

10 Report Writing

Presumably, you think that writing the report of your final year project is the last step that you should do. Although this assumption is partially correct, however, it should not lead you to postpone the report writing activity to the last minute of your schedule. In fact, you have to start to write your report from the early stages of your project. If you have a look at Figure 3-2 again, you can find out that the report-writing task has been considered as an ongoing task after literature review finished. This means that your report is gradually completed alongside other activities that you would perform during the development process. Clearly, as you can move towards the end of your project, the time and effort that you dedicate to this task would increase.

Most of the schools/departments provide you with a template based on which you would prepare your final report. These templates may differ in detail or even the topics that they expect. However, there are commonalities among majority of them. Below I will suggest a general structure based on which I will explain the expected contents of each section.

10.1 Report Structure

You can find a template for the report structure below. However, depending on your specific project you may revise it.



"I studied English for 16 years but...
...I finally learned to speak it in just six lessons"
Jane, Chinese architect

ENGLISH OUT THERE

Click to hear me talking before and after my unique course download



Report Structure

- Cover Page
- Executive Summary/Abstract
- Acknowledgement
- Table of Contents
- List of Figures
- List of Tables
- Introduction
- Literature Review
- Methodology
- Solutions
- Requirement Management
- Analysis
- Design
 - User Interface Design
 - Database Design
 - Software Design
 - Implementation
- Testing
- Conclusion and Future works
- Bibliography/References
- Appendices

Each item of the above structure would be briefly explained in the following subsections.

10.1.1 Cover Page

Cover page is the identity of your final year report. I have seen many carelessly prepared cover pages and have penalized the providers (my students are well aware of this)! Unless there is a specific template in your department, make sure that you have provided at least the following information on your final year project report.

Cover Page information

- University Name and Logo
- Department
- Course/Program
- Your name
- Student ID
- Project Name
- Course/Module title and code
- Supervisor

10.1.2 Table of Contents

Prepare Table of Contents (TOC), List of Figures, and List of Tables. Most of word processors, e.g. MS Word help you in automatically prepare and update these lists. Utilizing these facilities prevents your document from wrong page references.

10.1.3 Executive Summary/Abstract

Executive Summary (ES) is a one-page explanation that explains to the reader the problem, how it has been tackled, and what the outcomes are. Although it is placed as the first page after the cover page, however, it is normally written at the end of project, when everything is clear! As the name is applying, it is a short summary for the executive management of your project, here the supervisor or the evaluation panel, to let them understand in a glance what the project is about, how it has been done and what the conclusion is.

If the project is a research-based project, usually, Executive Summary is replaced by “Abstract” title. However, the main theme remains similar, largely.

Executive Summary

- It is placed as the first page after the cover page
- It is normally written at the end of project, when everything is clear!
- It is a short summary to show:
 - what the project is about,
 - how it has been done,
 - and what the conclusion is.
- It is NOT an explanation on the report structure!

I have seen many reports within which the students have confused between Executive Summary and Introduction. Be careful on this issue and look the hints on these two to understand their differences.

10.1.4 Introduction

This chapter of your report provides a background of the project, states, in general terms, what the report is about and how it has been structured. Introduction can be divided to subsections such as Overview, Background, and Report Architecture. As you can see below, introduction has a clear-cut difference with the Executive Summary/Abstract. However, I have seen many reports with a transposition of Introduction and ES.

Excellent Economics and Business programmes at:



university of
 groningen




**“The perfect start
of a successful,
international career.”**

CLICK HERE
to discover why both socially
and academically the University
of Groningen is one of the best
places for a student to be

www.rug.nl/feb/education



10.1.5 Literature Review

Although this section mainly applies to the research-based projects, however, it is a good idea to have it in the normal projects as well. In this chapter, you should acknowledge the previous works on the area of the project in order to show their main outcomes, strengths, and spaces for improvement. Consequently, you can show how your project has been built upon the previous ideas and works and how it would contribute to add more to this background.

10.1.6 Methodology

This chapter depicts how you have applied the subjects that we discussed in in chapter 4. Students, sometimes, refer only to the tools that they have used and the subjects that they have studied as their methodology. However, you should not write this chapter, aftermath! Methodology is something that you have to decide on during the early stages of your project. As a result, you can write this chapter as soon as you made your decision. This was one reason, among many, that I mentioned that report writing was an ongoing activity and should not be postponed to the last minute.

10.1.7 Solutions

This chapter can be considered as a subsection to the methodology chapter or as an individual one. Whichever way you choose, you have to clearly state that why you have taken this specific approach to develop the system. If there are more than one solution to your problem, name these solutions and talk about their pros and cons and then explain the reasons behind your decision to take one not the others. For example, you have to explain that why you have used a web-based system and not a desktop one.

10.1.8 Requirement Management

In this chapter, show the project requirements as we discussed in chapter 5. Use the classification that was used or other classifications that you have studied. But, this is important to depict the requirements clearly. Do not forget to pay proper attention to the functional requirements. Try to write this chapter when you finished the activity or at least draft its contents, otherwise, you may loss lots of data when you start writing it at the end of the project.

10.1.9 Analysis

Depending on your methodology, this chapter would contain use case modeling or data flow analysis. Whichever is the case, show the analysis steps and try to use proper figures (e.g. UML diagrams) to show the general view of the system. If you have restrictions on the word count of your report, then provide the main analysis here and move the details to the appendices of your report.

10.1.10 Design

Depending on your methodology, this chapter would contain different materials. However, structuring it as three subsections can be a good idea.

10.1.10.1 Software Design

In this subsection, you should provide your software design. I did not discuss software design in details as it is beyond the scope of this book, and you can find enormous resources about the subject (see the bibliography for instance). However, you should show the system architecture, decompositions, and modularity in this section. If you followed an OO method, then, you may provide package model, class model, and interaction model in this chapter, as well.

10.1.10.2 User Interface Design

You should introduce the User Interfaces (UI) in this chapter or show a sample of which and explain the way that you have designed it, then, leave the details to the appendices. You can use the approach that I advised you in chapter 6 to combine the UI design with use case description.

10.1.10.3 Database Design

If your project is a database application, I advise you to be as generous as you can with the explanation of your data model and database design. In this subsection, you can provide the ERD and then the normalized version of your database design. Providing the details of your tables can give your project, more flavor and would show your profession. However, you can move some samples of triggers and stored procedures, if you have any, to the appendices section.

10.1.11 Implementation

Implementation chapter should focus on the codes. In addition, you should present the general architecture of implementation. Provide samples of codes. Explain algorithms used. If you have a considerable amount of code, then either provides them through a supplementary media or as one the appendices.

10.1.12 Testing

Testing chapter should show how the test process has been implemented, in general, and how the verification/validation techniques have been applied, in particular. Samples of test cases and test data explanation should be provided here. Importantly, test results, the outcome not the detail, should be provided as well. You can provide details of the test process as one of the appendices.

10.1.13 Conclusion and Future Works

Although it is usually a short chapter, however, conclusion and future works chapter is the distillation of your report. It should show the main outcome of your project. You should critically discuss the outcomes of your project, and point out your opinion on the results and outcomes. Try to be neutral at this stage and look at the outcomes as an outsider.

10.1.14 Bibliography/References

To clarify, bibliography is the list of resources that you have consulted with for your project but not directly cited, while, references is the list of resources that you have cited.

Most of departments have their suggestion for using bibliographical/citation style. However, in some cases you might not receive any specific suggestion. In this case, choose a style that you are already familiar with such as APA or Harvard citations and bibliography style. Fortunately, most of word processors, e.g. MS Word, can provide you with tools, which support several common citations and bibliographic styles.

10.1.15 Appendices

Well, the name is pretty much reflecting the content, and hence, there is no need to talk more about it. In addition, in the previous sections I addressed those parts of report that can be extended more by moving material to appendices section, wherever it was appropriate.



LIGS University
based in Hawaii, USA

is currently enrolling in the
Interactive Online **BBA, MBA, MSc,**
DBA and PhD programs:

- ▶ enroll **by October 31st, 2014** and
- ▶ **save up to 11%** on the tuition!
- ▶ pay in 10 installments / 2 years
- ▶ Interactive **Online education**
- ▶ visit www.ligsuniversity.com to find out more!

Note: LIGS University is not accredited by any nationally recognized accrediting agency listed by the US Secretary of Education. More info [here](#).



10.2 Proofreading

You have to follow academic writing techniques in your report writing. You have received proper training on this subject during your study at the university. However, most of the time, we forget to check our writing according to these techniques. This is important for both native speakers and those who use English as the second (perhaps third or fourth) language (like me, myself!). Unfortunately, most of the time students are careless and negligence about this activity. Below you can find some hints about proofreading.

Proofreading

- Use spell checkers.
- Do NOT trust spell checkers!
- Print your report; forget about being “green” at this stage.
- Find a quiet place.
- Read your report word by word, loudly.
- Correct errors with a distinguishable pen/marker.
- However, if you are so interested to remain “green”, some word processors and some digital gadgets allow you to perform proofreading, digitally. Therefore, there is no way to escape of proofreading and no excuse that justify our errors (please let me know about mine in this book!).

10.3 Summary

Your final year project would be presented through three main items, namely, software, presentation, and project report. Project report is a key document that shows how you have accomplished your project. It presents your understanding of the project, explains the project plan, provides the results of each stage of your project, describes the outcome, and presents the evaluation and your conclusion on your final year project. In fact the project report is one of the main deliverable items based on which your project would be evaluated and marketed.

Usually, faculties/schools/departments are providing a template based on which you have to prepare your final report. However, in this chapter, a general outline for a typical project report was presented. It is crucial to pay attention to all the details that you have to present, however, your focus should be on those chapters of the report, which carry the higher marks. Moreover, being careful on the academic writing style, citation, referencing, proofreading, and general report structure such as cover page, table of contents, pagination, headers and footers are important as well. They show how professional you are in documenting your project.