

University of London International Programmes
Computing and Information Systems/Creative Computing
CO3348 Interaction design
Coursework assignments 1 & 2 2017–18

Introduction

Your coursework assignments are designed to enable you to become more deeply engaged in specific aspects of ID and HCI and to investigate a selected area in depth. The focus of your submitted work should be on user issues, design principles for interactive user experiences and on effective interaction design.

- In coursework assignment 1, you are asked to investigate a particular interactive technology, through music streaming and playback applications, with an emphasis on high-fidelity music streaming. You should produce a report with an assessment of the current and future uses of mobile, computer and streaming device based systems and applications. You should attempt to identify the user experience features which you believe to be critical for effective and usable interactions with such devices and applications. Your focus should be on the use of the applications which are made available by such technologies rather than on the implementation of the underlying technology itself.
- In coursework assignment 2, you will design and produce an initial prototype for an interface to an application of your own choice based on those you have investigated in coursework assignment 1.

Before you start, please take careful note of the following requirements:

- Coursework assignment 1 should be in a report format of about 3,000 words with illustrations (roughly 6 pages). Although very fixed limits will not be rigidly imposed, exceptionally long work or work which significantly exceeds the word limit set will be penalised. Very short submissions are also unacceptable and blank, incomplete, or corrupted submissions will not be marked.
- Coursework assignment 2 should be in the form of a design portfolio, with additional text material describing the various design features, assumptions, and decisions taken, with your critique.
- The structure, clarity and organisation of your work will be assessed. Your submissions must be well-presented, coherent and logical. They should be fully spell- and grammar-checked and logically structured, with both a clear Introduction and a Conclusion in coursework assignment 1. For coursework assignment 2, you should include all relevant

diagrams, drawings, illustrations or images in an organised sequence and with explanatory legends and labels. Please ensure that images are of a suitable size and resolution and can be viewed clearly.

- You do not need to restate the question asked, or provide a table of contents, an index, or additional Appendices. Please think about presentation aspects since your work is likely to be read on screen: assume a screen resolution of 1024 * 768, use a legible font designed for reading from a screen and do not overuse colours, capitals, italics, underlines, and so on.
- It is important that your submitted coursework assignments are your own individual work and, for the most part, written in your own words. You must provide appropriate in-text citation for both paraphrase and quotation, with a detailed reference section at the end of your coursework assignments (this should not be included in the word count). Copying, plagiarism and unaccredited and wholesale reproduction of material from books, online sources etc. is unacceptable, and will be penalised (see: [How to avoid plagiarism](#)).
- Be very careful about the validity of information on Internet sites and web sources. Be aware that many information sites are really commercial advertising, or simply repeat material copied from elsewhere. Check the date of all material and do not use out of date sites, sites which list student work or projects, references from commercial publishers to abstracts only of journal papers, or those which are simply personal opinions, blogs, comments or pages from social networking sites. Do not simply copy text from Wikipedia or similar, or from company promotional pages. These are not appropriate sources for academic work. Be careful, critical and very selective in your choice of material.

Resources

For coursework assignment 1, you will have to undertake reading beyond the course notes and textbooks. You will have to explore some of the available online information for this topic, and search for further information yourself. It is not possible to provide an exhaustive completely up-to-date list of sources but do look at the links suggested in the **CO3348 Interaction design** subject guide preface. You may also find some useful pdf downloads by searching in Google Scholar and presentations in Slideshare.

For coursework assignment 2, the readings and activities suggested in Section 2 of the **CO3348 Interaction design** subject guide and the following books will be useful:

- Buxton, B. [*Sketching user experiences: getting the design right and the right design*](#). (San Francisco, CA: Morgan Kaufman, 2007).
- Greenberg, S., S. Carpendale, N. Marquardt and B. Buxton [*Sketching user experiences: the workbook*](#). (San Francisco, CA: Morgan Kaufman, 2012).
- Cooper, Al., R. Riemann, D. Cronin, and C. Noessel. [*About face: the essentials of interaction design*](#). (New York: John Wiley & Sons, 2014) 4th edition.
- Rogers, Y., H. Sharp and J. Preece [*Interaction design: beyond human computer interaction*](#). (New York: John Wiley & Sons, 2011) 3rd edition.
- Rogers, Y., H. Sharp and J. Preece [*Interaction design: beyond human computer interaction*](#). (New York: John Wiley & Sons, 2015) 4th edition.

Assessment

The overall presentation, structure, coherence and clarity of your submissions will also be assessed.

For coursework assignment 1, marks will be awarded for demonstrating a good understanding of the topic, for providing an appropriate and informed analysis, and for writing a clear report, focusing on interaction design elements and issues.

For coursework assignment 2, marks will be awarded for a suitable and competent design and prototype mock-up, and for a well-explained design justification and self-critique.

Marks are distributed as below:

Coursework assignment 1:

95% Report Content
5% Report Presentation.

Coursework assignment 2:

30% Personas and Scenarios
50% Design mock-up
15% Design justification
5% Critique.

Submission

Follow the current instructions for electronic submission and make sure that what is submitted is clearly identified as your work. You should upload a single pdf or FDF file for each coursework assignment rather than a Word or other text format file, zip file, etc.

Please use the naming convention as given in the Coursework Instructions: YourName_SRN_COxxxxcw#.pdf (e.g. MarkZuckerberg_920000000_CO3348cw2.pdf)

- **YourName** is your full name as it appears on your student record (check your student portal)
- **SRN** is your Student Reference Number, for example 920000000
- **COXXXX** is the course number, for example CO3348, and
- **cw#** is either cw1 (coursework 1) or cw2 (coursework 2).

Coursework assignment 1

Along with a revival in vinyl record production and sales, there has been a growing interest in accessing high-quality music through streaming music services such as “TIDAL” or Apple Music. This interest is moving from a niche area for technology-aware enthusiasts, to embrace more mainstream music lovers who can appreciate the quality of music on good hi-fidelity home systems and mobile devices running suitable software. Increasing bandwidth available through domestic broadband Internet technologies and mobile cellular infrastructures are now enabling these services in ways that were simply not possible in the recent past.

Given the limits of human hearing abilities, particularly the reduction in hearing acuity that is an inevitable attribute of aging, there is a growing perception that some of the services and technologies being promoted for high-fidelity music distribution and listening may be redundant because humans simply cannot hear the contribution made by those technologies.

- Investigate what is meant by ‘High Fidelity’ or ‘HiFi’ music streaming and the technologies involved, including the digital music encoding technologies used. Explore the capabilities and features of a representative selection of streaming services, portable playback devices and domestic music playing systems. You will find it helpful to highlight the distinction between quality supported by established streaming services and the quality available from the new generation of high-fidelity systems at the start of your report.
- An area of music streaming and playback that is frequently criticised is the user interface associated with the streaming and buying services and the associated music libraries. Your report should provide an overview of the technology and the state of the art in this area of interaction and User Experience. Concentrate on the interactions and interfaces which exist on devices and applications and provide an assessment of their usability. In addition, explore the limits of human hearing abilities and the validity of claims made about the need for and the usefulness of the music encoding technologies that provide ‘beyond CD’ quality.

[END OF COURSEWORK ASSIGNMENT 1]

Coursework assignment 2

After having completed coursework assignment 1, you should have sufficient knowledge to begin to design and mock-up a prototype application for finding, streaming and archiving high fidelity music for domestic and mobile playback. Remember that this is intended as an early prototype and that the focus of the work to be undertaken is on the interaction mechanisms and the interface to the technology rather than a fully functional application: the coursework assignment is intended to give you some experience in early design practice.

- a. Develop a profile of three different types of expected users and create a realistic persona for each.
- b. Develop a realistic scenario for each persona using the application to carry out some activity.
- c. Design the look-and-feel of your chosen interface and an interaction sequence, based upon good practice guidelines and that reflects the needs of the users, as identified by the personas chosen. Provide an initial rough sketch of the proposed interface.
- d. Mock-up your design showing sets of screen flows, user actions and interface elements.
- e. Make clear your design assumptions and explain in detail the decisions you have made, together with your justifications for doing so.
- f. Provide a critique of your design and explain how you could improve on it.

You should create a design which is **your own work** and **not** a copy of an existing application; try not to duplicate existing interfaces but find an original solution of your own.

[END OF COURSEWORK ASSIGNMENT 2]