

Annotated Table of Contents Coursework COMP-1649 Human Computer Interaction and Design

Author: Ralph Barthel

This is an example of how a table of contents for your coursework report COULD look like. You can use a different structure as what is shown here as long as the relevant content is covered. This is a basic example showing what is needed in the report.

Do not forget to make reference to relevant background literature to support your writing. Citations and references need to be provided in Harvard format. The word count for the report should be about 3000 words long. You need to include at least 12-15 academic citations to enable you to provide authoritative background literature (academic conference papers, journal papers, chapters from academic books) across the different sections to support your writing.

The only accepted propriety format for Prototypes are Axure files. If the prototypes are not created with Axure they need to be presented in an open format (e.g. HTML, Javascript) that moderators can easily access. The submission as mobile Java Apps, database driven web applications or any other proprietary format that requires installation is not permissible and no points can be awarded for such prototypes.

1. Introduction

Brief introduction to the coursework and the structure of your report.

2. Background

Brief definition of some key terms e.g. what is smart gym equipment, what are connected devices and how is this discussion embedded in a wider societal context of technology adoption and expected future uses of technology.

2.1 Processes and Frameworks for Interaction Design

Brief discussion of different frameworks for interaction design (e.g. User Centred Design, Goal-oriented Design, Participatory Design) and a justification for a framework that you used for designing your coursework artefacts. All discussions need to be supported by suitable academic literature.

2.2 Cognitive Psychology

Brief discussion of how aspects of cognitive psychology and cognition affect interaction design and how they apply to your coursework.

2.3 Interaction Design Theory

Brief discussion of different modes (e.g. voice, touch) and types of interaction (see lecture slides) and how they apply to your coursework.

3. Design Process

3.1 Interaction Design Research

Provide an overview of the research activities that you have carried out to develop your conceptual design. You need to make references to the contents in the section 2. 1, 2.2 and 2.3 and make sure your design activities are aligned and guided by the content in those sections. Summarise your main findings from the literature review and outline how they informed your practical work and the requirements for your 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. At the end of the section 3 you need to provide a summary of your prototype and how it will work.

3.2 Conceptual Design

Present a concept and a conceptual model for your proposed design solution. Demonstrate how you used available literature and data and show how your work and ideation process has been informed by the outcomes from section 3.1 *Interaction Design Research* and discuss the requirements you generated. Make use of visualisations to communicate your design idea and the interactions. You are only asked to design the interactions not the physical attributes. You can include some figures to give the reader a rough idea what the physical product and overall solution will look like but this does not have to be very detailed.

4. Prototype

Briefly introduce and discuss your final high-level prototype and describe how the design is informed by the research that has been carried out and the concepts in the previous sections. Include screenshots of the final prototype and provide artefacts that show how your design progressed from initial lower-fidelity prototype(s). It is important that you can demonstrate how the design progressed over time and that you can discuss the purpose and audience for your prototype. **A series of static images is not a high-fidelity prototype so that your submitted prototype needs to include some interactivity.**

There need to be clear links between coursework report and the corresponding prototype so that design decisions are well documented. There needs to be 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 researchers and designers.

5. Research Study

A presentation of a detailed concept for an empirical research study that uses your prototype to test at least one assumption that you have made when designing your prototype. In this step you need to present the design of a research study including the question(s) that your research study attempts to answer. What assumption are you testing? Who are the participants of your study will and how will find participants? How the study will be run and how you will analyse the data? **You are not asked to run the study but to design the necessary artefacts so that someone**

else such as a usability researcher could run the study using your materials and the prototype. You need to create all necessary instruments and documentation that is required to run the study. This documentation should be included in an Appendix.

6. Conclusion

Provide critical reflections on the work that has been completed. What are some of the limitations and constraints of the work? What could have been improved? What would be potential next steps? Go beyond just repeating what has already been said elsewhere in the report.

7. References

Make sure all your references and in-text citation are correctly formatted using Harvard format. If you are unsure about the Harvard format use suitable tutorials or guidelines such as the University's guide on Harvard referencing¹.

¹ https://www.gre.ac.uk/__data/assets/pdf_file/0019/232570/SS-Referencing-Rev5.pdf