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| **Course: COMP1649  Interaction Design** | **Contribution: 100% of course** |
| **51: Interaction Design - Term 2 - MAC** | **PDF file and zip required** |
| **Greenwich Course Leader: Dr Ralph Barthel** | **Due date: 8th April 2019** |
| This coursework should take an average student who is up-to-date with tutorial work approximately 50 hours; Feedback and grades are normally made available within 15 working days of the coursework deadline | |
| **Learning Outcomes:**   A. demonstrate a critically level of comprehension of the nature of cognitive psychology and how it influences the ways in which users interact with computer systems; B. use established design principles and methodologies to solve interaction design problems; C. develop multimedia applications which incorporate the critical selection and use of advanced interaction design techniques; D. demonstrate the synthesis of theory and application; E. demonstrate a critical evaluation of current issues in Interaction Design. | |

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| **Plagiarism** is presenting somebody else’s work as your own. It includes: copying information directly from the Web or books without referencing the material; submitting joint coursework as an individual effort; copying another student’s coursework; stealing or buying coursework from someone else and submitting it as your own work.  Suspected plagiarism will be investigated and if found to have occurred will be dealt with according to the procedures set down by the University.  **All material copied or amended from any source (e.g. internet, books) must be referenced correctly according to the reference style you are using.   Your work will be submitted for electronic plagiarism checking.  Any attempt to bypass our plagiarism detection systems will be treated as a severe Assessment Offence.** |

**Coursework Submission Requirements**

* An electronic copy of your work for this coursework must be fully uploaded by midnight on the Deadline Date using the link on the coursework Moodle page for COMP1649.
* For this coursework you must submit a single Acrobat PDF document.   
  In general, any text in the document must not be an image (ie must not be scanned) and would normally be generated from other documents (eg MS Office using "Save As .. PDF"). More details are on the [IT Support pages](http://labs.cms.gre.ac.uk/). An exception to this is hand written mathematical notation, but when scanning do ensure the file size is not excessive.
* **For this coursework you must also upload a single ZIP file containing supporting evidence (e.g. files of your high-fidelity prototype). Please note your prototype can be developed in Axure and submitted as Axure file or it needs to be submitted in an open accessible format (e.g. HTML and JavaScript). Other proprietary files types will not be accepted.**
* There are limits on the file size (current values are on Moodle)
* Make sure that any files you upload are virus-free and not protected by a password or corrupted otherwise they will be treated as null submissions.
* Your work will be marked online and comments on your work and a provisional grade will be available from the Coursework page on Moodle. A news item will be posted when the comments are available, and also when the grade is available in BannerWeb.
* You must NOT submit a paper copy of this coursework, or include the Banner header sheet.
* All coursework’s must be submitted as above. Under no circumstances can they be accepted by academic staff

The University website has details of the current Coursework Regulations, including details of penalties for late submission, procedures for Extenuating Circumstances, and penalties for Assessment Offences.  See <http://www2.gre.ac.uk/current-students/regs>

* **Detailed Specification**
* ***Scenario***

*Smart home objects* are technology enabled objects often designed with the aim for people to change traditional behaviours for example in relation to consumption patterns, to reduce energy consumption, to improve personal healthcare to name just a few typical use cases of smart objects.

You have been commissioned to create a concept and prototype for connected smart health device that enables people to do an electrocardiogram (ECG) using their smartphone. The device is supposed to enable people to take an ECG using sensors on either another device or via a wearable that can be connected to a smartphone. People should be able to record an ECG and also have access to ECG’s they have recorded in the past. There should be at least two modes of interaction (e.g. voice, gestures, natural user interfaces) how people interact with your smart object. The focus of your work is to identify and prototype suitable interactions how people can use such a device. You are not required to do any material studies or create a working physical prototype of a smart object.

You can decide on a target audience for your device. However, your design and research activities need to be in alignment with that choice. The requirements that you generate through your research need to be justified and your report needs to provide a good overall narrative not a number of disjoint sections. Your writing needs to be supported by at least 12-15 academic references (not blogs or online tutorials or the like). References ought to be formatted in Harvard style.

**Deliverables**

* Report (3000-4000 words) uploaded as a pdf file.
* High-fidelity prototype uploaded in a zip file.
* **Grading Criteria**To gain a distinctive grade (70+)
  + The report will
    1. have a clear structure and coherent argument throughout, address all the required areas, clearly identifying the key issues and displaying critical analysis;
    2. offer full support for all points made.
  + The report to be well written throughout, and fully adequate to express ideas.
  + The high-fidelity prototype will be well constructed and linked exactly to the points made in the report.

To gain a grade between 60-69

* + The report will
    1. have a clear structure and coherent argument throughout, address all the required areas, clearly identifying the key issue and displaying critical analysis;
    2. offer support for most of the points made.
  + The report to be largely well written throughout, and adequate to express ideas.
  + The high fidelity prototype will be well constructed and linked exactly to the points made in the report.

To gain a grade between 50-59

* + The report will
    1. show some attempt at a clear structure and critical analysis although the line of argument may not always be clear and coherent. All of the required areas are attempted.
    2. offer some support for the points made.
  + The report may not be well written, but will be adequate to express ideas.
  + The high fidelity prototype will link to the majority of the points made in the report.

To gain a grade between 40-49

* + The report will
    1. be badly organised and the line of argument will be unclear and incoherent. There will be a significant amount of irrelevant material; most of the required areas will be attempted.
    2. offer inadequate support for the points made.
  + The report not be well written, language may be adequate to express some ideas.
  + The high fidelity prototype will link to some of the points made in the report.

To fail

* + The report will
    1. show little or no shape or direction, be badly organised and the line of argument unclear and incoherent. Very few key issues will be identified and there will be a significant amount of irrelevant material. Only a couple of the required areas will be attempted.
    2. offer little or no support for the points made.
* The report will not be well written; language will be inadequate to express ideas.
* The high fidelity prototype will either not be attempted or bear little resemblance to the points made in the report.
* **Assessment Criteria**

The relative weightings for the criteria are as follows and will take into consideration the student demonstration of their work:

**Report**

Logical structure of the report and appropriate referencing in Harvard style of relevant background literature (journal papers, conference papers, academic books) throughout the report 10%

A discussion of different frameworks for Interaction Design followed by a justification for a framework that has been used for the design task of this coursework. Include a discussion and visual representation of the design process that has been followed.

15%

Evidence that appropriate research activities have been carried out to generate requirements for the Interaction prototype. There needs to be a clear link, documentation and justification for each core requirement. Relevant background literature (e.g. cognitive psychology, interaction design theory) needs to be integrated.

25%

A presentation of a concept for an interaction device. In this step you need to demonstrate how insights from research have been used during the ideation process and how the proposed system is addressing those requirements. Use additionally academic literature to ground your discussion.

15%

A conclusion drawing together the key facts, critical reflections on the limitations of the work that has been carried out and a discussion of potential future work if the project would be developed further.

10%

**High-fidelity prototype of an interaction device**

Clear links between coursework report and the corresponding prototype so that design decisions are well documented

5%

Evidence of the effective and successful application of Interaction Design principles to create a prototype that can be used to test core concepts of your design and that is suitable as a learning tool for designers.

20%

If the pass mark is not achieved the student will be referred until the next assessment point and although the coursework would be different the indicative marking criteria would be the same.