



BSc EXAMINATION

COMPUTER SCIENCE

Interaction Design

Release date: Wednesday 16 March 2022 at 12:00 midday Greenwich Mean Time

Submission date: Thursday 17 March 2022 by 12:00 midday Greenwich Mean Time

Time allowed: 24 hours to submit

INSTRUCTIONS TO CANDIDATES:

Section A of this assessment paper consists of a set of **TEN** Multiple Choice Questions (MCQs) which you will take separately from this paper. You should attempt to answer **ALL** the questions in Section A. The maximum mark for Section A is **40**.

Section A will be completed online on the VLE. You may choose to access the MCQs at any time following the release of the paper, but once you have accessed the MCQs you must submit your answers before the deadline or within **4 hours** of starting whichever occurs first.

Section B of this assessment paper is an online assessment to be completed within the same 24-hour window as Section A. We anticipate that approximately **1 hour** is sufficient for you to answer Section B. Candidates must answer **TWO** out of the **THREE** questions in Section B. The maximum mark for Section B is **60**.

Calculators are not permitted in this examination. Credit will only be given if all workings are shown.

You should complete **Section B** of this paper and submit your answers as **one document**, if possible, in Microsoft Word or a PDF to the appropriate area on the VLE. Each file uploaded must be accompanied by a coversheet containing your **candidate number**. In addition, your answers must have your candidate number written clearly at the top of the page before you upload your work. Do not write your name anywhere in your answers.

SECTION A

Candidates should answer the **TEN** Multiple Choice Questions (MCQs) quiz, **Question 1** in Section A on the VLE.

SECTION B

Candidates should answer any **TWO** questions from Section B.

Question 2

- (a) Describe **THREE** advantages of utilising crowdsourced technologies in empirical studies. [9]
- (b) Describe **THREE** disadvantages of utilising crowdsourced technologies in empirical studies. [9]
- (c) Why is it difficult to build systems that are 'intuitive' and 'user-friendly'? Explain the challenges you might face when attempting to evaluate these things in the context of interaction design. [12]

Question 3

- (a) Define a goal in the context of interaction design and provide **THREE** examples of a goal being achieved. [10]
- (b) Provide **TWO** examples of a situation where a goal might not have a binary outcome and **TWO** techniques to design a system to overcome these challenges. [8]
- (c) Assume you are designing an application to support daily activity tracking. The application handles both short and long term goals in this context. Describe **THREE** challenges in supporting these use cases from an interaction design perspective and **THREE** viable strategies to overcome each challenge. [12]

Question 4

- (a) Discuss **THREE** interaction design techniques that you might use to support self-regulation in the scenario of online news commenting. [6]
- (b) The Think-aloud protocol is often used to identify problems with a system. Describe **THREE** advantages of using a think-aloud protocol over other usability evaluation techniques? [6]
- (c) Describe **THREE** disadvantages of using a think-aloud protocol over other usability evaluation techniques? [6]
- (d) Describe the general considerations you would take into account when running a usability study. [12]

END OF PAPER