

This paper is part of an examination of the College counting towards the award of a degree. Examinations are governed by the College Regulations under the authority of the Academic Board.

**EXAMINATION PERIOD:** January 2022

**MODULE CODE:** 6CCS3HCI

**TITLE OF EXAMINATION:** HCI Written Examination

**FORMAT OF EXAMINATION:** Written Questions

**START TIME:** XXXXX (the PS team will add this in once the timetable has been released)

**TIME ALLOWED:** Two hours

**SUBMISSION DEADLINE:** XXXXX (the PS team will add this in once the timetable has been released)

**INSTRUCTIONS:** You are permitted to access any materials you wish, but this is not mandated and is not expected. You may use a calculator if you find this helpful.

**ANSWER ALL QUESTIONS**

The rubric for this paper must be followed and extra answers should not be submitted. For answers that are handwritten, write with blue/black ink on light coloured paper. Include the module code, question number and student number on every page to be submitted. For answers that are typed, use the template provided.

**SUBMISSION PROCESS:** Your work must be submitted as a PDF file. If you have prepared some answers on computer, and some on paper (which have then been digitised), you may upload at most two PDF files -- one for computer-prepared answers, one for digitised answers. Do not duplicate answers across the two PDFs – if you do this, the computer-prepared answer will be taken. You should check that your work displays correctly after it has been uploaded. Work must be submitted to the level **X** Informatics Assessments KEATS page.

**Ensure you upload the correct file to the submission folder**

**ACADEMIC HONESTY AND INTEGRITY:** Students at King's are part of an academic community that values trust, fairness and respect and actively encourages students to act with honesty and integrity. It is a College policy that students take responsibility for their work and comply with the university's standards and requirements.

By submitting this assignment, I confirm that this work is entirely my own, or is the work of an assigned or permitted group, of which I am a member, with exception to any content where the works of others have been acknowledged with appropriate referencing.

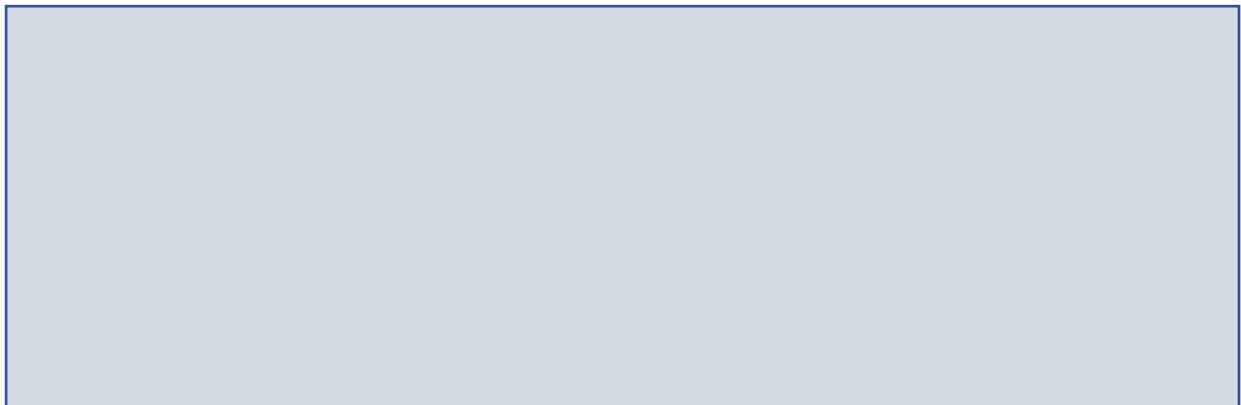
I also confirm that I have read and understood the College's Academic Honesty & Integrity Policy: <https://www.kcl.ac.uk/governancezone/assessment/academic-honesty-integrity>

Misconduct regulations remain in place during this period and students can familiarise themselves with the procedures on the College website at <https://www.kcl.ac.uk/campuslife/acservices/academic-regulations/assets-20-21/g27.pdf>

**General note:** All the questions within this exam will refer to your **design context**, specified below. Please make sure to clearly connect your responses to this design problem – general descriptions of design methods or approaches will not be marked unless they also directly explain how the given method is to be applied to your problem.

For example, when answering a question on prototyping, describing only the general process of how you would prototype (select an assumption to test, identify low/high-fidelity method ...) would lead to 0 marks unless also accompanied by the specific examples of an assumptions that would be meaningful in your context, and the specific choices you could make for your prototype.

## Your design context



### 1. Empathise – envision the needs and challenges of your users.

- a. Imagine you are to interview 15 future users from your population, for about 30 minutes each.
  - Create an example interview guide you could use, including the specific 8-10 key questions you would ask; as well as basic introduction and wrap up questions.
  - Outline the key areas these questions will be covering (i.e., what aspects of users' experience you are trying to learn more about and why?).
  - Briefly explain how you would select people to be recruited. What kinds of roles / people would you target?

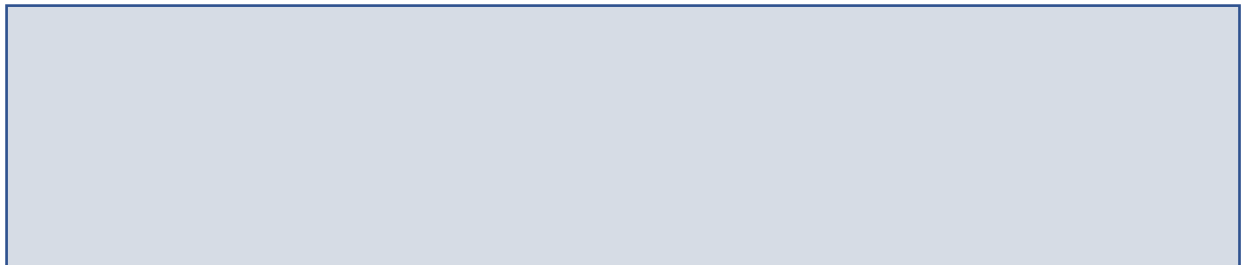
[17 marks]



**2. Define – What is your problem statement, and why is it the most interesting to design for?**

- a. Drawing on your key areas from your interview and the envisioned 'empathy map', describe how a potential persona in your design area might look like. What could be the important characteristics, goals, and needs that you would imagine a substantial part of your target population to have?

[10 marks]



**3. Ideate & Prototype – what assumptions do you envision to be key in this design context?**

- a. Generate 5 HMW questions that you see plausible in your design context.

[5 marks]

- b. Select one of the directions above to 'prototype'. Identify and describe a key design assumption that you would need to test first. Explain why this is the most important assumption in your design context.

[10 marks]



**4. Evaluate – how would you know that your system works?**

- a. Going back to your problem statement (and assuming your prototyping was successful), outline what would be useful evaluation metrics for your system – what does 'works better' mean in this particular context? Identify at least 3 qualitative or quantitative indicators that you could use as a measure of success of your app. Explain why you selected these, and how they might be measured.

[10 marks]

