Examiners' commentary 2018–2019

CO3348 Interaction design – Zone A

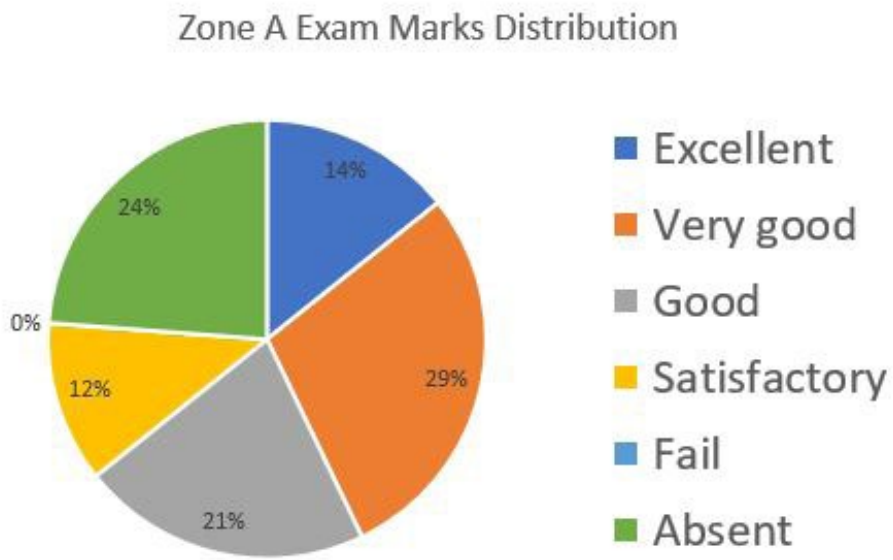
General remarks

This examination aimed to test candidates' general understanding of the syllabus, not only how well they had remembered the course text, and it involved application of knowledge to a variety of scenarios.

It is important to read and answer questions carefully. Only three out of five questions should be answered and if more are answered, only the first three will be marked.

In general, while there were some outstanding answers, a common weakness was simply reproducing 'textbook' answers rather than fitting what was known to the context of the question.

The average grade for students who took this paper was 61.31 per cent, distributed as shown in the graph below:



Comments on specific questions

Question 1: Design scenario

This question focussed on the early stages of a design process, where work is done to understand the requirements of users and to propose initial solutions. It was answered by **31** candidates from a cohort of 42, with an average grade of **14.14/25**.

a. Part (a) required candidates to explain how they would gather user/task requirements through different data collection techniques, but also what the limitations of the techniques are. Good marks were achieved where the technique was accurately described and was relevant to the design scenario. In particular, the problem of some participants dominating a focus group session should be emphasised. Excellent marks were awarded for justifying the technique and showing its relevance and limitations in

this context. In particular, good marks could be gained by drawing out the issues of the sensitivity of health/fitness/lifestyle data and the skewing of insights depending on the interest of the participant.

b. There is a tendency to underestimate the importance of desk research, so marks can be lost in Part (b). Good answers focussed on avoiding wasting time by proposing solutions that had previously been identified as inappropriate; identifying current products; and the context of the previous explorations. Excellent marks were awarded for realism rather than a generic statement with no reference to the specific context being considered; breadth of knowledge; correct details; and appropriate justifications.

c. Answers to Part (c) should identify appropriate prototypes for different stages in the design/development cycle. Good answers would include interfaces for a wearable tracking device if appropriate and for the device being used to collect the data, for example a smart phone. Excellent answers would consider prototypes that demonstrated the aggregation of the data with other data such as weight, diet and sleep data, and the correlation of that data to reveal a whole fitness story.

Question 2: Evaluation

This question was concerned with standard and well-documented HCI usability assessment strategies and evaluation techniques. The focus was on user-centred HCI design. It was answered by **30** candidates from a cohort of 42, with an average grade of **14.18/25**.

a. For Part (a), it is important to recognise that there are a variety of stakeholders with an interest in an application or service, including the end user, the service provider, investors, those required to regulate a service, etc. A good answer would recognise these various interests, whereas a weak answer might highlight different demographics within a stakeholder cohort such as younger or older end users. An excellent answer would highlight the usability needs of the different stakeholders, suggesting perhaps alternative interfaces required for the system in this case.

b. For Part (b), it is important that the answers include more than just a simple list but also include a description. Excellent answers would reflect on the application context being explored.

c. Eye gaze tracking is an increasingly important technique for measuring the way that people use an interface. For Part (c), good answers would comprehensively describe how eye gaze can be used to measure UI behaviour. Excellent answers would give a relevant concrete example, perhaps with a sketch of a UI showing 'hot spots' where users give their attention.

d. Evaluations that give insightful answers need to be planned so that the activity explores the topic of interest without introducing confounding questions. For Part (d), an excellent answer would go beyond simply describing an ordered list of steps that would be relevant to any evaluation study, but would also clearly describe what open questions would be answered by using eye gaze tracking and might sketch an expected outcome that could represent a potential hypothesis.

Question 3: Essay

This was an essay question, and was answered by **nine** candidates from a cohort of 42, generally quite well with an average grade of **16.78/25**.

This question is intended to give candidates an opportunity to demonstrate their ability to bring together a range of knowledge and techniques from the course to explore a practical and contemporary question. Good answers would point out that the issues are likely to have different perspectives for different stakeholders. This would lead to an exploration of the interest of

users in knowing that their data is secure, and simple interactions that confirm this. Excellent answers drew on practical examples from social media and websites or applications that require subscriptions and sign-up mechanisms, including, for example, banking and shopping services.

Question 4: Usability

This question required candidates to demonstrate knowledge of usability and an understanding of how usability is affected for older users, particularly those with a disability. It was answered by **28** candidates from a cohort of 42, with an average grade of **16.29/25**.

a. For Part (a), basic answers would describe the principles, drawing on knowledge presented in the subject guide. Excellent answers would go beyond the description to contextualise the principles in this specific scenario and explain how the violation of each principle would affect the usability of the system, perhaps considering the unfamiliar and the subsequent familiar use.

b. Same as part (a) above.

c. There is a danger that we can have a very shallow view of the capabilities of older people, assuming that they are all frail, slow, have poor vision and are technophobic. In reality, older people are remarkably diverse in their capabilities and interests. This diversity should be reflected in responses to Part (c) where answers would acknowledge that changes experienced by older people are often compounded by the effects of slowing cognitive abilities. Excellent answers would reflect on the habits that older people may have established in the past and attempt to use those habits to provide usable interfaces to contemporary technology.

Question 5: Design scenario

This question was answered by **18** candidates from a cohort of 42, with an average grade of **14.56/25**.

This question aimed to test candidates' ability to demonstrate understanding and apply knowledge to this specific design scenario with this special cohort of users. The particular attribute of children to be highlighted in this question is their tendency to be poor at assessing risk and consequence. Excellent answers would go deeper than a generic answer to explore concrete potential aspects of the scenario.

a. Part (a) required a realistic description of the scenario, highlighting the behaviour of children that might put them at risk. Excellent answers would highlight imaginative use of contemporary technologies to address this risk.

b. For Part (b), it is expected that the scenarios would be further developed highlighting for example differences that might be expected between children of different ages or those in urban or rural environments.

c. Part (c) required an outline of an evaluation plan including users, a timetable, methods, and metrics. Good answers provided detail and realistic sequencing. The evaluation method should be appropriate for the task and the choice should be fully justified. The description of users should include the number of users, and how they would be found, together with a brief description of their characteristics. Answers should also mention the data to be collected, and how it would be analysed, as well as the performance measures to be used. Excellent answers would justify the choices made.