



**UNIVERSITY
OF LONDON**

BSc Computer Science

Module: Interaction Design

**Your overall total word count should not exceed [3000] words
(Weighted at [50%] of final mark for the module)**

Coursework Description

You will be expected to answer the series of questions independently, exploring the themes and concepts through a combination of theoretical and practical considerations. You will be utilising the skills you have learned in the first five topics of the module to deliver on this coursework assignment.

The work is composed of six questions, each with sub-sections that you should answer clearly. In some cases you are expected to find external resources and analyse them in supporting your claims. The marks available for each section can be clearly identified at the end of each question part. Some questions will ask you to upload files and others will require text input responses. Please follow the instructions carefully.

Plagiarism:

This is cheating. Do not be tempted and certainly do not succumb to temptation. Plagiarised copies are invariably rooted out and severe penalties apply. All assignment submissions are electronically tested for plagiarism.

Penalties for exceeding the word count:

The content within the main body of text comprises the overall word count, including in-text citations, references, quotes, heading and sub-headings. The cover page, reference list and any appendices do not count towards the overall word count. **There are penalties for exceeding the specified word count.**

- The maximum word limit for this coursework assignment is **3,000** words (excluding the list of references).
- You may use less than **3,000** words but in so doing you may be penalising yourself as it is likely to be challenging to respond to the coursework brief.
- You **MUST** state an accurate word count (excluding the list of references) at the end of your work. If you do not state an accurate word count your mark will be reduced by 5 marks.

- For coursework elements and the project, there is a maximum word limit. If you exceed the word limit, we will reduce the mark you receive as follows:

Excess number of words over the word limit	Penalty applied
Up to and including 10%	5 marks deducted from original mark
More than 10% up to and including 20%	10 marks deducted from original mark
More than 20%	10 marks deducted from the original mark. The updated mark will be capped at a maximum of 40%.

Assignment

Q1. State three potential pitfalls that need to be addressed when using focus groups as a means of collecting data. [3]

Q2. You have been asked to develop the preliminary ideas for a full redesign of the interface to an online betting site which has recently been losing customers.

- i. Describe one technique that you could use to identify the particular needs of your users. [1]
- ii What kind of data would you gather? [1]
- iii How would you analyse that data? [1]
- iv What would be the output of that process? [1]
- v State two limitations of this technique. [2]

Q3. You have been tasked with designing an interface for a self-driving car.

- i) Describe an appropriate model for exploring interaction design possibilities with cars that are driven by human beings. [2]
- ii) Describe your model and potential limitations of the model in relation to the five dimensions of interaction design: Language, visuals, space and proximity, time and behaviour [5]
- iii) Identify a goal [1] scenario [1] and a story [1] for the context of riding in a self-driving car
- iv) Describe an uncomfortable interaction in driven cars that can be solved by moving to a self-driving model [1]

Q4. Find an example of a system that allows users to customise and order clothing and include a screenshot of the interface. Define each of the following usability evaluation criteria and describe the interface in relation to how you would evaluate the success and failure of said criteria in the context of the system that you have chosen.

- i. efficiency [2]
- ii. memorability [2]
- iii. Satisfaction [2]

Q5. Find and post an image of a web based media player such as Spotify or YouTube. You should upload a complete answer to this question alongside your image and you may choose to annotate the image and/or make reference to parts of the image in your response to the question.

- i. Define what a metaphor is [1] and describe how they can enhance the usability of an application [1].
- ii. Describe a type of metaphor used in the online media player you have chosen. [1]
How does it improve the user interface? [1]
- iii Describe a new type of metaphor that you could use to change the design of this system. [2]

- iv. Using examples from the literature, state three objections that authors have had about the use of metaphors in interaction design. [3]
- v. Identify tasks for the online media player that would be best supported by each of the following interaction types – instructing, conversing, manipulating, exploring. [4]

Q6. When performing usability evaluations it is common to give users some time to familiarise themselves with the system.

- i. Why is this important? Please provide three examples.[3]
- ii. Describe two advantages and two disadvantages of utilising quantitative data in research. [4]
- iii. Describe two advantages and two disadvantages of utilising qualitative data in research. [4]