

One and a half hours - online

This paper version is made available as a backup  
In this event, only MCQ answers written in the boxes on the exam paper will be marked.

**UNIVERSITY OF MANCHESTER  
SCHOOL OF COMPUTER SCIENCE**

User Experience

Date: Wednesday 16th January 2019

Time: 14:00 - 15:30

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**This is an online examination. Please answer all Questions**

**Use Blackboard to answer all questions. Use the SEPARATE answerbook for Notes and Diagrams - these will be marked.**

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This is a CLOSED book examination

The use of electronic calculators is permitted provided they are not programmable and do not store text

**[PTO]**

**Section A**

This section is multiple choice. Answer ALL questions from this section.  
Write your answer directly into the box provided for each question.

a) What is the purpose of the UX specialist? (Knowledge) (1 mark)

- A. Inform the design and evaluate the build;
- B. Build the software;
- C. Design the software;
- D. Evaluate the design;
- E. Cost the design.

b) What are the 4 aspects on which the principles of Affective Experience are built (hint - NOT the Principles themselves)? (Comprehension) (1 mark)

- A. Reflective, Aesthetic, Objective, Visceral;
- B. Reflective, Aesthetic, Subjective, Temporal;
- C. Reflective, Aesthetic, Artistic Narrative, Visceral;
- D. Reflective, Temporal, Artistic Narrative, Visceral;
- E. Reflective, Generous, Artistic Narrative, Visceral.

c) Which of the following are methods of collecting information from the user? (Application) (1 mark)

- A. Participant Observation, Social, Scenarios, Persona;
- B. Participant Observation, Interview, Focus Group, Social;
- C. Interviews, Scenarios, Flow-Chart, Focus Group;
- D. User Stories, Interviews, Participant Observation, State Transition Diagram;
- E. User Stories, Scenarios, Flow-Chart, Interviews.

d) What are four key principles of ethical research on human participants? (Knowledge)  
(1 mark)

- A. Benefits, Openness, Competence, Justice;
- B. Competence, Integrity, Science, Respect;
- C. Trust, Responsibility, Integrity, Openness;
- D. Utility, Integrity, Science, Respect;
- E. Openness, Integrity, Science, Respect.

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e) Which 4 are Usability Models? (Comprehension) (1 mark)

- A. Barrier Walkthrough Model, Human Processor Model, KLM, GOMS;
- B. Human Processor Model, GOMS, Keystroke Level Model, KLM-GOMS;
- C. "Goals, Operators, Methods, and Selection rules" model, WCAG, Keystroke Level Model, KLM-GOMS;
- D. Barrier Walkthrough Model, "Goals, Operators, Methods, and Selection rules" model, KLM, GOMS;
- E. Human Processor Model, GOMS, Keystroke Level Model, WCAG.

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f) What are the two main danger points to remember when undertaking UX by Participatory Design with individuals? (Application) (1 mark)

- A. Testing the design and engineering failures;
- B. Testing the design and group think;
- C. Group think and ethical failures;
- D. Engineering failures and experimenter bias;
- E. Experimenter bias and testing the design.

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g) Which are four principles of efficient design (Usability)? (Knowledge) (1 mark)

- A. Progressive Disclosure, Scalability, Self Description, Perceivability;
- B. Simplicity, Situational Awareness, Learnability, Understandability;
- C. Familiarity, Stability, Openness, Robustness;
- D. Scalability, Self Description, Openness, Understandability;
- E. Consistency, Familiarity, Stability, Robustness.

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h) How does UX relate to previous Human Factors work? (Comprehension) (1 mark)

- A. They aren't related;
- B. UX is mostly about product design;
- C. UX adds emotion and fun to mainstream HCI;
- D. UX is mostly about interface engineering;
- E. UX is just another name for HCI.

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i) What are the two key factors related to Thinking and Learning? (Knowledge) (1 mark)

- A. Attention, Exploration;
- B. Attention, Communication;
- C. Visualisation, Exploration;
- D. Visualisation, Communication;
- E. Communication, Exploration.

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j) What are 4 barriers to Effective Experience? (Knowledge)

(1 mark)

- A. Visual Impairment, Hearing Impairment, Situational Impairment, Combinatorial Impairment;
- B. Visual Impairment, Hearing Impairment, Situational Impairment, Technical Impairment;
- C. Visual Impairment, Hearing Impairment, Situational Impairment, Computational Impairment;
- D. Visual Impairment, Cognitive Impairment, Physical Impairment, Technical Impairment;
- E. Visual Impairment, Hearing Impairment, Cognitive Impairment, Computational Impairment.

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## Section B

Answer ALL questions from this section.

1. What tools are at the disposal of the 'poor' UXer? Include each tool along with a one sentence description of how you would use it to gain full marks (Knowledge)  
(2 marks)
2. Why is affective computing different to affective experiences? In one sentence, describe what affective computing is along with a short description of why this is different to affective experiences to gain full marks (Comprehension)  
(2 marks)
3. You are suffering from the 'Just-In-Time' constraint and need to get a formative evaluation with 20 people (employees of the factory commissioning your new production line software) underway very quickly. At this stage you only need qualitative results – how would you go about getting this information in the fastest time possible, and why would you be cautious? Include a paragraph description for how you go about this (the tools and techniques you choose), and a one paragraph discussion of why you should be cautious to gain full marks. (Application)  
(4 marks)
4. What is the scientific method and why is it important in UX? To get full marks you should demonstrate substantive knowledge of the topic with in-depth analysis. You may want to use examples (and diagrams if appropriate) to help your analysis (Analysis)  
(4 marks)
5. If there are no 100% correct answers in UX, how do we decide what is right and what is wrong? To get full marks you should demonstrate substantive knowledge of the question and substantive ability to synthesise information learnt in another part of the unit. You may want to use examples (and diagrams if appropriate) to help your analysis (Synthesis)  
(4 marks)
6. What is Quality, define and discuss, and explain why you have come to this view and how it relates to the user experience.

**In around 250 words, discuss this in terms of the topics surrounding User Experience.**

You should interpret the question, add your insight (using experience created from your UX/CS training), and produce a 'mash-up' of the two focusing on aspects of the article you think are important, rationalising why, and linking it to other work you have read, work you have done or seen, prior knowledge, or real world experience. Apply a knowledge of information not explicitly taught in the unit. Detail any use of formal/informal sources your ideas are based on (these can be formal such as [Law, 2009] or informal such as 'recent news article on BBC detailing xyz'). You

should include argument, ideas, opinions and thoughts and show a critical analysis or secondary interpretation.

I understand that it can be difficult to not just produce a summary (but a summary is often never required). Think to yourself, what do I bring to this 250 words, could anyone have created the 250 words by just reading the article and without your training and insight? If the answer to the last question is 'yes' then you will lose marks; instead change your answer by adding your insight based on your expertise. To get full marks you should demonstrate the ability to apply a knowledge of information not explicitly taught in the unit. Wide-ranging use of sources located by the candidate. Argument, ideas, opinions and thoughts based on formal sources, and showing a critical analysis or secondary interpretation. You may want to use examples (and diagrams if appropriate) (Creativity) (4 marks)