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# **jIdeaGenerator**

**A Novel Approach to Idea Generation in  
Statically-Typed Languages**

## **Bachelor Thesis**

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# Abstract

In less than one page, [you](#) have to briefly provide the following information:

- What is the **PROBLEM** you are trying to solve? Or what is the research **QUESTION** you are trying to answer?
- Why is this problem/question worth solving/asking? Who would care?
- How have other people in the past tried to solve/answer it?
- What is your **NEW** approach to solving/answering this problem? Or what improvement are you making on an existing solution?
- How do you prove that the solution you came up with is a **GOOD** solution?
- How do you demonstrate that your solution works?

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# 1

## Introduction

Start a summary of the problem you are trying to solve and your approach.

**Advice: Use Macros** Probably in the introduction, you will introduce the name of your solution, and maybe other concepts that you will reuse during the thesis. Remember that LaTeX is a programming language, and you can define macros for the concepts that are frequently referred in the thesis.

For sure the name of your tool needs to be should be defined in a macro, and then always used as such. E.g. The Cool Tool.

**Structure of this Thesis** The structure of this document is the following:

- In Chapter 2 (Related Work), the general research field is described together with descriptions of how others tried to solve the problem...
- In Chapter 3 (...) ...
- ...

# 2

## Related Work

Describe the field in general and how others have tried to solve this problem. ML ▶ *//*  
*leave comments in the text when needed.* ◀

Your goals are to:

- show you are aware of current state of knowledge (theoretical, methodological, applied) that relates to your research topic
- To indicate a gap/question worthy of investigation

# 3

## The Problem Statement

describe in detail the problem you are trying to solve.

# 4

## The Approach

describe your approach to solving the problem. Describe any potential weaknesses of your approach.

# 5

## The Implementation

describe how you implemented your approach. If it is a software system give diagrams, relevant algorithms etc.

packages that you can look at for code formatting:

- <http://mirror.unl.edu/ctan/macros/latex/contrib/minted/minted.pdf> - <https://en.wikibooks.org/wiki/LaTeX>



# 6

## The Evaluation

describe how you evaluated to show that your approach was successful. You may need a methods section, a results section and a conclusion section.

# 7

## Conclusion and Future Work

Summarize your thesis again as in the introduction. Then you can list at a high-level the contributions of this thesis:

**Contributions of this thesis** Early on in the conclusions, it is a good place to list the contributions of the thesis in an explicit way, so the reader is reminded of the important parts that he read. For example:

- An implementation of an automatic system that ... can teach one how to program Java in 21 days
- A study which evaluates the usability of the
- ...
- ...

### 7.1 Future Work

A good thesis opens more questions than it answers. You now, hopefully, have a much better understanding of the problem and of your solution than anybody else, and can think of the most important directions in which the work can be continued. Think of what are the most important things that need to be done to improve the existing solution.