One hour and thirty minutes

TBD

UNIVERSITY OF MANCHESTER
SCHOOL OF COMPUTER SCIENCE

User Experience
Summer 2013
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.
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**
Of the total students taking these almost all achieved the correct answers. Some variation occurred through the questions however a frequency analysis showed on lower than 60 out of 79 students getting the correct answer for each.

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

A. Utility, Effective, Efficient, Affective, Engaging;
B. Robust, Effective, Efficient, Affective, Engaging;
C. Utility, Effective, Efficient, Learnable, Engaging;
D. Utility, Effective, Efficient, Affective, Robust;
E. Utility, Effective, Robust, Affective, Engaging.

b) What is the purpose of the UX specialist? (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.

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;
E. Flexibility, Perceivability, Operability, Robustness.
d) Given the need to rapidly create an interface prototype for a specific user need, which software design methodology would you use? (1 mark)

A. Cowboy;
B. Iterative;
C. Waterfall;
D. Agile;
E. Spiral.

☐

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;
E. Satisfaction, Personality, Openness, Oneness.

☐

f) How does UX relate to previous Human Factors work? (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.

☐
g) What are four key principles ethical research on human participants? (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) Which of the following are informal methods of conveying information to the developer? (1 mark)

A. Use Cases, Personas, Wireframe Diagrams;
B. Use Cases, User Stories, State Transition Diagrams;
C. User Stories, Scenarios, UML Diagrams;
D. Personas, Scenarios, UML Diagrams;

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

A. Understanding emotions;
B. Enabling computers to recognise, express, and have emotions;
C. We can add emotions at design time;
D. Makes computing more efficient;
E. Makes computing more effective.
j) Which list below contains a condition not normally associated with ‘Combinatorial Impairment’? (1 mark)

A. Sight, Hearing, Physical Coordination;
B. Hearing, Physical Coordination, Ageing;
C. Physical Coordination, Sight, Cognition;
D. Sight, Cognition, Physical Coordination;
E. Cognition, Situational Impairment, Hearing.
Section B

Answer ONE question from this section.

1. 

<table>
<thead>
<tr>
<th>Marker’s feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>This question got the lowest average marks and was taken by only 20 students. Indeed, it seemed to be the question chosen if the students were not sure of the answers to both Question 1 and Question 2. The lowest mark was 3, the highest 14 of 20, the mode was 09. The most badly answered questions were both C and D.</td>
</tr>
</tbody>
</table>

a) What is the single most important reason for having a set of ethical procedures governing experimentation with human participants? (Bookwork) (2 marks)

b) What are qualitative and quantitative methods, and how do they differ? (Bookwork) (2 marks)

c) Windows Toolkits are often specific to the Windows Manager, how can you more efficiently design for multiple Windows Managers? (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) 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)
2. **Marker’s feedback**

This question was answered by 59 out of the 79 candidates and showed a model value of 12. I’m very happy with this and questions need not be changed here. The lowest ranking question was the C as students did a rushed job and forgot to include examples.

a) Briefly describe two ‘pros’ (advantages) of gamification? (Bookwork)  
(2 marks)

b) What are two key problems with laboratory based work when evaluating User Experience? (Bookwork)  
(2 marks)

c) What is wrong with Cowboy Coding? (Discussion with Example[s])  
(6 marks)

d) 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? (Application of Technique)  
(4 marks)

e) Given the task of designing a Sales support system for a large Car Component supplier, how can you enhance the users’ (in this case Sales People) perception of fun? (Explanation & Original Thought)  
(6 marks)

**Marker’s feedback**

I think for next year I will make the marks distribution visible to the students to prompt them into thinking about how the question should be answered.