

Module code: INF3720

Module name: Human-Computer Interaction II

Assessment 2 (Assignment 2) – 2025

Unique number: 794836

1. Answer all questions
2. Do not share answers, this is an individual assignment
3. Chapters: Focus on 1, 2 ,3, 4, 6,8,11& 14.
4. Submit before or on the due date. Check the CORRECT time since the time is not midnight.
5. Do not wait until the due date to submit the assignment because MyUnisa may be down.
6. Submit your answers in PDF format. Make sure that the PDF is editable and not password protected. Password-protected PDFs will not be marked.
7. As you may be aware. An assignment may not be sent by e-mail for marking. Please do not ask for extra time.
8. Total marks 100

Section A (Chapters 1, 3, 4, 6 and 11)

Question 1

[60]

Draw a table similar to the one below and use it to answer the MCQs give. It must have three columns, each with 15 questions. Include the text given below the table, too. It will be filled by the marker(s):

Each question is 1.5 marks, making a total of 60 Marks (40 x 1.5 =60)

Q	Answer	Question	Answer	Question	Answer
1		16		31	
2		17		32	
3		18		33	
4		19		34	
5		20		35	
6		21		36	
7		22		37	
8		23		38	
9		24		39	
10		25		40	
11		26		41	
12		27		42	
13		28		43	
14		29		44	
15		30		45	

Total correct: _____

Marks for question 1 _____

1. Which usability goal refers to how easy it is for users to remember how to use a product after a break?
 - A. Learnability
 - B. Efficiency
 - C. Memorability
 - D. Utility
2. Which component of the conceptual model defines the operations that can be performed on domain objects?
 - A. Metaphors
 - B. Concepts
 - C. Relationships
 - D. Mappings

3. Which challenge is characteristic of asynchronous discussion forums in distance learning?
 - A. Immediate feedback
 - B. Delayed responses
 - C. Live video
 - D. High bandwidth
4. Which feature would BEST provide immediate feedback to users in an online discussion forum?
 - A. Real-time notifications
 - B. Daily summary emails
 - C. Static pages
 - D. Printable transcripts
5. Which persuasive strategy involves providing users with an option to undo their last action?
 - A. Reward
 - B. Suggestion
 - C. Reminding
 - D. Recoverability
6. Which requirement discovery method involves observing users in their natural context?
 - A. Brainstorming
 - B. Contextual inquiry
 - C. Survey
 - D. Prototyping
7. Which term best describes how satisfying an interactive product is to use?
 - A. Efficiency
 - B. Usability
 - C. User Experience
 - D. Reliability
8. Given that users need an “undo” option to recover from mistakes, which usability goal is supported?
 - A. Safety
 - B. Memorability
 - C. Learnability
 - D. Utility
9. Which example illustrates poor design?
 - A. Tablet with intuitive gestures
 - B. Remote with unlabeled buttons
 - C. Smartwatch with haptic feedback
 - D. Touchscreen coffee maker
10. Which phrase did Don Norman recommend replacing “user” with for broader context?
 - A. Operator
 - B. Customer
 - C. People
 - D. Subject

11. Which form of guidance uses menus and icons on screen?
 - A. Commands
 - B. Forms
 - C. Menus
 - D. Gestures
12. Which of these is not considered a core usability goal?
 - A. Effectiveness
 - B. Efficiency
 - C. Profitability
 - D. Safety
13. Fill in the gap: Accessibility and _____ are essential for inclusive design.
 - A. efficiency
 - B. memorability
 - C. inclusiveness
 - D. utility
14. What are the four basic activities of the interaction design process?
 - A. Planning, coding, testing, deployment
 - B. Discovering requirements, designing alternatives, prototyping, evaluating
 - C. Research, marketing, budgeting, launch
 - D. Ideation, specification, manufacturing, support
15. Fill in the gap: Interaction design consists of discovering requirements, designing alternatives, prototyping the designs, and _____.
 - A. marketing them
 - B. discarding them
 - C. evaluating them
 - D. manufacturing them
16. People-centered design rests on three principles: early focus on users and tasks, empirical measurement, and _____.
 - A. cost reduction
 - B. iterative design
 - C. brand alignment
 - D. single-pass development
17. Which of these best describes a conceptual model?
 - A. A low-level software architecture plan
 - B. A user's mental representation of how a system works
 - C. A network topology diagram
 - D. A marketing strategy document
18. Which component of a conceptual model uses analogies to help people understand what a product does?
 - A. Mappings
 - B. Relationships
 - C. Metaphors
 - D. Attributes

19. Fill in the gap: In a conceptual model, mappings specify the relationship between concepts and the _____.
A. codebase
B. user experience
C. marketing plan
D. manufacturing process
20. Which interaction type would you classify “swiping across a single line of letters on a TV screen”?
A. Direct manipulation
B. Form fill
C. Command language
D. Menu selection
21. Which is a key advantage of moving parking-meter transactions to a mobile app?
A. Requires exact change
B. Forces customers to print paper tickets
C. Allows automatic time-up notifications
D. Increases queue length
22. Fill in the gap: One disadvantage of digital tickets is that some users may not have a _____ to access the app.
A. smartphone
B. pencil
C. banknote
D. paper ticket
23. Given that digital parking apps can store your details for next time, which usability goal does this primarily support?
A. Learnability
B. Efficiency
C. Safety
D. Memorability
24. Since some users prefer anonymity, which feature should a digital ticket system include?
A. Mandatory profile photo
B. Option to pay by cash without logging in
C. Automatic social sharing
D. Biometric lock
25. Which form of digital ticket verification is mentioned as reducing the need to queue?
A. Barcode or QR code scan
B. Handwritten pass
C. Voice password
D. PIN-only entry
26. Fill in the gap: A digital ticket can be stored in a _____ that keeps all past purchases.
A. paper folder
B. digital wallet

- C. handwritten diary
 - D. physical wallet
27. However, if a user's phone battery dies, which backup option is recommended?
- A. No backup—user is locked out
 - B. Print the digital ticket at home beforehand
 - C. Rely solely on cash payment
 - D. Use another user's phone without permission
28. Which ethical concern arises when apps collect personal data for convenience?
- A. Increased usability
 - B. Privacy and data security
 - C. Faster transactions
 - D. Lower costs
29. Which of the following is an example of a persuasive strategy in an eating-habits app?
- A. Requiring users to fill lengthy forms
 - B. Displaying pop-up recipe suggestions
 - C. Hiding feedback messages
 - D. Using random color schemes
30. Which strategy helps eliminate an annoying interface by allowing users to recover from mistakes?
- A. Locking input fields
 - B. Disabling back navigation
 - C. Providing an undo function
 - D. Removing help text
31. Which persuasive element could reward users for meeting their dietary goals?
- A. Timed locks
 - B. Praise notifications
 - C. Random resets
 - D. Error pop-ups
32. Fill in the gap: A trustworthy interface design should ask users for their _____ before accessing private data.
- A. password
 - B. consent
 - C. username
 - D. age
33. Which of these reduces memory load for users?
- A. External reminders
 - B. Complex menus
 - C. Hidden controls
 - D. Bright flashing colours
34. Which is NOT a recommended strategy for a trustworthy interface?
- A. Secure user information
 - B. Ask for user consent
 - C. Employ deceptive defaults
 - D. Use fair and ethical design

35. Fill in the gap: To avoid annoying users, error messages should be _____.
A. verbose and technical
B. understandable
C. vague
D. infrequent
36. Which of these is a primary stakeholder in the library management system?
A. Alumni
B. Librarian
C. External examiner
D. Cafeteria staff
37. Which requirements discovery method involves interviewing librarians and students?
A. Contextual inquiry
B. Heuristic evaluation
C. Card sorting
D. A/B testing
38. A borrower can request to _____ a book through the system.
A. delete
B. loan
C. print
D. ignore
39. Which functional requirement ensures that overdue books block new loans?
A. Search catalogue
B. Check overdue status
C. Send marketing emails
D. Display advertisements
40. The system must notify users of overdue books via _____.
A. fax
B. automated email or SMS
C. postal mail only
D. in-person notice
41. Which atomic requirement ensures the app calculates times correctly?
A. Record login time
B. Compute overdue days
C. Display library hours
D. Reset password
42. None of the options given
A. Generate fine reports
B. Update user profile
C. Backup database nightly
D. None of the options given
43. Since distance-learning students may not return books promptly, which feature would help them?
A. On-screen keyboard
B. Electronic book access

- >>>>>>>>>>>>>>>>>Start Section B on a NEW page>>>>>>>>>>>>>>>**

Question 2 **[15 marks]**

2.1 An Interaction designer is required to be part of the team that develops the library information-systems application. From what you have learnt in this module (prescribed book), provide the job description of an Interaction designer in point form. The definition should be based on your understanding and not AI-generated. (1 mark)

2.3 Provide any two important reasons for involving users during the development of the library information system. (1 × 2 = 2 marks)

2.5 Using the first three phases of the Double Diamond of design (page 38, prescribed book), produce an initial design of the library system. At the Develop phase (3rd), include one or more sketches to show the main functions and the general look and feel of the system. (8 marks)

Question 3**[13 marks]**

School of Computing have a small library, which is not associated with the university's main library. The library has a collection of information-systems and computer-science textbooks and journals. It currently uses an Excel spreadsheet to manage loans, but borrowers (students and all School of Computing staff) often return books late or never return them. You have been approached to write a software program that will help with library management, making sure that late returns and non-returned books are tracked. Use this scenario to answer the following questions:

3.1 Identify any three common types of requirements discovery in the context of the library system. (1 × 3 = 3 marks)

3.2 Identify any three functional requirements of the library system. (1 × 3 = 3 marks)

3.3 Choose one functional requirement of the library system and present it as an atomic requirement using the Volere template (page 389, prescribed book). (1 × 5 = 5 marks)

3.4 Based on the functional requirement you chose, express it as a user story.

(1×2=2 marks)

Question 4**[12 marks]**

Go to myUnisa under Additional Resources and download the file **Case study – Academic library.pdf**. Read the case study and answer the following questions:

4.1 Who were the primary users of the website? (1 mark)

4.2 What was the purpose of the usability evaluation? (1 mark)

4.3 At what stage of the website's design did the evaluation occur? (1 mark)

4.4 What kind of usability test setting/environment was used in the study? (1 mark)

4.5 How much control did the researchers exert? (1 mark)

4.6 Identify five methods used to collect data. (1 × 5 = 5 marks)

4.7 Do you think it was necessary to do the usability test in this study? Support your answer. (2 marks)

End of Assignment 2

See extra reading on the next page.

Extra reading /EMO

	Source – you may also search for site.	
1	10 Principles in UI Design: Enhancing User Experience through Practical Examples. Credit: Hai Thang (UI/UX Designer)	
2	https://medium.com/@MynaviTechTusVietnam/10-principles-in-ui-design-enhancing-user-experience-through-practical-examples-9d519e91b515 The link to Hai Thang also has more interface guidelines with examples.	
3	Search for “Who are the current experts in Usability/UX design?”. Norman , Dix, Nielsen, Ben Shneiderman, etc.	
4	AI in AI/UX see video : https://youtu.be/6e2oZ8Po4B4 or https://youtu.be/cvm_ECH94x4	