

SENIOR DESIGN PROJECT REPORT WRITING GUIDELINE

Information Technologies Department

International Burch University

PREFACE

The purpose of this report writing guideline is to clarify, simplify and promote excellence in Senior Design Project writing and presentation. This guideline describes the important requirements for maintaining the uniformity at the International Burch University.

Recommendations are most welcome. Such recommendations will be evaluated annually.

Table of Contents

1	Introduction	5
2	General Guidelines and Parts of the Report	6
3	Submission of Report	7
4	Format and Appearance	7
	4.1 Paper Quality and Duplication	7
	4.2 Margins and Justification	7
	4.3 Font	8
	4.4 Spacing	8
	4.5 Paragraph and Formatting	8
	4.6 Pagination	9
	4.7 Multiple Volumes	10
	4.8 Front Cover and Binding	10
5	Writing the Parts of the Report	11
	5.1 Preliminary Pages	11
	5.1.1 Title Page	11
	5.1.2 Approval Page	11
	5.1.3 Abstract	11
	5.1.4 Acknowledgements	11
	5.1.5 Declaration	12
	5.1.6 Table of Contents	12
	5.1.7 List of Tables	12
	5.1.8 List of Figures: List of Illustrations / List of Symbols	13
	5.1.9 List of Appendices	13
	5.1.10 List of Abbreviations	13
	5.2. The Body	13
	5.2.1 Headings	13
	5.2.2 Illustrative Material: Tables and Figures	14
	5.2.3 Formulas	16
	5.2.4 Quotations	16
	5.2.5 Footnotes and Endnotes	16
	5.2.6 Citations	17
	5.2.7 References	17

5.2.8 Appen	dices	17
5.2.9 Curricu	ulum Vitae	18
Appendices		
Appendix 1 Cov	ver Page	19
Appendix 2 Title	e Page	20
Appendix 3 App	proval Page	21
Appendix 4 Abs	stract	22
Appendix 5 Ack	nowledgements	23
Appendix 6 Dec	laration	24
Appendix 7 Tab	le of Contents	25
Appendix 8 List	of Tables	27
Appendix 9 List	of Figures	28
Appendix 10 Lis	st of Appendices	29
Appendix 11 Lis	st of Abbreviations	30
Appendix 12 Sa	mple Table	31
Appendix 13 Sa	mple Figure	32
Appendix 14 Cu	ırriculum Vitae	33
Appendix 15 Fo	rmat for References	34

1. Introduction

This guide describes the style and format regulations in preparation of a satisfactory report for International Burch University undergraduate students. The manuscripts are required to follow these guidelines in full for acceptance by International Burch University Information Technologies Department.

2. General Guidelines and Parts of the Project Report

All reports must be prepared electronically by using a word processor, a mark-up language (e.g. LaTeX) and drawing or graphics software.

All tables, figures and formulas should be electronically generated by using word processor or relevant software. Figures that cannot be generated electronically should be manually drawn subject to technical drawing principles.

All tables, figures should be cited within the main body of the report.

Laser or ink-jet printer outputs are required. All print must be in permanent black ink and must appear on only one side of the paper.

No ink corrections, strikeovers, correction fluid, correction tape, paste-ups, insertions between lines, or letterset are permitted on the final bound copies. If any corrections are needed, they should be made on the original manuscript (but not by ink corrections or strikeovers which are never allowed) and the corrected pages must be reprinted before making copies of the report.

Every report should include three main parts or divisions: the preliminary pages, the body, and the reference material.

The report should be written in English.

3. Submission of Report

Candidates should follow the following procedures in submission their report:

- A candidate should submit two copies of his/her report for examination at least one
 week before Defense date. The defense time will be determined according to this first
 submission of the report.
- ii. A candidate should submit to his/her mentor five hardbound copies and a soft copy on CD of the approved report, project application code, and presentation file within 30 days after the successful defense of his/her project.

4. Format and Appearance

4.1 Paper Quality and Duplication

All copies of the thesis should be printed on good quality, preferably acid-free, white bond paper, of 80 g/m², measuring 210 by 297 mm (A4). Only single-sided copies will be accepted.

4.2 Margins and Justification

The left margin (binding side) should be 40 mm and the right, top and bottom margins should be 25mm. All footnotes, headings, page numbers, text, tables, illustrations should be within these margins.

The headings of all main sections (such as, Approval page, Acknowledgements, Table of Contents, List of Tables, List of Figures, List of Symbols, List of Abbreviations, Introduction, all other sections in the main body of the thesis, Conclusion, References, Appendices, Curriculum Vitae) should be 60 mm below the top of the page. No hyphenation is allowed in the headings and in the text of the preliminary pages. The headings should be center justified.

4.3 Font

A conventional font type preferably Times New Roman, size 12-point, should be used consistently throughout the manuscript. Bold face letters and symbols, and italics should be used sparingly throughout the thesis.

Font size of the footnotes must be 10 points. Font size of figure captions and table headings must be 12 points. Font size of characters in tables and figures can be reduced down to 8 points if space limitations make it imperative. When necessary, for example in large volume theses, all the font sizes indicated above can be reduced by 1 point.

4.4 Spacing

The thesis should be typed *one and a half spacing* and *three spaces* between paragraphs. Tables, long quotations, footnotes, endnotes, bibliographies, references and bibliography (except between entries), headings or subheadings, multiline captions and algorithms (pseudo-codes, software programs) should be single-spaced.

4.5 Paragraph Formatting

Each paragraph should start from the left margin and 3 spaces (2x1.5) distance from the preceding paragraph. If a paragraph is split between pages, at least two lines of a paragraph must appear together at the top or bottom of a page. All headings and subheadings must be followed by at least two lines of a paragraph before a page break.

Algorithm descriptions (pseudo-codes, software program codes) should be written in single spacing using a mono-spaced font type as a separate paragraph and indented in its entirety at 10 mm from the left margin.

4.6 Pagination

TABLE 1.1 Order of appearance and pagination.

Front cover (bind)		***	
Inside cover (title page)		***	
Approval page	Page i	**	
Abstract	Page ii +	*	
Acknowledgements	•••	*	
Table of Contents	•••	*	
List of Tables		*	
List of Figures	•••	*	
List of Symbols	•••	*	
List of Abbreviations	•••	*	
Introduction	1 +	*	
Main body of the report		*	
Conclusion		*	
References		*	
Appendices		*	
Curriculum Vitae		*	
ψψψ λτ 1			

^{***:} No page number

The title of the report and Abstract pages should not include table, figure, boldface, italics, chemical or mathematical formulas, symbols, subscripts superscripts, Greek letters or other non-standard abbreviations or characters.

All pages, except for outside and inside cover page should be numbered centrally. Preliminary pages (such as, Approval page, Abstract, Acknowledgements, Table of Contents, List of Tables, List of Figures, List of Symbols, List of Abbreviations) should use lower case Roman numerals (i, ii, iii,). Starting from the body of the thesis (namely from the "Introduction" section), all numbers should use Arabic numerals (1, 2, 3,...) beginning with "1" and should be consecutively applied continuously throughout the thesis until the last page, including the pages containing illustrations, tables, figures, and photographs.

4.7 Multiple Volumes

If a finished manuscript exceeds 50 mm in thickness it must be bound in two or more volumes, each limited to 50 mm in thickness, too. All volumes must be numbered consecutively, using capital Roman numerals. Each additional volume must contain a title

^{**:} Number does not appear on the page

^{* :} Number appears on bottom center

page. Title pages should be identical except for the notation Volume I, Volume II, etc., just below the title to differentiate the volumes.

Both the Roman and the Arabic numbering systems used in Volume I should continue through Volume II. As with the title page of Volume I, that of Volume II counts among the preliminary pages but does not bear a number. If "iv" is the last Roman numeral used in Volume I, for example, the title page of the second volume will count as page "v" and will be followed by preliminary pages "vi", "vii", etc. Each volume must contain a complete Table of Contents, List of Tables, List of Figures, List of Symbols and List of Abbreviations.

4.8 Front Cover and Binding

All undergraduate project reports are to be bound in reflex white cloth. Synthetic, leatherette, or similar cloths are not acceptable. A bound copy of the thesis should measure 215 by 285 mm. The title of the project should appear 60 mm from the top of the cover.

See Appendix A for an example of the front cover and the spine.

Chapter 5

Writing the Parts of the Report

5.1 Preliminary Pages

5.1.1 Title Page

The title should be typed single-spaced, all in capital letters, and should begin at 60 mm from the top of the page. The format of the title page and cover page, including spacing and capitalization should be exactly as in the sample title page shown in Appendix 2.

5.1.2 Approval Page

A sample approval page is presented in Appendix 3. Only the university or organization name should be used to indicate affiliation. Academic titles in English are Prof., Assoc. Prof., Assist. Prof. or simply Dr. for instructors.

5.1.3 Abstract

The objective of an abstract is to give the reader a concise account of the thesis or dissertation. The abstract should have three main parts: the statement of the problem, methods and procedures, results and conclusion. It must not exceed 350 words for both masters thesis and doctoral thesis, must not include references, diagrams, mathematical formulae unless absolutely essential or footnotes.

A sample abstract page is provided in Appendix 4.

5.1.4 Acknowledgements

Acknowledgements contain expressions of appreciation to the individuals or institutions who have helped the author in any way during his/her studies. A sample acknowledgement page is presented in Appendix 5.

5.1.5 Declaration

The declaration form in Appendix 6 should be filled and signed.

5.1.6 Table of Contents

The table of contents must list the title of each chapter and its parts and sections, references or bibliography, appendices and Curriculum Vitae (if applicable). The wording used for all entries in the table of contents must match exactly with what is used in the text. Each entry must have leader dots which connect it to its corresponding page number.

The heading Table of Contents appears without punctuation centered between the text margins, 60 mm from the top of the page. The listing of actual contents begins at the left margin at least 15 mm below the heading.

A sample table of contents is provided in Appendix 7.

5.1.7 List of Tables

The list of tables should immediately follow the table of contents on a new page.

The heading List of Tables appears centered between the texts margins, without punctuation, 60 mm from the top of the page; the listing begins at the left margin at least one and a half spacing below the heading.

Each entry should have the same number and the same caption or title used for a table in the text, although a long caption may be abbreviated to the extent of using only the first full sentence. As in the table of contents, each entry must have leader dots which connect it to its page number.

A sample list of tables is provided in Appendix 8.

5.1.8 List of Figures; List of Illustrations; List of Symbols

If included, these lists must appear on separate pages and are governed by the same rules as the list of tables. A sample list of tables is provided in Appendix 9.

5.1.9 List of Appendices

If included, this list must appear on separate pages and are governed by the same rules as the list of tables. A sample list of tables is provided in Appendix 10.

5.1.9 List of Abbreviations

If included, this list must appear on separate pages and are governed by the same rules as the list of tables. A sample list of tables is provided in Appendix 11.

5.2 The Body

5.2.1 Headings

The text, or the main body of a thesis, is divided into multiple chapters to help the reader in understanding the subject matter. Although the detailed organization of the text varies among academic disciplines, the formatting of the text must be consistent throughout. All headings and subheadings should be presented in the same way in each chapter, in terms of capitalization, placement on type page and kind of type used. Headers, giving the chapter number and chapter title, are allowed at the top of the pages

Chapters are numbered consecutively in Greek or Arabic numerals and capital letters (Chapter 1, Chapter 2, etc., or Chapter I, Chapter II, etc.). In addition to general titles like Introduction, the chapters need short but substantially descriptive titles, as well.

Only new chapters should begin with a new page. Within a chapter, the presentation of subsections must be continuous; partially filled pages of text are acceptable only on non-textual pages, such as those presenting tables and illustrations.

The title of the Chapter should be written in all bold capital letters and 14-point font size is centered between the text margins, 60 mm from the top of the page; the title in all bold-faced and 14-point font size goes one and a half space below and is also centered. The text begins at least one and a half spacing below.

Second-level headings, first-level subheadings and second-level subheadings must be left justified, bold-faced and 12-point font size. Second-level headings should be numbered as 2.1, 2.2, The first letter of each word except conjunctions, propositions and articles must be capital. Second-level heading should be separated from the preceding and succeeding text by a distance of one and a half space or by carriage return.

First-level subheadings should be numbered as 2.1.1, 2.1.2, ... and should have a distance from the preceding and succeeding text of at least 8 mm. The first letter of each word except conjunctions, propositions and articles must be capital.

Second-level subheadings, if needed, should be numbered as 2.1.1.1, 2.1.1.2, ... and should have a distance from the preceding and succeeding text of at least 8 mm. However, second subheadings should be avoided if possible. No further subheadings are allowed.

5.2.2 Illustrative Material

Illustrations include drawings, charts, figures, tables, diagrams, plates, and photographs. These may be inserted wherever the author feels appropriate, but as a general rule, should appear as close as possible to the part of the text which refers to them.

Table numbers and captions should be centered above the illustration; figure numbers and captions should be centered below the illustration. Table numbers, figure numbers and captions should be separated from the illustrations by least 8 mm.

Illustrations of one-half page or less in length may appear on the same page with the text, separated from the text above and below one and a half space.

Illustrations that are too wide to be placed in portrait orientation between the left- and right-hand margins should be rotated counterclockwise 90 degrees so that the top of the illustration

runs parallel to the left-hand margin of the page. In such a case, the whole page must be reserved only for that illustration. The caption or legend for such an illustration must also be rotated. When illustrations are presented in this manner, the usual margin requirements remain in effect, and page numbers should appear in their normal place.

Illustrations of any kind must be numbered consecutively, including appendices. A decimal approach (1.1, 1.2, 1.3,..., A.1, A.2,..., where the first digit is the chapter or appendix number, and the digit after the decimal point is the illustration number within that chapter or appendix) should be used.

Illustrations may run longer than one page. In such cases, all subsequent pages of the illustration must include at least the illustration number and the notation that is continued, e.g., "Table 1.2 (cont'd)" or "Table 1.2 (continued)".

Table headings and figure captions must be in the same font used in the text. The size of characters in figure captions and table headings must be 12 points.

A point size that is easy to read, especially for tables, axis scales, axis titles, legends, and labels in charts and diagrams must be chosen. Font size of characters in tables and figures can be reduced down to 8 points if space limitations make it imperative.

Color may be used in figures and photographs as long as duplicate copies are all produced by color photocopy. Photographic illustrations must be originals or well-made photographic copies of the originals. Standard photocopies of photographs are not acceptable. Wherever required, mounting of illustrations should be done with a technique that ensures durable and good quality result (e.g., dry mounting). With dry mounting, the paper to which photographs are attached will not curl. Other methods, such as library paste, rubber cement, spray mounting, or tape, are not acceptable: such mounting techniques are not permanent, and the adhesives used will eventually destroy both the paper and the photograph in the long run.

If an audio visual material (e.g., videotape, cassette, etc.) is needed to accompany and supplement the text, it should be adequately described within the continuity of the text. Only one copy of the material will be submitted.

A soft copy of the thesis in the form of CD will be submitted with all copies. Computer printouts must conform to the margin specifications, must be dark and legible with high black and white contrast, and must be copied on thesis-quality paper.

Samples of table and figure are provided in Appendix 12 and 13.

5.2.3 Formulas

Mathematical and chemical formulas, equations and expressions must be computer generated using an equation editor or a mark-up language. If a reference is made to them, they must carry a numerical identification. Each equation must be numbered in parentheses and this must be given next to the right margin. Like illustrations, equation numbers must have two parts where the first part is the chapter or appendix number, and the part after the decimal point is the equation number within that chapter or appendix. For instance, (1.1) or (A.2).

5.2.4 Quotations

Short, direct prose quotations of three lines or less should be incorporated into the text, enclosed in double quotation marks. Prose quotations which exceed three lines should be set off from the text in single spacing and indented in its entirety at least 10 mm from the left margin, with no quotation marks at the beginning or end.

5.2.5 Footnotes and Endnotes

Notes may be in the form of footnotes, placed at the bottom of each page, or endnotes, placed at the end of each chapter or at the end of the report before the bibliography and appendices.

Footnoting practices differ widely among publications in the sciences, humanities, and social sciences. Candidates should consult with their departments regarding accepted footnoting practice in their individual disciplines.

The most common mode of presentation for both footnotes and endnotes is to single-space within, and double-space between, each listing. If placed at the bottom of a page, footnotes

must be separated from the text by a complete horizontal line 4 mm above the first line of the footnote.

Arabic numerals, asterisks or small letters should be used for footnotes and endnotes. In either case, the label used may appear either above the line or in parentheses even with the line

5.2.6 Citations

The Publication Manual of the American Psychological Association (APA) referencing system should be used. Samples for writing References is provided in Appendix 15.

5.2.7 References

All of the references are to be listed at the end of the report. The references in a section headed "References".

All cited material in the text should be listed in the References. Similarly, all referenced material should be cited in the text as well.

The references section is not assigned a chapter number, but it must have page numbers written in the same font and point size used for pagination throughout the thesis. The heading References is centered between the margins, without punctuation, 60 mm from the top of the page; the list begins one and a half space below. Each bibliographic entry should be single-spaced with double spacing between entries.

5.2.8 Appendices

Some authors may desire to include certain material of the report in an appendix rather than in the main text. For example, an appendix may contain test forms, detailed apparatus description, extensive tables of raw data, computer programs, etc.

Each appendix should be given a number (Appendix 1, Appendix 2, etc.). The heading Appendix 1 should appear centered between the text margins, 60 mm from the top of the

page. Each appendix has a descriptive title. The font and point size should be same as those used for chapter titles.

Spacing need not be the same for each of the appendices. Documents and case studies may be single-spaced, whereas spacing for the explanations of methods and procedures may be similar to that of the text.

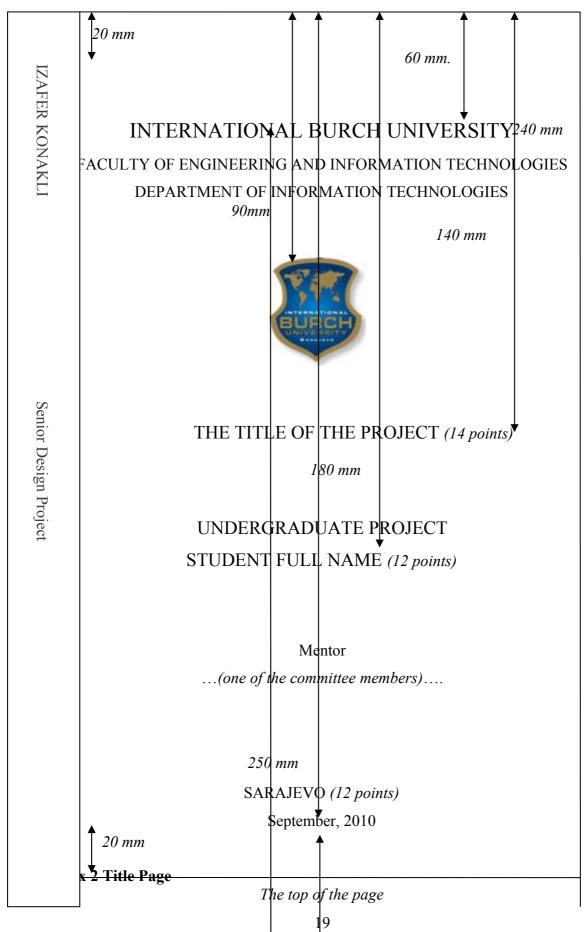
Each appendix with its title must be listed separately in the table of contents, similar to a chapter.

All appendices must have page numbers written in the same font and point size used for pagination throughout the thesis.

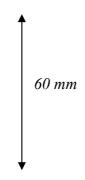
If an appendix contains photocopied material, the photocopies should be of publication quality.

Appendix 1 Cover Page

The top of the page



THE TITLE OF THE PROJECT (14 points)



STUDENT'S FULL NAME (14 points)

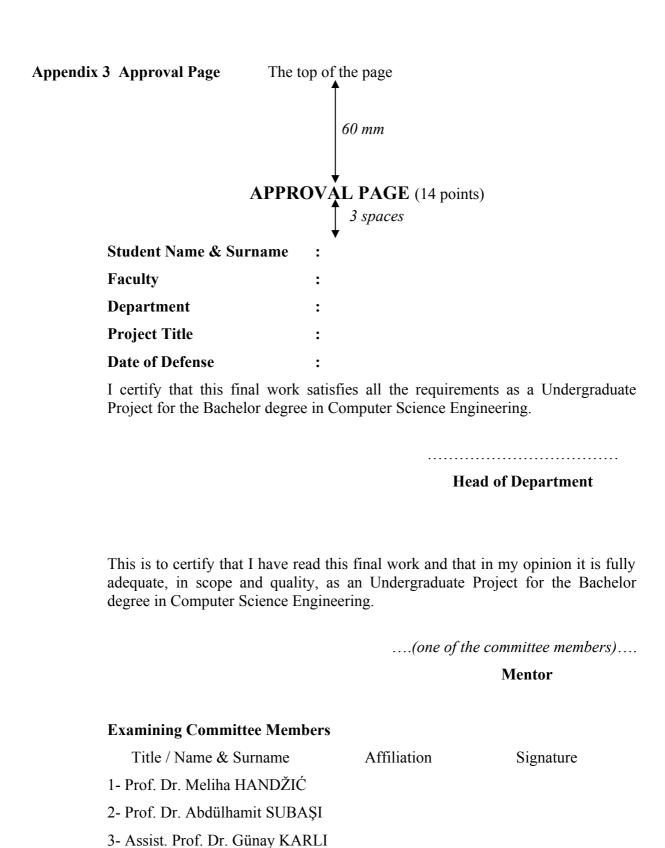


Report Submitted in Fulfillment of Requirement for the Undergraduate Project



250 mm

INTERNATIONAL BURCH UNIVERSITY (12 points)
2013 (12 points)

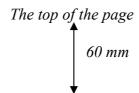


It is approved that this final work has been written in compliance with the formatting rules laid down by the Department of Information Technologies.

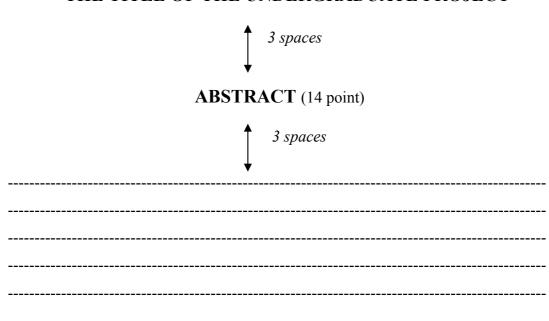
Prof. Dr. Meliha HANDŽIĆ

Head of Committee

Appendix 4 Abstract

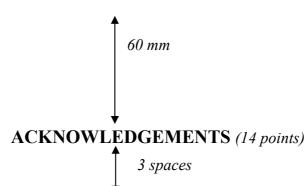


THE TITLE OF THE UNDERGRADUATE PROJECT



Appendix 4 Acknowledgements

The top of the page



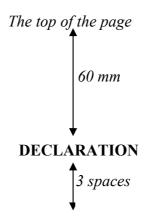
There are many people who helped to make my years at the graduate school most valuable. First, I thank, my major professor and dissertation supervisor. Having the opportunity to work with her over the years was intellectually rewarding and fulfilling. I also thank who contributed much to the development of this project starting from the early stages of my dissertation work. provided valuable contributions to the development of the econometric model. I thank him for his insightful suggestions and expertise.

Many thanks to Department computer staff, who patiently answered my questions and problems on word processing. I would also like to thank to my undergraduate student colleagues who helped me all through the years full of class work and exams. My special thanks go to whose friendship I deeply value.

The last words of thanks go to my family. I thank my parents and my brother for their patience and encouragement. Lastly I thank my husband, ..., for his endless support through this long journey.

This study was supported by the Grant No: BAP-.....

Appendix 6 Declaration

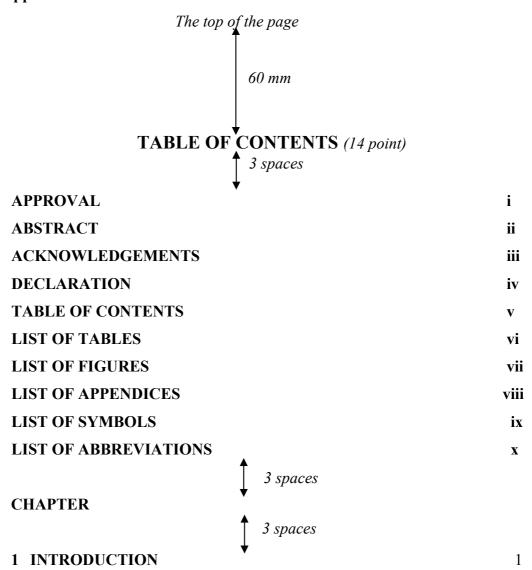


(Signature)

Name of Candidate

Date:

Appendix 7 Table of Contents



(Statement of the problem, the solutions can be implemented How this work solves the problem in what way ... Current studies around the problem ... Current applications implemented before ...)

3 spaces

2	2 ANALYSIS 5 2.1 Requirements Analysis 5 2.1.1 Functional Requirements 6 2.1.2 Reporting 10			
	2.1	Requi	rements Analysis	5
		2.1.1	Functional Requirements	6
		2.1.2	Reporting	10
		2.2.3		29

2.2 Feasibility Analysis



3	APPLICATION DESIGN	49
	3.1 Use Case Diagrams	58
	3.2 Class Definitions and UML Diagrams	67
	3.3 Activity Diagrams	70
	3.4 Database Table Definitions and Relations	77
4	IMPLEMENTATION	140
		7

4.1 ...(Programming Languages that are used in the application, Hardware Components and implementation environment definitions ...)



5 TESTING 150

(Testing results and modifications about project implementation)

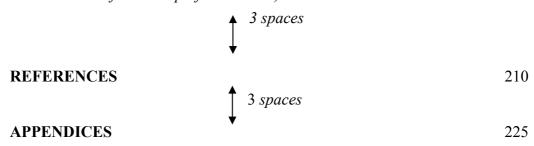
6 MAINTENANCE ANALYSIS

(Administrator part ... Features and their maintenance... Data maintenance ... Backup ... Restoring the data when application crashes ... Future developments and data integrity ...)

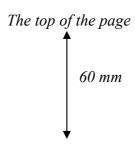


6 CONCLUSION 180

(The benefits of the project, the things learned when implementing the project.... The future work that can improve this work ... The limitations faced when implementing the project ... The limitations that application has Use recommendations for better performance ...)



Appendix 8 List of Tables



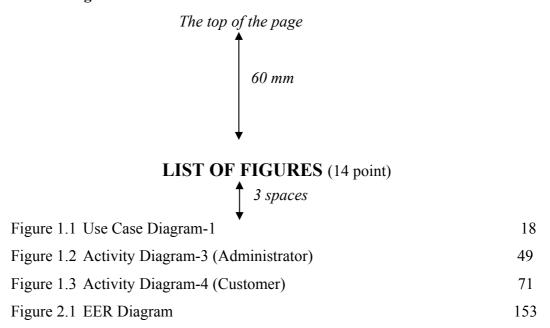
LIST OF TABLES (14 point) 3 spaces



Table 1.1	Environmental conditions that influence swelling potential	48
Table 1.2	Stress conditions that influence swelling potential	49
Table 1.3	Diagnostic Testing Results	51
Table 2.1	Data sources	103

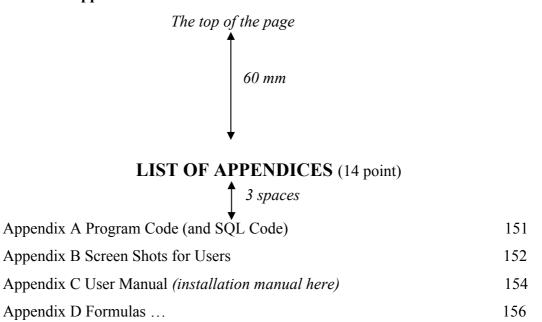
(Note: Table 1.1 indicates the first table in Chapter 1, Table 2.1 indicates the first table in Chapter 2)

Appendix 9 List of Figures

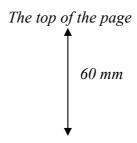


(Note: Figure 1.1 indicates the first figure in Chapter 1, Figure 2.1 indicates the first figure in Chapter 2)

Appendix 10 List of Appendices



Appendix 11 List of Abbreviations



LIST OF ABBREVIATIONS (14 point)

↑ 3 spaces

ARDL Autoregressive Distributed Lag

CPI Consumer Price Index

ECSC European Coal and Steel Community

ECM Error Correction Model

EEC European Economic Community

EMU European Monetary Union

EU European Union

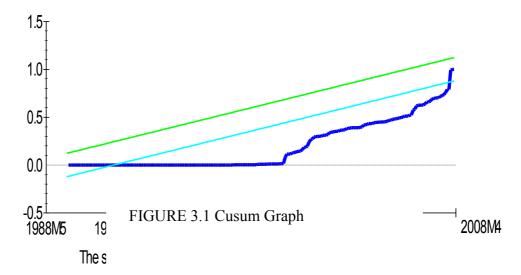
GARCH Generalized Autoregressive Conditional Heteroscedasticity

Appendix 12 Sample Table

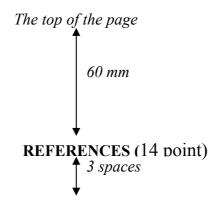
TABLE 1.3 Diagnostic Testing Results

Test Performed for	Test	Test Stat.	Conclusion
Normality	Jarque-Bera	1.427	Residuals normally distr.
Heteroscedasticity	ARCH	0.0712	Residuals are Homosc.
	White	0.473	
	Breusch-Pagan-G	od. 1.367	
Serial Correlation	Breusch-Godfrey	0.866	No Serial Correlation

Plot of Cumulative Sum of Squares of Recursive Residuals



Appendix 14 Format for References



Book

Author(s). (Date of Publication). Title of book. Location of Publisher: Publisher.

Meyer, S. (2007). *Eclipse*. New York, NY: Little, Brown and Company.

Marzano, R. J., & Marzano, J. S. (1988). A cluster approach to elementary vocabulary instruction. Newark, DE: International Reading Association.

Article with doi

Author, A. A., Author, B. B. & Author C. C. (Year of publication). Title of article. *Title of Periodical, volume*(issue), pp-pp. doi:xx.xxxxxxxx

Article without doi

Author, A. A., Author, B. B. & Author C. C. (Year of publication). Title of article. *Title of Periodical, volume*(issue), pp-pp.

Websites

Green, D. (2010). *Gardening tips – perennials*. Retrieved August 12, 2009 from http://www.gardening-tips-perennials.com/index.html

Annual Report

Vermont Teddy Bear Company. (2004). 2004 annual report. Shelburne, VT: Author.

Annual Report Online

Proctor & Gample Company. (2010). *P* & *G* 2010 annual report. Retrieved from http://www.pg.com/annualreport2010/index.shtml