

# HCI EXAMS COLLECTION: HCI Mid 1

School of Information Technology & Engineering (SITE)  
Addis Ababa Institute of Technology  
Addis Ababa University

Subject: Human Computer Interaction  
Exam Duration: 30 Minutes  
Date: 8/Dec/2021

Max. Marks: 20 Marks  
Instructor: Dr. G Manjunath

Test-1

Full Name: [REDACTED]  
ID: [REDACTED] n: SITE Section: 1

Instructions to the examinees:  
1. Switch off your mobiles.  
2. Do not hold any hand-out or notes relevant to the course.  
3. Do not cheat or you will be punished. Do not communicate with others during the exam.  
Please attempt all questions and make sure your answers are clearly stated and to the point.

Short Answer Questions:

1. What is Interface? List the Five different types of interfaces with examples? 3m

-> Boundary between separate component used to exchange information

- \* Interaction Object and Object in OOP uses method
- \* Graphical User Interface uses stream
- \* CBI Interaction uses command
- \* Hardware Command uses (Input output)
- \* Oral Command & finger for touchscreen

2. List the characteristics of effective user interface? 3m

- Simple
- Clear
- Consistent
- User-control
- Forgiving
- Provide feedback
- Aesthetic

3. Give an example of Direct and Indirect Manipulation? 1m

Direct - Game -

Indirect - Use Text and words eg. CMD

4. List the types of Container Objects? 1m

- Work place
- folder
- Work Area

Fill in the blanks:

5. In 1970 Cathode ray ~~teletype line~~ was used in screen designing.

6. Object and Action constitute a graphical system.

7. The Graphical Interface is also known as WIMP.

8. A User interface refers to the collection of techniques and mechanisms to interact with machine.

9. Point defines the motor activity and Click represents the signal to carry out an action of a graphical screen.

10. HTML is a commonly used language for designing web Interfaces.

11. In GUI users move through Lists, Tree and Menu.

True or False Questions:

12. Container objects present information that appears in the body of the screen [T/F] False

13. Device objects consists of other objects for acting upon. [T/F] False

14. An Intranet is partially accessed by the authorized users. [T/F] True

15. The web system responds to the users request immediately and it is fixed. [T/F] False

16. The GUI is famous for breach of security. [T/F] False

## HCI Mid 2

**School of Information Technology & Engineering (SITE)**  
**Addis Ababa Institute of Technology**  
**Addis Ababa University**

Test-2  
 Max. Marks: 20 Marks  
 Instructor: Dr G Manjunath

Subject: Human Computer Interaction  
 Exam Duration: 30 Minutes  
 Date: 29/Dec/2021

Full Name: \_\_\_\_\_ ID: \_\_\_\_\_ Stream: SITE Section: \_\_\_\_\_

**Instructions to the examinees:**

1. Switch off your mobiles,
2. Do not hold any hand-out or notes relevant to the course,
3. Do not cheat or you will be punished. Do not communicate with others during the exam.

Please attempt all questions and make sure your answers are clearly stated and to the point.

**Fill in the Blanks:**

1. RSVP is a technique which increases the reading speed.
2. A short term memory is also known as working memory.
3. The mental model relies completely on user's mental model.
4. The graphical presentation of data is called as information.
5. The Responsive Principle directly encounters problem with the "Minimize the Need for Scrolling" principle in a web page design.

**True or False Questions**

<u>True</u>	6. Higher-Level information Processing performs reasoning.	[T/F]
<u>False</u>	7. Verbal and Analytical thinkers prefer graphical interfaces.	[T/F]
<u>True</u>	8. Mental Models are developed to explain, understand and perform something fast.	[T/F]
<u>True</u>	9. The density and complexity are directly proportional to each other.	[T/F]
<u>True</u>	10. Experts mentioned that "good screens" contain the density of order 25%.	[T/F]

**Short Answer Questions:**

11. List the major goals of interface design? 1m

→ The User Interface Design goals can be separated into 2: Usability Goals & UX Goals.

Usability Goals:

- learnability
- effectiveness
- efficiency
- utility
- memorizability

User Experience Goals:

- supportive
- user-satisfaction
- encouraging
- fun at work.

12. Describe the term Usability? 1m

→ Usability refers to the extent a user or human can use the system with ease or efficiency.

Ease: specific level of human assessment

Efficiency: specific level of human performance.

→ The more usable a system the more users will feel easy when they use the systems

→ The more well-designed the system is the more usable it will be. This will increase the customer consumption of the system.



13. List some techniques that help in making scanning easier? 1.5m

- Different technologies and scanning technique
- I/O Devices (Scanner)

14. List the types of headings that can be included on screens? 1.5m

- Heading is one of the main things that can appear on screen but there are several type of heading such as the following.

- Web based Header
- Title Header
- Body Header
- Main Header

15. List the factors that affect the Visual Clarity? 2m

- Visual clarity is very important for a good design.
  - Visually ordered:- only necessary information on screen.
  - Impaired information reading: if the colors and contrast of background don't match.
  - Confusing Navigation
  - Incomprehensible Components
  - Annoying Distraction.
- mainly the graphics and color affect the visual clarity

16. List the Goals of a well-designed screen? 1.5m

- There are 3 main goals of a well-designed screen which are the following:-
  - 1) Being able to show users capabilities, activities and requirements.
  - 2) Being able to control the software.
  - 3) Accomplishing business objectives.

17. List the factors that contribute to a poor design? 1.5m

- There are 5 main factors that contribute to a poor design which are the following:
  - 1) Fine Dissimilarities: this means the same work will result in ~~different~~ <sup>different</sup> action or the same action will result in ~~different~~ <sup>different</sup> work. This will be very confusing to the user.
  - 2) Inconsistency in Problem Solving:- humans are designed to solve problems so when this inconsistency occurs it results in poor design.
  - 3) Non-Obvious Design: when the design is too complex it becomes non obvious.
  - 4) Design Inconsistency: this also means it will have poor design due to inconsistency.
  - 5) Usage of Specialized Language: Specialized language is language that users may not understand easily. For example: words like reboot. If the design has a lot of Specialized Language this will result in user feeling confused.

# HCI Final

Subject: Human Computer Interaction  
Exam Duration: 2:00 Hours  
Date: 24/Feb/2021  
Addis Ababa University  
Final Exam  
Max. Marks: 40 Marks  
Instructor: Dr. G Manjunath

Full Name: [REDACTED]

ID: [REDACTED]

Instructions to examinees:

1. Switch off your mobiles,
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3. Do not cheat or you will be punished. Do not communicate with others during the exam.

Please attempt all questions and make sure your answers are clearly stated and to the point.

Fill in the Blanks:

1. \_\_\_\_\_ ensures that products used for interaction are easy to learn and use.
2. \_\_\_\_\_ section comprises of specific files that can also be used later.
3. Through \_\_\_\_\_ section, files can be shared across different computer systems.
4. \_\_\_\_\_ windows include a set of images, colors or patterns displayed in a window.

Multiple Choice Questions:

1. The "good screens" contain the density of order \_\_\_\_\_. [ A ]  
a) 15 b) 25 c) 35 d) None
2. \_\_\_\_\_ is used in urgent situations when a quick response is required. [ ]  
a) Blink b) emphasis c) Underlining d) None
3. The graphical presentation of data is called as \_\_\_\_\_. [ A ]  
a) statistical graphics b) Chart c) graph d) None
4. A \_\_\_\_\_ is a set of options presented to the user of a computer application. [ A ]  
a) Menu b) scroll bar c) Task bar d) None
5. \_\_\_\_\_ assist the user in developing a mental model of the system. [ B ]  
a) Menu b) scroll bar c) Task bar d) None
6. The \_\_\_\_\_ is the portion of the screen where the user performs tasks. [ ]  
a) Work Area b) Size grip c) Command Area d) None
7. The \_\_\_\_\_ consists of menu bars and some other basic controls. [ B ]  
a) Primary b) secondary c) tertiary d) None

True or False Questions:

1. Palette Window is a type of Primary window [ T / F ]
2. DVORAK layout reduces the finger travel distances [ T / F ]
3. With QWERTY layout, the typing speed of the users get reduced [ T / F ]
4. F5: It is used to refresh or reload a page or a document. [ T / F ]
5. F3: It is also known as the rename function key. [ T / F ]
6. F2: It is also known as search which is used to open a search feature [ T / F ]
7. When Alt+F4 is pressed, the currently active window is closed. [ T / F ]
8. F6: It is used to move the cursor to the address bar. [ T / F ]
9. F8: It is used to check the spelling and grammar. [ T / F ]
10. When Shift+F7 is pressed, a thesaurus check is performed on the highlighted word. [ T / F ]
11. F10: It is used to active the menu bar of an application. [ T / F ]
12. When Shift+F12 is pressed, the word document is saved. [ T / F ]



13. Predictability refers to a highly established order or plan. ( T / F )  
14. Order of usage is a technique where the items that are used frequently must be grouped at the beginning. ( T / F )

**Short Answer Questions:**

List the major goals of user interface design? 2m

List the two types of densities? 2m

List the four distinct contents of menus? 2m

List the different kinds of graphical menus? 3m

List the different kinds of graphical menus? 3m

List the five different types of icons? 3m