THIS PAPER IS NOT TO BE REMOVED FROM THE EXAMINATION HALLS

UNIVERSITY OF LONDON   **CO3348 ZB**

BSc Examination

COMPUTING AND INFORMATION SYSTEMS, CREATIVE COMPUTING and COMBINED DEGREE SCHEME

Interaction Design

Thursday 11 May 2017 : 10.00 – 12.15

Duration: 2 hours 15 minutes

There are FIVE questions on this paper. Candidates should answer **THREE** questions. All questions carry equal marks and full marks can be obtained for complete answers to three questions. The mark for each part of a question are indicated at the end of the part in [.] brackets.

Only your first **THREE** answers, in the order that they appear in your answer book, will be marked.

There are 75 marks available on this paper.

No calculators should be used.

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Question 1
Design scenario

You work in a design team which is involved in the development of a screen-based interface for a driverless taxi.

a. Taking a user-centred design approach describe the prototyping methods you would make use of. [10]

b. Draw and annotate prototype sketches for the new interface. [15]

Question 2
Evaluation

You are part of a HCI team who are developing a wearable device to monitor the health of elderly patients. Your role is to evaluate the user experience of the device.

a. Describe **three** quantitative evaluation methods that could potentially be used. [6]

b. Describe **three** qualitative evaluation methods that could potentially be used. [6]

c. Outline **two** scenarios to be used in testing the usability of the device. [6]

d. Outline the structure of an appropriate plan for evaluating the device. [7]

Question 3
Essay

Discuss how the Internet of Things has impacted the field of HCI and interaction design. [25]

Question 4
Design approaches

You are part of a HCI team exploring the potential of virtual reality to enhance the shopping experience.

a. Describe why a user centred design process may be useful in this scenario. [5]

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b. Describe the criteria you would use to select a user group for this scenario. [4]

c. Describe **two** methods you could use to elicit user requirements from this group. Outline the advantages and disadvantages of each approach. [7]

d. What other sources of information, apart from users, may be useful in this scenario? [4]

e. Describe the prototyping methods that may be useful in this scenario. [5]

Question 5
Design approaches

a. Describe what is meant by the term *'consistency'* in relation to user interface design. [3]

b. Define the term *'affordance'* and provide **two** examples of how affordances are useful in design. [8]

c. What is a *'conceptual model'*? Describe how it can be useful for designers. [6]

d. Discuss how metaphors can be useful in the domain of interaction design. [8]

END OF PAPER