University of London International Programmes CO3348 Interaction design Coursework assignments 2015–16

Overview

Your coursework assignments are designed to enable you to become better informed about specifically chosen 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, that of pervasive e-health and the proliferation of mobile technologies for self-monitoring individual health.
- ✓ You should produce a Report with an assessment of the current and future uses of mobile individual health monitoring 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 the Coursework assignment 2, you will design and produce a first 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:

- Answers to the Coursework assignment 1 should be in an essay format of about 3,000 words with illustrations (6 pages roughly). 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.
- Answers to the Coursework assignment 2 should be in the form of a design portfolio with additional text material which describes the various design features, assumptions, decisions taken and your critique.
- The structure, clarity and organisation of your work will be assessed. Your submission must be well-presented in a coherent and logical fashion. It should be fully spell- and grammar-checked and you should structure it so that there is 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 will 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, etc.
- You should provide a Bibliography and References section, showing the books, articles, videos and websites you have referenced and consulted. Websites should be referenced by the date of access and a complete and correct URL. Generic site names are not acceptable. References should be in a standard format (namely, Author surnames, Year of publication, Title, Publisher, actual page numbers referenced). Use the guidelines for referencing as given in the CO3320 Project subject guide.
- All books cited, reports referred to and any material used (including all online resources) must be referenced. Any text that is not your own words and which is taken from any source <u>must</u> be placed in quotation marks and the source identified correctly in the

References Section with page numbers or a specific URL.

- ➢ 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. Note that your references will be checked.
- The submitted Coursework assignment must be your own individual work and not a copy of another person's or author's work. Copying, plagiarism and unaccredited and wholesale reproduction of material from textbooks or from any online source is totally unacceptable. Note that all submitted coursework is scanned by a plagiarism checker and that any such copying will be heavily penalised.
- Follow the current instructions for electronic submission and make sure that what is submitted is clearly identified as your work. You should upload a pdf or FDF file for these coursework assignments rather than a Word or other text format file, or a zip file.

Please use the naming convention as given in the Coursework Instructions:

- e.g. FamilyName_SRN_COxxxxcw#.pdf (e.g. Zuckerberg_920000000_CO3348cw2.pdf)
 - FamilyName is your family name (also known as last name or surname) as it appears in your student record (check your student portal)
 - o SRN is your Student Reference Number, for example 920000000
 - o **COXXXX** is the course number, for example CO1108, and
 - o **cw#** is either cw1 (coursework 1) or cw2 (coursework 2).

Assessment

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

For Coursework assignment 1, marks will be awarded for demonstrating a good understanding of the topic identified, for providing an appropriate and informed analysis, and for writing a suitable Report, focused 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 per cent (Report)

5 per cent (Presentation)

(Total 100)

Coursework assignment 2: 30 per cent (Personas and Scenarios)

50 per cent (Design mock-up)
15 per cent (Design justification)

5 per cent (Critique)

(Total 100)

Coursework assignment 1

- Recently, there has been a proliferation in digital games and mobile health (m-health) applications used by many people across all sectors of society to monitor their own health and level of fitness. This usually occurs by means of applications which collect data from such activities as the number of steps walked per day, nutritional intake and sleep patterns. For some people, the aim is to improve individual health through lifestyle changes and monitoring. For others, self-monitoring of chronic health conditions is vital to maintaining a healthy lifestyle and such recording activities can keep chronic diseases under control. This concept of 'life-logging' has many interesting usability and accessibility issues as people engage with digital technologies such as Fitbit or use mobile apps to help monitor physical activity and nutrition. The impact of the latest m-health technologies on the management of many chronic conditions (such as diabetes or fall prevention) can be significant as can the use of digital games for cognitive or physical rehabilitation.
- Investigate what is meant by 'life logging' and how m-health applications as described above are utilised in practice. Find out what applications are in use and research the user experience and interaction design aspects, maintaining a critical viewpoint.
- Write a Report giving an overview of the technology and the state of the art in this new 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.
- Do remember that this is just part one of two coursework assignments and therefore do not spend an inordinate amount of time on exhaustive research. Bear in mind the word limits in place.

[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 of your own choice for an m-health application. 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 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, 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.

Resources

You will find some guidance in the course materials provided – the readings and activities suggested in Section 2 of the **CO3348 Interaction design** subject guide and the following books will be of most use for the design activity.

- > Buxton, Bill Sketching User Experiences: Getting the Design Right and the Right Design. (Morgan Kaufman, 2007); http://www.elsevier.com/wps/find/bookdescription.cws_home/711463/description#description
- Greenberg, Saul, Sheelagh Carpendale, Nicolai Marquardt and Bill Buxton Sketching User Experiences: The Workbook. (Morgan Kaufman, Jan. 2012). http://www.elsevier.com/wps/find/bookdescription.cws_home/723098/description#description
- Cooper, Alan, Robert Riemann, David Cronin and Christopher Noessel About Face 4: The Essentials of Interaction Design. (John Wiley & Sons, 2014); http://eu.wiley.com/WileyCDA/WileyTitle/productCd-1118766571.html
- Rogers, Yvonne, Helen Sharp and Jennifer Preece *Interaction Design: Beyond Human Computer Interaction*. (John Wiley & Sons, 3rd Edition, 2011); http://www.id-book.com/thirdedition/
- Rogers, Yvonne, Helen Sharp and Jennifer Preece Interaction Design: Beyond Human Computer Interaction. (John Wiley & Sons, 4th Edition, 2015); http://www.id-book.com

For the research topic, 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.

[END OF COURSEWORK ASSIGNMENT 2]