One hour and thirty minutes

TBD

UNIVERSITY OF MANCHESTER
SCHOOL OF COMPUTER SCIENCE

User Experience
Summer 2012
Time: TBD

Marker’s feedback version

Answer ALL Questions from Section A.
Answer ONE Question from Section B.

Write directly onto this paper for Section A. Use the SEPARATE answer–book for SECTION B.

For full marks your answers should be concise as well as accurate.
Marks will be awarded for reasoning and method as well as being correct.

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

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

Marker’s feedback
Group average: 55.27% - This is a little low for an MCQ – I would have expected 65% – Question b and question h seem to be the main problems, with averages of 16% and 42% respectively.

a) What are the five key properties of UX? (1 mark)

A. Utility, Effective, Efficient, Emotional, & Dynamic;
B. Robust, Effective, Efficient, Affective, & Dynamic;
C. Utility, Effective, Efficient, Learnable, & Dynamic;
D. Utility, Effective, Efficient, Affective, & Robust; or
E. Utility, Effective, Robust, Affective, & Dynamic.

b) What are the two main danger points to remember when undertaking UX / Participatory Design? (1 mark)

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

Marker’s feedback
Only 16% got the correct answer. This is a difficult question to be sure, but it is valid. The differences are stressed within the lectures and notes - but I may emphasise this in coming years.

c) What are the four main principles of effective design (Accessibility)? (1 mark)

A. Openness, Perceivability, Operability, & Robustness;
B. Openness, Perceivability, Operability, & Understandability;
C. Perceivability, Operability, Understandability & Robustness;
D. Learnability, Perceivability, Operability, & Understandability; or
E. Flexibility, Perceivability, Operability, & Understandability.
d) Which are four principles of efficient design (Usability)? (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; or
E. Consistency, Familiarity, Stability, & Robustness.

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e) Which are four principles of Emotional design? (1 mark)

A. Personality, Ego-ness, Oneness, & Flow;
B. Flow; Quality, Learnability, & Visualness;
C. Aesthetics, Oneness, Personality, & King Principle;
D. Quality, Aesthetics, Flow, & Pleasantness; or
E. Satisfaction, Personality, Openness, & Oneness.

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f) Which are the three principles of Dynamic design? (1 mark)

A. Fun, Progression, & Play;
B. Social Dynamics, Progression, & Play;
C. Social Dynamics, Progression, & Enjoyment;
D. Enjoyment, Progression, & Play; or
E. enjoyment, Fun, & Play.

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g) What are four key ethical principles? (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;

h) Why is conforming to scientific principles key to good ethical designs? (1 mark)

A. If the science is bad the experiment will have been performed for nothing;
B. Science is ethical;
C. Scientific principles ensure good ethics;
D. Science and ethics are the same; or
E. Ethical design is a scientific principle.

Marker’s feedback
Only 42% got the correct answer. Again, this is a difficult question to be sure, but it is valid. The differences are stressed within the lectures and notes - but I may emphasise this in coming years.

i) What does Affective Computing mean? (1 mark)

A. Understanding emotions;
B. Enabling computers to recognise emotions;
C. We can add emotions at design time;
D. Makes computing more efficient; or
E. Makes computing more effective.
j) What was the key focus of HCI? (1 mark)

A. Emotion and Fun;
B. Objective metrics;
C. Affective Computing
D. Subjective measures; or
E. Qualitative reporting.

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Section B

Answer ONE question from this section.

1. Marker’s feedback

24 People answered question 1; the marks being as I’d expect. There were a few small problems for part (d) - application of technique which I’ll address in next years teaching (but in general the incorrect answers were so wide of the mark that the student obviously had not revised that section). Part (a) ended up with any people getting full marks - next year I’ll change this to include a short description of each. The breakdown for this question is - StdDev 2.95, Mode 12, Mean 11.33, Median 12, Variance 8.71, and Percentage 56.66. I’d have liked this to be a little more in the 60% region.

a) List four, of the five, main principles proposed by the Xerox Star team. (Bookwork) (2 marks)

b) What does GOMS stand for and what does it involve? (Bookwork) (2 marks)

c) What is Modern User Experience and how is it applied? (Discussion with Example[s]) (6 marks)

d) Given the following guideline definition:

“The user can globally set any or all of the following characteristics of visually rendered text content, overriding any specified by the author or user agent defaults”

Create one persona and one scenario to illustrate the importance of this guideline to a Software Engineer. (Application of Technique) (4 marks)

e) What is your view regarding ‘Combinatorial Impairment’? (Explanation & Original Thought) (6 marks)
2.

**Marker’s feedback**

30 People answered question 2; the marks being a little low. The main reason for low scoring was in question (c) whereby a number of people did not give an example (thereby loosening 2 marks). Even though the question states (Discussion with Example) I will update this for next time with wording which emphasises the need to include an example. The breakdown for this question is - StdDev 2.52, Mode 10, Mean 11, Median 11, Variance 6.37, and Percentage 55.

a) Briefly describe two ‘cons’ (disadvantages) of gamification? (Bookwork) (2 marks)

b) What do we mean by internal and external validity? (Bookwork) (2 marks)

c) If there are no 100% correct answers in UX, how do we decide what is right and what is wrong? (Discussion with Example[s]) (6 marks)

d) You are suffering from the ‘Too–Little–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? (Application of Technique) (4 marks)

e) Of 49 medical articles, 45 claimed to have uncovered effective interventions. Thirty-four of these claims had been retested, and 14 of these, or 41 percent, had been convincingly shown to be wrong or significantly exaggerated. Therefore between a third and a half of the most acclaimed research in medicine seems to be untrustworthy, is this a problem? (Explanation & Original Thought) (6 marks)

**Marker’s feedback**

It may be useful allow the students to see the marks split in future. For example instead of 6 marks for a discussion with example question; it maybe should say – 4 marks for discussion and 2 for an example; 6 marks in total.