports the logical design of system files and databases turning design specifications into working computer code

Several usability measures can be collected while observing users interacting with a computer system including

down time for the application number of user errors software reliability time spent looking at help materials both b and d

| When color is used<br>True                | d in a graphical user interface, saturated color pairs are preferred:   |
|---|---|
| False                                     |   |
|   |   |
| between system a<br>Sul<br>Cus<br>Fle     | wing concerns the transfer of control for a) execution of tasks and user? bistitutivity stomizability xibility sk migratability   |
| Shortcuts enable True                     | <br>frequent users to perform often-used operations quickly   |
| False                                     |   |
| Ethnography focusocial context True       | us on understanding the full complexity of behavior, in its complete  |
| False                                     |   |
| Structured Intervi<br>performance<br>True | ew with groups of individuals focus on preferences and views, not   |
| False                                     |   |
| Color is not good                         | for supporting visual search  |
| False                                     |   |
| the<br>the<br>the                         | narts typically indicate e color scheme of a user interface. e reasons why users need particular tasks. e order of user actions needed for completing a task. ich user controls are placed on a user interface. |

| White space provides symmetry and balance through its use True   |  |
|--|--|
| False  |  |
| Be sure to use saturated blues for text or small, thin lines   |  |
| True   |  |
| False  |  |
| Observation technique focus on specific task-relevant behaviors in notes, but late convert to abstract subtasks.  True   |  |
| False  |  |
| The Model Human Processor is a theoretical concept not used in the daily practic of User Interface Research and Design.  True  |  |
| False  |  |
| In a well designed User Interface, the systems image and the mental image are completely different.  True  False   |  |
|  |  |
| Informative feedback inform user about what is occurring True  |  |
| False  |  |
| Affordances are:  possibilities for using an object or interface. the cost of buying a user interface component. the completion times for a typical task. user settable preferences. |  |

\_\_\_\_\_

| True  |
|---|
| False   |
| Which of the following concerns the transfer of control for a) execution of tasks between system and user?  Substitutivity Customizability Flexibility Task migratability |
| Metaphor enable tying presentation and visual elements to some familiar relevant items  |
| True  |
| False   |
| Be sure to use saturated blues for text or small, thin lines True False   |
|   |
|   |
| Recall is better than recognition to minimize user's memory load True   |
| False   |
|   |

Observation technique focus on specific task-relevant behaviors in notes, but later

convert to abstract subtasks.

لسسست مسسؤول عن الاجابات انما هذا اجتهاد شخصي ..اذا فادتكك هات دعوة يوحش ..#قدعنة

| True  |
|---|
| False  2 Fitts' Law describes the time it takes for a person to make a decision as a result of the possible choices he or she has |
| True  |
| False   |
|   |
| The Model Human Processor is a theoretical concept not used in the daily practice of 3.User Interface Research and Design True    |
| False   |
|   |
| 4 Which of the following is not a Prototyping Dimension Representation Scope Sketches Maturation                                  |
|   |
| 5:The Power Law of Practice applies to knowledge acquisition sensori-motor skilled behavior quality                               |
|   |
| 6 Which of the following is not a physical/movement Model Hick's Law Model human processor Fitts' Law                             |

Simulations

In Incremental Prototyping the next prototype is an improved version of the

| 7 ?Which of the following is not a Model human processor<br>The perceptual system<br>The cognitive system<br>The motor system |  |
|---|--|
| The cognitive system  |  |
| -   |  |
| The motor system  |  |
|   |  |
| The memory system   |  |
|   |  |
| 8 ?Which of the following is not a Cognitive Model  |  |
| Power Law of Practice   |  |
| GOMS  |  |
| Production Systems  |  |
| Grammars  |  |
|   |  |
| Interaction flowcharts typically indicate   |  |
| the color scheme of a user interface  |  |
| the reasons why users need particular tasks   |  |
| the order of user actions needed for completing a task  |  |
| which user controls are placed on a user interface.   |  |
|   |  |

10 ?How do you get to know the user in the usability engineering lifecycle Draw up a user profile

Analyze user complaints Run a thinking aloud test Ask user in each phases