LZSCC.300 – The Third Year Project Report

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Overview

The third year project is an opportunity for you to exercise your practical problem solving skills; but it is equally an opportunity to develop and exercise your communication skills. In particular, you need to communicate the results of your project in your report. The importance of the report cannot be over-emphasised as it is the main basis for the assessment of your work.
In terms of presentation, the report should be typeset on A4 paper. It should be single spaced in Times New Roman with a font size not smaller than 12 point. Each new chapter of the report should start on a new page, and the pages should be numbered. It should not normally exceed 13,000 words excluding front matter, references and appendices, but speak with your supervisor if you have concerns about this.
Note, however, that it is quality rather than quantity that is being looked for, and that waffle and irrelevancies will be penalised rather than rewarded! Discuss the length of your report with your supervisor. You can get a good idea of expected length of reports by looking at past students' reports.
All undergraduate projects involving user participants must conform to the University guidelines on ethics, and be approved by your supervisor. Be sure that you have used the ethics self-assessment forms posted on the LZSCC.300 Moodle space. If you have worked with participants during your project, you may be asked about your ethical procedures during your project demo.

Suggested Report Structure

Below is a suggested structure for the report. As indicated below, you should decide upon a structure that best communicates the nature of the work done, your results and analysis. For example, a project that involves the design of a complex underlying system and a user interface may require two design chapters. You should discuss a suitable report structure for your specific project with your supervisor.

Abstract: You should create a short abstract (200 words at maximum) which is on a page by itself. The abstract should be a very high-level overview: for example 1–2 sentences on the aims of the project, 1–2 sentences on the kind of design, implementation, or empirical work undertaken, and 2–3 sentences summarising the primary contribution or findings from your work. The abstract appears in the front matter of the report: after your title page but before the table of contents.

Introduction: Start with a brief statement of the overall aim of the project. Give an overview of the problem being addressed by the project. Describe aspects of the background such as why the project is worth doing, how the project may be useful or helpful for others. Then state the aims of the project (preferably as bullet points). End the chapter with a brief chapter by chapter overview of the rest of the report.

Background: Analysis of background research and reading. Summarise technical problems and approaches. Discuss any relevant work and/or existing related systems. For related work and systems also discuss their implications for your project. For example, any improvements that your system offers, shortcomings that your work addresses, and so on. Justify your choice of platform, software, solution, ... Care should be taken not to stray too much into design and implementation details, which belong in later chapters.

The sections in the middle of the report vary, and these should be outlined in advance with your supervisor to decide on an initial structure and intended content. Here are just some examples, based on the nature of the project undertaken.

Implementation of a software tool or technology demonstrator	**Qualitative study of technology in real life**	**Creation and evaluation of a new protocol**
Design	Study Design and Participants	Requirements and High-level Design
Implementation	Findings	Implementation
System in Operation / Process Description	Implications	Evaluation Methodology
Testing and Evaluation		Comparative Analysis

Conclusions: This is a very important chapter. Revisit your objectives from the Introduction. For each, analyse whether the project met that objective, and if not, discuss this, and suggest a solution. Discuss the project as a whole, if you did it again would you do it differently? What did you have to learn to do the project, what did you learn from doing it? What would you do if you had more time? Some suggested subsections for your concluding chapter are: Review of aims; Suggested revisions to design/implementation; Future work (possible developments of existing system); Lessons learned. Finish the concluding chapter with a brief, fairly upbeat overall conclusion on the project as a whole. Even projects that are not an overall success usually achieve something, and you acquire skills and knowledge from doing the project. End on a positive note.

References: Your references should appear in a separate section at the end of the report. The reference section should not have a chapter number.

Appendices: As mentioned below, the first appendix should be your original project proposal. Any other appendices should be used to provide supporting material to provide additional context for the reader, but are not strictly necessary to understand the report. Examples include:

- a particularly crucial excerpt from your source code (which might have appeared in block diagram or flowchart form in the main report)
- the questionnaire given to users during a user study
- an excerpt from an anonymised interview transcript
- a participant information sheet and agreement form
- additional graphs or visualisations that are evidence of the work done, but not strictly needed for the analysis in your main report

Referencing Conventions

It is important that you use **only one style** in your report. Lancaster University suggested style is new Harvard. Informations on reference styles and how to use them correctly can be found on Cite Them Right (accessible via the University library).

Format and Presentation

It is important that your report has a clear and attractive layout. The following guidelines will help you achieve this.

- Chapters should have a heading, e.g., Chapter 1. Introduction.
- Each chapter **MUST** start on a new page (but sections should not, unless necessary).

Chapters should have subsections numbered x.1, x.2., ... Subsections can have subsections x.1.1, x.1.2 .... It is not advisable to have a subsection structure deeper than this.

Use a good large bold font for main chapter heading and title. For first level subsection titles, use bold and a font size slightly larger than the text. For lower level subsection titles, use smaller font (and bold and/or italic).

The following is a suggested chapter format and structure.
2. The title of this chapter
Short passage (paragraph or so) telling us what the chapter is about, and setting the scene
. . . then. . .
2.1 The heading of the first major subsection of this chapter
. . .
2.1.1 The heading of the first subsection of this major subsection
. . .
2.2 The heading of the second major subsection of this chapter
⋮
2.y Conclusions (or perhaps Summary)
Briefly summarise what the chapter's been about, any major results or conclusions from the chapter. Then link it in with the next chapter, for example as follows: This chapter has considered the overall design of the system. The following chapter discusses the implementation of the system.

General Style

Do not use bold and underlining together. Use the same style and size font for the actual text throughout each chapter. All of the text and headings should be justified to the left hand margin, i.e., do not left indent the text of subsections any further than that of enclosing sections. Use consistently formatted paragraphs. Justified on both left and right edges, rather than ragged right edge, is best. You can also use first line indent if you wish (but make sure it is used consistently). Check your spelling and cross references very carefully.

Figures: Within a chapter, number figures Figure x.1, Figure x.2, Figure x.3, . . . where x is the chapter number. Figures are predominantly pictorial or diagrammatic. Each figure should have a caption, e.g., "Figure 4.3 System Architecture". Be consistent with caption style and positioning throughout the report.

Tables: Within a chapter, number tables Table x.1, Table x.2, Table x.3, . . . where x is the chapter number (note: figures and tables are numbered independently of each other, e.g., first figure in chapter 2 is Figure 2.1, first table in chapter 2 is Table 2.1.). Tables are predominantly tabular in form, and contain mainly textual and/or numerical data. Each Table should have a caption, e.g., "Table 4.3 Results of performance evaluation". Be consistent with caption style and positioning throughout the report.

Referring to Figures and Tables: Any figures and tables used must be referred to in the text. Try to position each table of figure close to where it is first referenced. Refer to Figures/Tables properly, e.g., "as shown in Figure 3.1" or "(see Figure 3.1)". The same rule applies to referring to figures and tables as for references, i.e., the sentence in which the figure or table is referenced should be grammatically correct.

Write in Advance and Proofread

Above all, remember that writing is a process that involves iteratively re-reading and re-drafting as necessary. Allocate plenty of time for the write-up, plenty of time for your supervisor to provide feedback, and plenty of time for further revisions after that. Things do not always go as planned.

Once again: check your spellings and all cross-references very carefully. Finally, note that the "project" encapsulates everything you do for the module: literature analysis, prototype development, evaluation, empirical study, the report, and any other activity you have done. So in your report, refer to parts of this work accurately, for example as the "system" or the "empirical study" (or similar), not as "the project". If you have developed a new system, it can be good to come up with a short name or acronym for it so you can easily refer to it throughout your report.

Mandatory cover page and declaration

There should be two pages at the very front of the report, as follows:

1. A title page with the following information:
   ⟨Your Own Name⟩ ⟨The Title of the Project⟩ B.Sc.⟨Degree Scheme Title⟩ ⟨Date of Submission⟩
2. A single page containing a statement of originality (declaration), with text similar to the following:

> I certify that the material contained in this dissertation is my own work and does not contain unreferenced or unacknowledged material. I also warrant that the above statement applies to the implementation of the project and all associated documentation. Regarding the electronically submitted work, I consent to this being stored electronically and copied for assessment purposes, including the School's use of plagiarism detection systems in order to check the integrity of assessed work.
> I agree to my dissertation being placed in the public domain, with my name explicitly included as the author of the work.
> Name:
> Date:

Mandatory Appendix

The first appendix should be the project proposal that you wrote near the beginning of Michaelmas term. Please do not edit it; it is fine if your work actual deviated from the original proposal, as long as you are able to justify changes to the plan.

Submission

Submit the following by 17:00 German time on the Friday of Week 20 on Moodle:

1. The electronic version of your report;
2. Any code and working documents (see below).

The Working Documents

As part of the submission of your project, you are required to submit a folio of working documents – this is in addition to your project report.

The working documents should provide evidence (e.g. raw results, prototype code) of your experimental work, including implementation and evaluation and should include documents providing implementation information such as code listings, software designs, user questionnaires . . .

Instructions for Electronic Submission

You are required to electronically submit your report AND working documents (including all source code) for automatic plagiarism detection purposes. Your finished report should be submitted onto Moodle (PDF preferred), your working documents (programs, and results) should be electronically submitted by copying all the relevant files into a relevant archive (zip or tar.gz) and uploading this archive onto the final submission point on Moodle.

Your code should be in the form of source files (i.e., not in a further archive, or pasted into word documents, . . .). Be sure to leave only one copy of your project in your directory.

NO extensions are given, unless there are serious and documented exceptional circumstances.