

CSM29
Mobile Interaction Design
Attempt 2 questions out of 3

Question 1

- (a) Distinguish between interface design and interaction design.
[3 marks]
- (b) What arguments might you make in an attempt to convince a mobile developer to adopt interaction design approaches?
[4 marks]
- (c) Briefly outline the main activities involved in interaction design and explain how these relate to the wider software development life-cycle.
[4 Marks]
- (d) You have been asked to develop some prototypes for a new mobile music service. Explain and justify the methods you would use to understand the user needs relating to such an application.
[7 marks]
- (e) Some designers might say that the mobile platform provides limited opportunities for effective interaction designs compared to the conventional desktop computer. Provide arguments to support this position or to counter it.
[7 marks]

Question 2

- (a) What do you understand by the term ‘usability’?
[8 marks]
- (b) To what extent does SMS (text) messaging have good or bad usability? What general lessons does the SMS case provide to mobile interaction developers?
[5 marks]
- (c) What role can usability principles and guidelines play in the system development process? Illustrate your answer with reference to specific guidelines and mobile systems.
[7 marks]
- (d) To what extent could usability guidelines be automated, providing developers with computer-based tools to improve the usability of their systems?
[5 marks]

Question 3

(a) Explain the components typically found in:

- (i) *a persona specification; and,*
- (ii) *a scenario specification.*

[6 marks]

(b) Explain how such personas and scenarios can be used in the design process.

[4 marks]

(c) You have been asked to produce a 'Family Doctor' application that will run on a PDA-sized (handheld) device. The application will provide medical information and advice to users. Using the components you identified in (a):

- (i) *Present **one** persona description for the system.*
- (ii) *Present **two** scenarios of use for the system.*

[5 Marks]

(d) Differentiate between hi-fidelity and low-fidelity prototypes indicating the uses of both. Illustrate your answer with reference to the system described in part (c) above.

[5 Marks]

(e) Briefly outline two methods of evaluating the 'Family Doctor' application from part (c) above. One of the approaches should involve users, the other no users. Discuss the types of evaluative information the two approaches can provide.

[5 Marks]