

BRNO UNIVERSITY OF TECHNOLOGY

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FACULTY OF INFORMATION TECHNOLOGY
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DEPARTMENT OF INFORMATION SYSTEMS ÚSTAV INFORMAČNÍCH SYSTÉMŮ

MODULAR STUDENT CLUB MANAGEMENT SYSTEM WITH INTEGRATION INTO EXISTING INFRASTRUCTURE

MODULÁRNÍ SYSTÉM PRO SPRÁVU STUDENTSKÉHO KLUBU S INTEGRACÍ DO STÁ-VAJÍCÍ INFRASTRUKTURY

DIPLOMOVÁ PRÁCE MASTER'S THESIS

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Modulární systém pro správu studentského klubu s integrací do stávající infrastruktury

Declaration

Prohlašuji že jsem tuto bakalářskou práci vypracoval samostatně pod vedením pana X... Další informace mi poskytli... Uvedl jsem všechny literární prameny publikace a další zdroje, ze kterých jsem čerpal.

Marek Dančo October 19, 2025

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Introduction

This text serves as an example content of this template and as a recap of the most important information from regulations, it also provides additional useful information, that you will need when you write a technical report for your academic work. Check out appendix A before you use this template as it contains vital information on how to use it.

Even though some students only need to know and comply with the official formal requirements stated in regulations as well as typographical principles to write a good diploma thesis (a bachelor's thesis is a diploma thesis too – you get a diploma for it), it is never a bad idea to familiarize yourself with some of the well-established procedures for writing a technical text and make things easier for yourself. Some supervisors had prepared breakdowns of proven procedures that have led to tens of successfully presented academic works. A selection of the most interesting procedures available to the authors of this work at the time of writing can be found in the chapters below. If your supervisor has their own web page with recommended procedures, you can skip these chapters and follow their instructions instead. If that is not the case, you should read the respective chapters prior to consulting your supervisor about the structure and contents of your academic work.

Diploma thesis is an extensive work and the technical report should reflect it. It is not easy for everyone to sit down and simply write it. You need to know where to begin and how to progress. One of many viable approaches is to start with keywords and abstract, this helps you establish what the most important part of your work is. More on that in chapter 2.

Once the abstract is finished, you can start with the text of the technical report. The first thing you should do is create a structure for your work, that you'll later fill with text. Chapter 3 provides basic information and hints on writing a technical text, that can help you avoid mistakes beginners make, create chapter titles, and figure out what the approximate length of individual chapters should be. The chapter concludes with an approach that should make writing a thesis much easier.

Diploma theses in the field of information technology have a specific structure. The introduction is followed by a chapter or chapters dealing with the summary of the current state. The next chapter should evaluate the current state and provide a solution, that will be implemented and tested. The conclusion should contain evaluated results and ideas for future development. Even though the chapter titles and their length may differ from other theses, you can always find chapters that correspond with this structure. Chapter 4

deals with the contents of chapters that commonly occur in diploma theses in the field of information technology. Most students will only use a subset of all the described chapters as not everything will be relevant to their thesis. The descriptions and hints provided help students with the inner structure and the contents of chapters as well as decide whether or not they should even include a given chapter.

The final chapter of a thesis is always followed by a list of references. Citations that this list is comprised of and their respective links are the subject of chapter 5. An inexperienced student may not perceive it that way, but the list of references is a vital part of a thesis. One of the important aspects of your reviewer's evaluation is how you work with literature. A single missing entry can lead to an F for your grade, disciplinary proceedings for plagiarism, and ultimately to being expelled. There are other consequences to this as two Czech ministers resigned over allegations of plagiarism in 2018. Be as thorough as possible in creating your list of references.



Figure 1.1: Testing how this works

When you're done with the text, it is necessary to figure out what the requirements for a thesis at BUT FIT are and work the kinks out. Formal requirements that are stated in regulations and on faculty web pages can be found in chapter 6. This chapter also contains information about the required length of different types of academic works and other helpful information. The chapter concludes with an overview of the most common mistakes that the reviewers have to deal with and that you should avoid. The review of the formal aspect of the thesis is just another important part of the reviewer's assessment.

Once you deal with the formal deficiencies, you can submit your thesis. Before you do so, go through the checklist in appendix C. The submission of paper and electronic versions of a thesis is described in chapter 7.

Chapter 8 contains a summary of what you can learn by reading this text, and most importantly things to keep in mind before you submit your thesis.

Abstract

There should be a summary of work at most 10 lines long under the Abstract heading. Despite how short it is, a good abstract provides enough information to know what the problem is, what was the chosen solution as well as the results achieved. The purpose of an abstract is to let the reader know whether or not they can find the answer to their question here. The rest of this chapter was taken from professor Herout's blog [7].

First and foremost - abstract matters. Second - It's not that hard to write one. Without further ado, let's dive into it.

What is the purpose of an abstract

An abstract is used for **searching** purposes, together with the title of the thesis and a list of keywords. These parts (perhaps except for the title) are not directly part of the text and it's not expected that anyone who will read your thesis actually reads them. The fact that they're reading your thesis means they're past the abstract stage. Abstract serves them well to decide **whether or not** they want to read your thesis.

Part one – What is the problem? What is the topic? What's the goal of the text?

- This thesis deals with.
- The goal of this thesis is.
- My aim was

There is no place for fairy tales specific to wrong scientific literature: "Our five-year-plan of work open new and bold goals for us", "With the evolution of computing technology and especially the display devices, it is more important than ever . . . " do not belong anywhere near a good text, especially an abstract. If you can express the purpose of your text in one sentence, do it and forget about everything else. Less is always more when it comes to the abstract.

2.1 Thesis structure – Five chapters

This subsection was taken from the blog of professor Herout[7] (partially inspired by a book from Jean-Luc Lebrun [9]) and from a document on professor Zemčík's web page [19].

Thesis is something that students work on for 2 semesters of their studies and then write a small book about it. The misconception is that this little book is the master's thesis. The book is in fact a technical report about the year long work and master's thesis represents the result of student's work.

The year long work includes studies first and foremost: "What already exists in the area of my thesis? How did the others do it?" It is implied that a student tries to innovate and design some things: "The problem has several solutions, I chose this approach, because it is the most efficient option for the given platform." The researcher should implement and evaluate their designs to validate them: "I used these tools for implementation, the entire system is split into these modules. The result is this fast, it is this effective and user reviews are such and such."

The basic structure of master's thesis according to professor Herout is as follows:

- 1. Introduction (1 page)
- 2. What had to be studied (including assessment of the current state; 40%)
- 3. New ideas that this thesis explores (30%)
- 4. Implementation and evaluation (30%)
- 5. Conclusion (1 page)

Drafting the basic thesis structure

1. Read a handful of good theses and try to understand what makes a good thesis. Your supervisor will gladly give you some examples.

2. Czech/Slovak or English?

- If your english level is decent and there's a chance that someone else outside of BUT FIT will read your thesis (part of international project, work for an international company, SW description that you want to submit to GooglePlay etc.), I highly recommend you write everything in english. You can tell yourself that you'll translate it later, but there isn't really time for that. On the bright side, you don't have to worry about diacritics.
- If you work on a thesis of a local significance and know, that your english isn't that great, I suggest you save yourself, your supervisor and the reviewer the trouble and write in czech or slovak. More information as well as common mistakes students make can be found in appendix B
- 3.1 Useful hints for writing a technical text
- 3.2 Who is the target audience for a thesis
- 3.3 Thesis structure five chapters
- 3.4 Thesis comics edition
- 3.5 Chapter titles

Individual thesis chapters

Bibliography

Appendix A

How to use this template

Hello There

Table A.1: Some other table, idk

Appendix B

Writing english texts

Appendix C

Checklist

Appendix D

LaTeX for beginners



Figure D.1: **Wide image.** Image can be comprised of multiple smaller images. If you want to address the partial images from text, use packagae subcaption.



Figure D.2: Good text is bad text, that has been changed countless times. You have to start somewhere.