



DEPARTMENT OF
NAME OF THE DEPARTMENT

A VERY LONG AND IMPRESSIVE THESIS TITILE WITH A FORCED LINE BREAK

SOME THOUGHTS ON THE LIFE, THE UNIVERSE,
AND EVERYTHING ELSE

JOHN VERY LONGNAME DOE

Master in name of previous degree

DOCTORATE IN PHD PROGRAM NAME

NOVA University Lisbon

Month, year

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Members: Yet another member of the committee,
Full Professor, Another University
Yet another member of the committee,
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This document was created with Microsoft Word text processor and the NOVAtesis Word template [1].

Dedictory lorem ipsum.

ACKNOWLEDGMENTS

Acknowledgments are personal text and should be a free expression of the author.

However, without any intention of conditioning the form or content of this text, I would like to add that it usually starts with academic thanks (instructors, etc.); then institutional thanks (Research Center, Department, Faculty, University, FCT / MEC scholarships, etc.) and, finally, the personal ones (friends, family, etc.).

But I insist that there are no fixed rules for this text, and it must, above all, express what the author feels.

“You cannot teach a man anything; you can only help him
discover it in himself.” (Galileo).

ABSTRACT

Regardless of the language in which the dissertation is written, a summary is required in the same language as the main text and another summary in another language. It is assumed that the two languages in question are Portuguese and English.

The abstracts should appear first in the language of the main text and then in the other language. For example, if the dissertation is written in Portuguese the abstract in Portuguese will appear first, then the abstract in English, followed by the main text in Portuguese. If the dissertation is written in English, the abstract in English will appear first, then the abstract in Portuguese, followed by the main text in English.

In the LaTeX version, the NOVAthesis *template* will automatically order the two abstracts taking into account the language of the main text. In the Word version, the author must ensure that the order is correct.

The abstracts should not exceed one page and, in a generic way, should answer the following questions (it is essential to adapt to the usual practices of your scientific area):

1. What is the problem?
2. Why is this problem interesting/challenging?
3. What is the proposed approach/solution?
4. What results (implications/consequences) from the solution?

Keywords: Keyword 1, Keyword 2, Keyword 3, ...

RESUMO

Independentemente da língua em que está escrita a dissertação, é necessário um resumo na língua do texto principal e um resumo noutra língua. Assume-se que as duas línguas em questão serão sempre o Português e o Inglês.

Em primeiro lugar deverá aparecer o resumo na língua do texto principal e depois o resumo na outra língua. Por exemplo, se a dissertação está escrita em Português, primeiro aparecerá o resumo em Português, depois o resumo em Inglês, seguido do texto principal em Português. Se a dissertação está escrita em Inglês, primeiro aparecerá o resumo em Inglês, depois o resumo em Português, seguido do texto principal em Inglês.

Na versão LaTeX, o *template* NOVAthesis ordenará automaticamente o resumo e o *abstract* tendo em consideração a língua do texto principal. Na versão Word terá de ser o autor a assegurar-se que a ordem é a correta.

O resumo/*abstract* não deve exceder uma página e de uma forma genérica deverá responder às seguintes questões (é fundamental adaptar às práticas habituais da sua área científica):

1. Qual é o problema?
2. Porque é que esse problema é interessante / desafiante?
3. Qual é a abordagem / solução proposta?
4. O que resulta (implicações/consequências) da solução?

Palavas chave: Palavra-chave 1, Palavra-chave 2, Palavra-chave 3,

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GLOSSARY

Computer	A programmable usually electronic device that can store, retrieve, and process data.
Cell phone	A portable usually cordless telephone for use in a cellular system.

ACRONYMS

IBM	International Business Machines.
NATO	North Atlantic Treaty Organization.

SYMBOLS

π	The ratio of the circumference of a circle to its diameter, having a value rounded to eight decimal places of 3.14159265 (symbol: π).
r	The radius of a circle.

INTRODUCTION

This chapter presents an introduction to the template and how it is organized. In the next chapter you can find some specific instructions. Please read the next sections carefully.

1.1 If You Use this Template

Someone spent a few dozens of hours working on this template to make your life easier and to allow you to be more productive. Those working hours were not paid and were “stolen” from family.

If you use this template, please [go to the project web page in GitGub](#) and:

1. Give the project a star (marked with a red ellipse at top-right in Figure 1.1); and
2. Make a small donation (marked with a red ellipse at bottom-left in Figure 1.1).

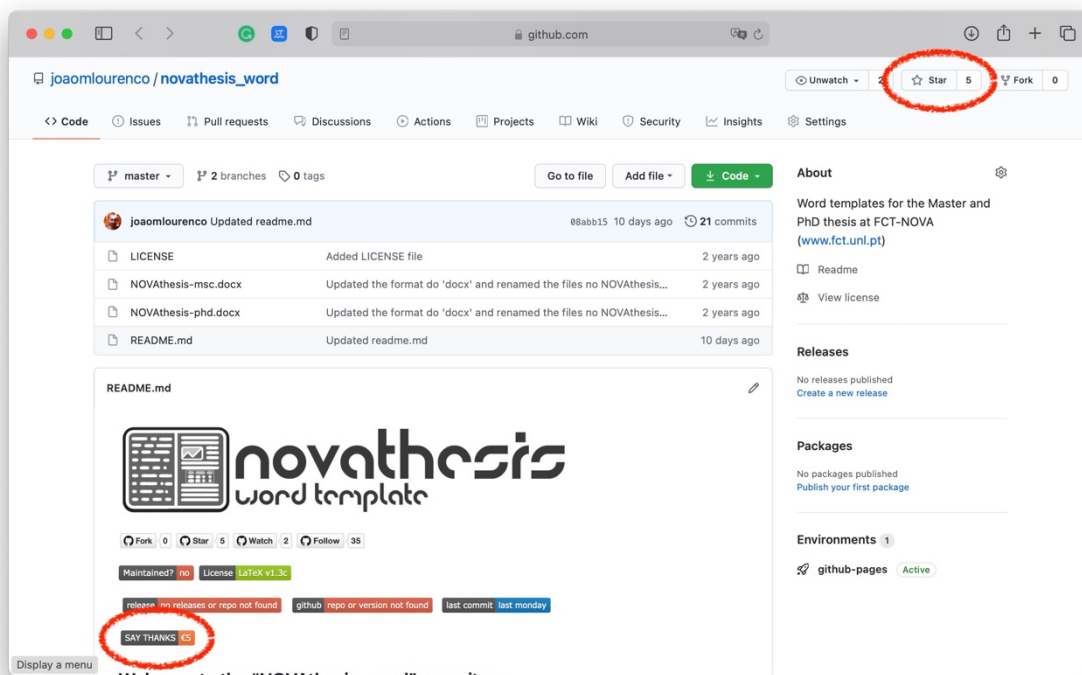


Figure 1.1 — NOVAtthesis_word project page in GitHub.

1.2 Important Rule for Starting a New Chapter

Please note that the chapters must start in an odd numbered page. Thus, the previous chapter must terminate with a *New Section, Odd page*. Just in this case the style for the Chapter Heading will work. If you start a new chapter after a simple *New Chapter* break, the chapter may start in an even numbered page and the title will be glued to the top of the page (and not a few centimeters down)!

To force a page change (or a blank page) in Windows you must do “CTRL + ENTER”, and in macOS you must do “CMD + ENTER”. To start a new section in an odd numbered page, select the tab *Layout*, then click the icon *Breaks* that will open a menu, where you must select *Odd page*. See Figure 1.2, which was created in macOS. Windows version of Word should be similar.

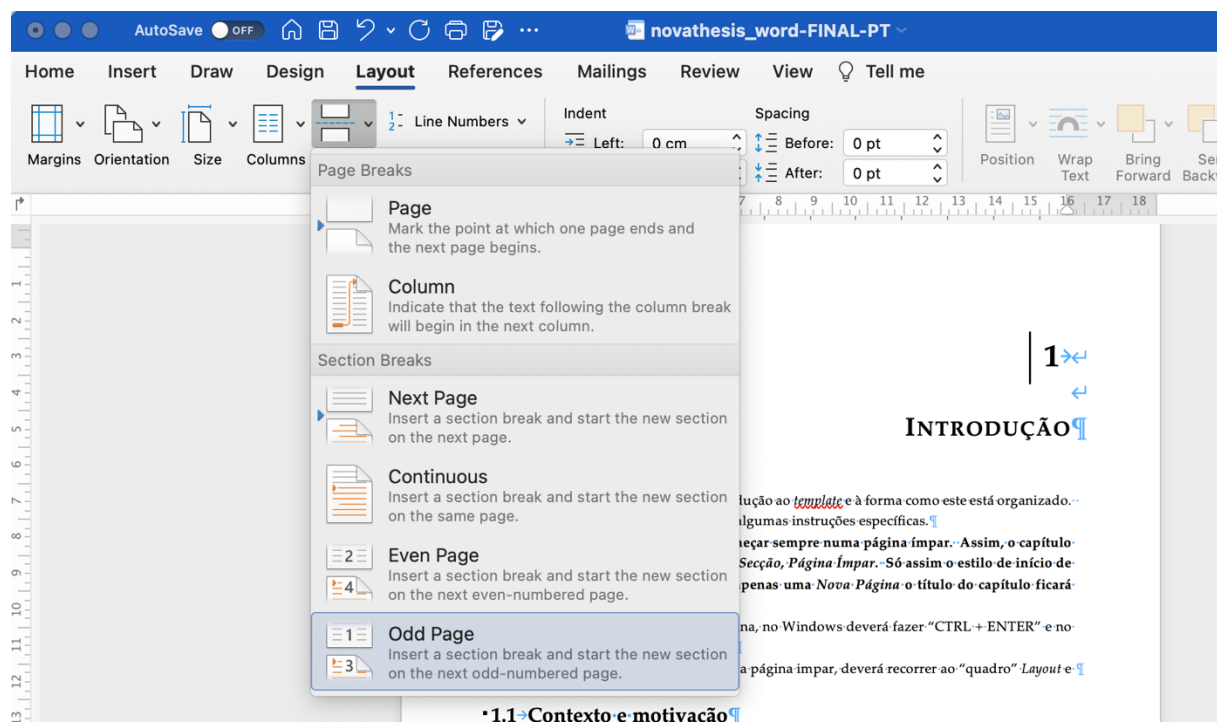


Figure 1.2 — How to start a new section in an odd numbered page.

1.3 Context and Motivation

Many higher education courses end with the writing of a monograph/dissertation/thesis. Monographs are considerably long and complex documents, with objects of diverse nature, some are floating (e.g., figures, tables, code listings) and some others are not (e.g., formulas,

equations, theorems). While writing a monograph it is also necessary to manage the organization of the document in chapters, sections, subsections, appendices, annexes. It is also necessary to manage the references in the text to capitulate them, sections, figures, tables, etc., as well as references to bibliographic entries (citations) according to the specific rules of the scientific area of the monograph.

Conventional word processors, such as Microsoft Word and Open Office Writer, conveniently handle small and medium-sized documents with low complexity, but they have several difficulties with managing large and complex documents, as is common with monographs. Thus, I strongly recommended using LaTeX and the NOVAtthesis template. LaTeX is a digital typography system that allows the end-user to produce professional-quality text, equivalent to what is obtained for documents edited and published by a specialized publishing company. The NOVAtthesis template is a template that aims to facilitate the writing of monographs using LaTeX, handling all aspects related to the management of the document and its final presentation of high quality. By using the LaTeX NOVAtthesis template, the author can concentrate solely and exclusively on the structure and scientific content of his document, leaving all the editing burden to LaTeX.

1.4 Problems and Objectives

The LaTeX system promotes the focus is on the structure of the content of the document (instead of on its aspect/visualization) and produces as output documents with very high typographic quality (in PDF format). Still, many authors choose to use word processors, such as Microsoft Word and Open Office Writer, for writing their monographs. And these authors also need a template that facilitates the process of editing and formatting the final document.

1.5 Approach and Contributions

This template is aimed at authors who plan to use a word processor for the editing and production of their monograph. The template presents a basis for the cover page (according to the type of document) and for the proposed structure for the first pages (frontmatter) that include a summary (s), indexes, glossaries, etc. The specific content of each monograph must be adapted to the specific context of each scientific area.

1.6 Document Organization

In Chapter 1 we introduced an introductory text to this template for word processors. In Chapter 2 we will present some important suggestions for structuring the document and editing it in Word.

HOW TO USE THIS WORD TEMPLATE

In this chapter you will find some simple instructions on how to use this template. However, consider using the NOVAtesis template in LaTeX ... in the end you will have a professional quality document, equivalent to what a book publisher would produce.

2.1 The Document Structure

A dissertation/ thesis, in its final version, should contain the following elements (the elements marked with [*] are optional):

1. Cover (simplified version)
2. Inner cover (naming the advisers and evaluation committee)
3. *Copyright* message from NOVA School of Science and Technology
4. [*] Dedicatory
5. [*] Acknowledgments
6. [*] Quote
7. Abstract in the same language as the main text (e.g., in English)
8. Abstract in an alternative language (e.g., in Portuguese)
9. Table of Contents
10. List of figures (only if you have more than three)
11. List of tables (only if you have more than three)
12. [*] Other lists (of code listings, equations, ...)
13. [*] Glossary
14. [*] Acronyms
15. [*] Symbols
16. The main text organized into chapters
17. Bibliography
18. [*] Appendices
19. [*] Annexes

2.2 The Chapters

Each chapter begins with a sequentially numbered title. How this effect was achieved in Word is one of the possible ways, there are others. If any Word expert can do it better (for example, with the bar on the right placed by Word itself and not a vertical line as it is now), please send it to me and I will incorporate it into this Word template.

To start a new chapter, the easiest approach is to duplicate the header of a previous chapter (by copying and then pasting elsewhere) and then replace the text.

2.3 The Types of Text

The template defines five text styles:

- **Normal** — for the main text, using the Palatino font, with paragraph indentation and line spacing of 1.2x.
- **Heading 1** — style for the chapter title.
- **Heading 2** — style for the sections.
- **Heading 3** — style for the subsections.
- **Heading 4** — style for the sub-subsections.

2.4 The Table of Contents and other Lists

The document will have several indexes, all of them starting on a unique page, namely:

1. **Table of contents** [required]
2. **List of Figures** [if you have more than three figures]
3. **List of Tables** [if you have more than three tables]
4. **List of Equations** [if you have more than three equations/formulas]
5. **List of Listings** (code/programs) [if you have more than three listings]
6. **Other lists** [glossary, acronyms, symbols, etc]

2.5 References to Chapters, Sections, Figures, Tables, etc.

Whenever you refer to a numbered object present in the text, you should not insert the number as text, but insert a cross-reference using the appropriate menu. In this way, if the objects are renumbered (for example, because inserting a new figure in the middle of two existing figures), the curated references will also be updated automatically.

2.6 The Bibliography

The bibliography appears after the main body of the text and before the Appendices and Annexes.

There are many bibliographic standards and styles. Each scientific area has its own way of presenting both citations and bibliographic references. The most common styles are the APA (American Psychological Association - author/date), now in its 7th edition, and the IEEE (Institute of Electrical and Electronics Engineers - numerical).

There is more than one way to cite/quote other authors in a text, however these can be divided in 2 big classes:

- **Indirect or conceptual citations**, in which we reproduce someone else's ideas in our own words through paraphrases;
- **Direct or formal quotations**, in which we transcribe exactly the words of an author using quotation marks.

The citation models follow 3 systems:

- **Author-date system**, in which the citation appears like this: (Santos, 2003), if there are two authors (Santos and Correia, 2003) and if there are more than 5 authors (Santos, et al., 2003), of which the best known and most used is the [APA style](#);
- **Numerical system**, in which each citation is identified with a number [1] and the list of bibliographic references is compiled at the end of the work (bibliography), of which the best known and used style is the [IEEE](#).

There are also **mixed systems**, in which the citation/quotation in the text is numeric, but the bibliography is sorted alphabetically by the author's surname. Examples of mixed styles are: Springer Lecture notes in Computer Science (alphabetically sorted) and the Council of Science Editors, Citation-Name (numeric alphabetically sorted), amongst others.

The most used styles, in general, are APA and IEEE, FCT is no exception, however you should always define with your advisor the standard or style to use.

The Library of FCT-NOVA provides training on these subjects, as well as support in the use of bibliographic management tools such as Mendeley and Zotero.

LET'S CREATE ANOTHER CHAPTER

3.1 And Now some Text to Fill in the Document

Integer sapien est, lobortis ac iaculis et, blandit a quam. Nulla efficitur mauris quis ultricies scelerisque. Morbi nunc massa, tempor sit amet lacus a, dignissim ullamcorper velit. Pellentesque dictum dignissim massa, ac lacinia tortor ornare eget. Proin tincidunt tristique nunc non pharetra. Morbi imperdiet, enim in consectetur euismod, nisl nulla volutpat tellus, in faucibus dolor erat a sem. Quisque sit amet arcu nunc. Nam lacinia magna nec lorem rutrum fermentum. Quisque ante xenim, elementum ac lorem sit amet, dapibus egestas urna. Proin in dolor quis nisl pulvinar sodales sit amet eget justo. Vestibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia curae; Sed venenatis dapibus mauris, quis hendrerit tortor ultricies eu. Cras felis mauris, ultricies et vestibulum in, ultricies sit amet arcu. Donec quis ex mauris.

3.1.1 Some more text in a subsection

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Figure 3.1 — Looks list the April's 25 bridge in Lisbon but it is not. It is the Golden Gate, in S. Francisco in California, USA.

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3.1.2.2 Yet another sob-subsection

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Table 3.1 — Portuguese population by age range.

	1971	1980	1990	2000
0–24	3 861 916	4 131 825	3 660 978	3 176 450
25–49	2 658 361	3 015 450	3 312 011	3 705 865
50–74	1 851 909	2 245 875	2 482 266	2 718 007
+75	271 575	373 125	527 967	689 581
Total	8 643 756	9 766 275	9 983 218	10 289 898

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Figure 3.2 — And another figure with a caption.

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Table 3.2 — This table is identical to the previous one, but it is here so that we have not only one but rather two tables in our docuemnt. And as this caption is very long, it should be justified and not centered.

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+75	271 575	373 125	527 967	689 581
Total	8 643 756	9 766 275	9 983 218	10 289 898

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4.1.1 This is a Subsection

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4.1.1.1 This is a sub-subsection

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AN APPENDIX

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ANOTHER APPENDIX

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