

A L^AT_EX Project Report Template

B. J. Phillips and S. P. Mickan

The University of Adelaide
School of Electrical & Electronic Engineering
PROJECT REPORT

Commencement Date: 20 May 2003
Submission Date: 06 June 2004

Acknowledgments

The authors would like to thank Donald Knuth who's work is a constant source of inspiration.

Executive Summary

The typesetting software \LaTeX offers many advantages for the preparation of project reports. It produces beautifully typeset output, elegantly handles equations and cross references and helps maintain consistent formatting. Sadly few undergraduate students are familiar with this software.

This template report has been developed to provide an accessible starting point for students who would like to use \LaTeX for their project report. The source document is available on-line [3] and is annotated with comments and instructions.

Contents

1	Introduction	5
1.1	Motivation	5
1.2	Previous Studies	5
1.3	Objectives	5
2	Theory	5
3	Experiments	6
4	Results	6
5	Conclusions	6
5.1	Future Work	6
6	Project Management	6
6.1	Time-line	6
6.2	Budget	6
6.3	Risk Management	6
A	Appendix: Source Code	6
B	Appendix: Report Format Tips	6
C	Appendix: CD Index	9

1 Introduction

This document has been written to help you use \LaTeX to prepare your project report. The source document `ProjectReportTemplate.tex` is available on-line [3] and contains comments and examples to help you with basic formatting. Before diving straight in you may want to check the document ‘Getting Started with \LaTeX ’ [4] which gives instructions on how to run \LaTeX on the PCs in the School of Electrical & Electronic Engineering.

This document also contains some examples as to how you can structure your project report and what it may contain. However you should note that your report must be in accordance with the guidelines published on the subject web page [2]. Where the information in this template contradicts the subject guidelines you should follow the guidelines.

The following sections demonstrate one possible structure for your report. Appendix B provides some tips for formatting your report as well as some examples of how to do this in \LaTeX .

1.1 Motivation

Describe the reasons why the project is interesting or important.

1.2 Previous Studies

Survey other published work on this problem.

1.3 Objectives

Summarise the aims of the project.

2 Theory

Describe the theory underpinning the project if appropriate.

3 Experiments

Describe the experiments you designed for your project if appropriate.

4 Results

Collate and present the data you collected.

5 Conclusions

Interpret your results to draw conclusions.

5.1 Future Work

Pose open questions and suggest how the project can be built upon.

6 Project Management

Discuss and evaluate the management of the project.

6.1 Time-line

6.2 Budget

6.3 Risk Management

A Appendix: Source Code

Present supplementary material in the appendices.

B Appendix: Report Format Tips

When writing your report:

- Three levels of headings (i.e. sections, subsections and subsubsections) are usually sufficient.
- Use cross references to help orient the reader. For example, one can refer back to the time-line in Section 6.1 on page 6.
- Try to use graphs such as Figure 1 on page 8 and tables such as Table 1 on page 8 to present results clearly and succinctly.
- Format equations carefully. Variables (such as A) should be in italics. Numbers (such as 1.223) should not be in italics. You can include equations in line with your text (for example $A = 3^n \log \psi$), as numbered equations (such as Eq. 1) or unnumbered equations such as:

$$F = \frac{C_{out}}{C_{in}} \times \prod_{i=1}^N g_i b_i$$

$$D = F + \sum_{i=1}^N p_i \tag{1}$$

- Be sure to reference all claims that are not substantiated by the work within your project. 9 out of 10 student reports make unsubstantiated claims [6].
- Define all acronyms (such as Three Letter Acronyms [TLAs]) the first time you use them and add them to the glossary.
- Whenever you use an unfamiliar technical term for the first time, format it in italics and provide a brief definition. For example: the authors prefer to maintain low *discursive viscosity* by avoiding jargon wherever possible. Include the term in the glossary.
- Interesting material that is not essential to the current discussion can be placed in a footnote.¹

¹This is a footnote.

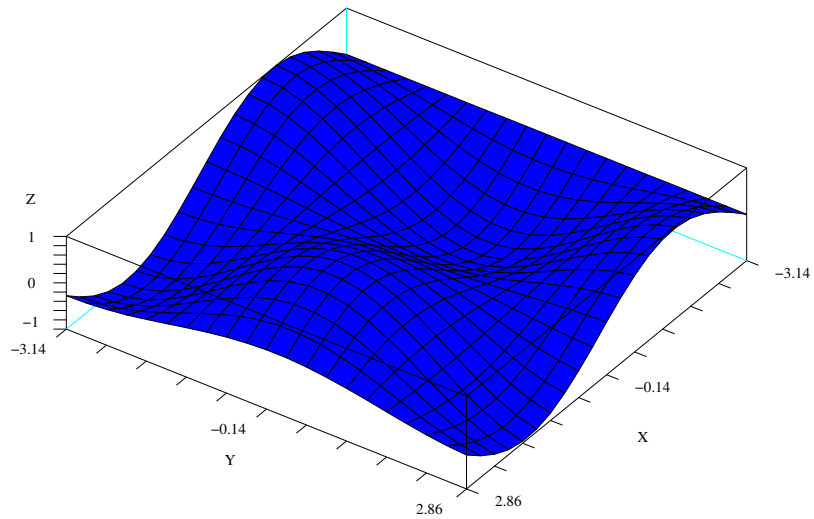


Figure 1: An example of a 3D surface plot generated by scilab (<http://www-rocq.inria.fr/scilab>).

Table 1: A table generated in \LaTeX .

Title 1	Title 2	Title 3	Title 4
A	0	00	0.00
B	1	11	1.11
C	Merged		2
D	3	33	3.33
E	4	44	4.44

C Appendix: CD Index

The attached CD ROM includes:

1. a copy of this report
2. a folder containing all experimental data
3. a folder with all the weekly reports
4. a folder containing the project proposal
5. a folder containing the slides for proposal seminar
6. a folder containing the slides for the final seminar
7. a folder with all of the original graphics files
8. any other documents

References

- [1] Tobias Oetiker, Hubert Partl, Irene Hyna and Elisabeth Schlegl, “The Not So Short Introduction to L^AT_EX 2_ε,” distributed with L^AT_EX 2_ε, Version 3.13, 23 February 2000.
- [2] C. A. Green, “Honours and Design Project Work: Guide to Preparation of Final Year Project Reports,” available at https://www.eleceng.adelaide.edu.au/INFO_UG/4039/documents/finalreport.pdf, February 2004.
- [3] B. J. Phillips and S. P. Mickan, “A L^AT_EX Project Report Template,” available at <http://www.eleceng.adelaide.edu.au/personal/phillips>, June 2004.
- [4] B. J. Phillips “Getting Started with L^AT_EX,” available at <http://www.eleceng.adelaide.edu.au/personal/phillips>, June 2004.

- [5] M. Shagger, *Reflexive Perspectives on Post-Modern Verbosity*, 3rd ed., Addison-Hall, 1969.
- [6] A. Dubious, “Its in the Numbers Baby,” *Transactions on Everything*, vol. 9, no. 4, pp. 42-749, Dec. 1984.

Glossary and Symbols

Discursive Viscosity: The average number of jargon terms per paragraph.

RNS: Residue Number System

TLA: Three Letter Acronym

ψ : Discursive viscosity