COMPUTER SCIENCE TRIPOS Part IB 75%, Part II 50% – 2019 – Paper 7

8 Further Human–Computer Interaction (afb21)

In this question you will be asked to reflect on a project you have been involved in or observed, in which a design evolved, or could have evolved, through applying a theory of user behaviour. You may refer to a Part IB group project, practical work from Part IA/IB Interaction Design, or a project outside the Computer Science Tripos. You are advised to read the whole question before choosing a project to describe.

- (a) Describe the project in one or two sentences. [2 marks]
- (b) Describe the intended users of this system, and the benefits that they would obtain through using the system. [2 marks]
- (c) Describe a theory of user behaviour that is relevant to the project, explaining why it is relevant.[3 marks]
- (d) Would application of this theory be formative or summative? Explain why. [2 marks]
- (e) How are the opportunities for design evolution different, when either summative or formative evaluation methods are applied? Your answer should refer to the roles of divergence and convergence in a design process. [4 marks]
- (f) Explain what kind of evidence would be required when applying this theory in your project, and how you would obtain it, noting whether this evidence would involve qualitative or quantitative data. [3 marks]
- (g) Describe how your project team applied, or could have applied, a method that would improve the reliability of *quantitative* data. [2 marks]
- (h) Describe how your project team applied, or could have applied, a method that would improve the reliability of *qualitative* data. [2 marks]