TITLE

SUBTITLE

A THESIS SUBMITTED FOR THE DEGREE OF DEGREE AIMED AT

FULL NAME

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Mat-Nr.: xxxx

current degree

Supervisors:

Prof. Dr. One

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FILMUNIVERSITÄT
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01. November 2018

Acknowledgments

Thanks everyone

Thank you.

Sincerely yours,

Full Name

What you can not find in the world, shall be your contribution.

- Inspired by Herrmann Hesse

Abstract

This example thesis is meant to introduce you to a few basic commands that you will need to work with latex. Always look at the source code whenever there is some example, because the interesting stuff happens underneath the surface :)

I want to give you a head-start into writing your thesis with latex, because after some initial hurdles you need to take, it can make the formal stuff so much easier, scientifically more sophisticated an your document will be better readable and even smaller in size.

You find examples of pretty much all functionality that I needed when writing my masters thesis. This template is not written by me, but I added some modifications. Make sure to have a look at the .cls file, because this one is well commented and shows you how to quickly manipulate the look of your whole document with just a few arguments and commands.

Enjoy writing!

Contents

List of Abbreviations

HCI Human Computer Interface, page 3

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Chapter 1

chapter 1

I used the commercial Latex editor Texpad (1.8.9), because I needed to speed up the initial setup time. To focus on the content and structure I first wrote a short draft with Markup. I was quite in a hurry when I found out, that Markup to Latex conversion is not that gapless as I hoped.

When everything went well you should see the following content:

- Title page
- *Blank Page*
- Acknowledgements
- *Blank Page*
- Abstract
- *Blank Page*
- Table of contents
- *Blank Page*
- List of Abbreviations (nomenclature)
- *Blank Page*
- List of Figures
- *Blank Page*
- List of Tables
- *Blank Page*
- List of source codes (listings)

- *Blank Page*
- Chapter1
- Chapter2
- *Blank Page*
- Chapter3
- References (Bibliography)
- Declaration

Internal links to other pages of the document should be green, external links (URLs) should appear blue. If you set the option media=print, these colors will be changed to black. You find this line in *thesis.tex*.

To have source code linted (colored depending on input e.g. variables other than functions), have a look at the "minted" package on CTAN here.

```
\documentclass[media=screen]{SPhdThesis}
```

You can speed up rendering by using only placeholders instead of images by adding the "draft" option:

```
\documentclass[media=screen, draft]{SPhdThesis}
```

If you decide to get rid of an unnecessary part of the frontmatter, just comment it out in the main tex file: *thesis.tex*.

1.1 citation examples

The exact styling used by the citation commands derives from the chosen .bst (bibtex style document).

Always think of proper citation - this is Author year style as defined in the .bst

```
\cite{cooper_about_2014}
```

Example: Cooper et al. (2014)

```
\begin{frontmatter}
\input{acknowledgments} %
\SgIntClearDoublePage
\input{quotation} %
\input{abstract} %
\SgAddToc %  Table of contents.
\SgAddAbbrv % List of abbreviations
\SgAddLof %  List of figures.
\SgAddLot %  List of tables.
\SgAddLos %  List of source codes
\SgAddLoa %  List of algorithms.
\end{frontmatter}
```

Listing 1: Latex code in the main document *thesis.tex*

But you can also only cite the year of a publication

```
\citeyear{cooper_about_2014}
```

Example: 2014

There is even a command to put the year in parenthesis

```
\citeyearpar{cooper_about_2014}.
```

Example: (2014)

To include a reference in the bibliography without having to cite it in the text, use:

```
\nocite{cooper_about_2014}
```

or to include all entries inside the .bib file, even the not cited ones:

```
\nocite*
```

Don't forget to feed your nomenclature: Communication is the key to superior results, think of computer interface (HCI) aspects.

1.2 Motivation

Always think of people you enjoy.

1.3 Structure

In chapter 2 you find a link back to this chapter.

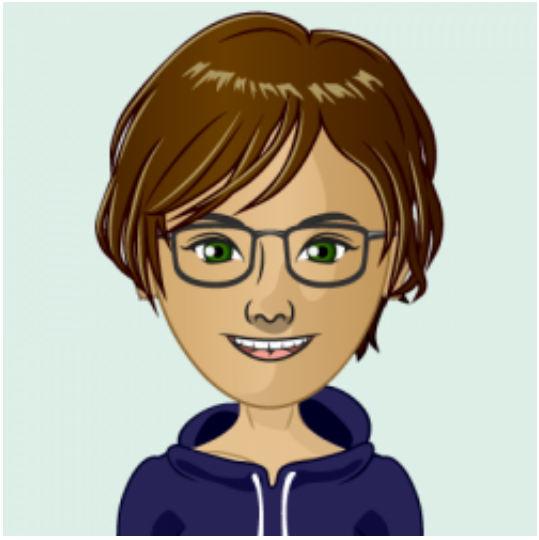

Figure 1.1: Barbara:
Sound Desiger, Composer, Musician

CHAPTER 2

Chapter 2

Here ist the link back to chapter 1.3.

2.1 Section 1

Special Effects as a layer contains again multiple layers of audio clips for each sound effect. A short car crash will be a composition of screeching wheels, a sharp metal hit sound, a hit on a resonant large wood box or steel barrel for increasing the physicality and impact and some shattered glass across the street. Each of these can again be a mixture of several sounds to create a feeling of the intended sonic expression to the accompanying picture. This is the most demanding layer in terms of using pre-recorded sound material. *Sound Effects* are a vertisile category ranging from purely atmospheric and subconsciously effective undefined sound objects like drones to very present and narrative key sounds.

- Dialog
  - Production-Sound
  - Add. Dialog Recordings
  - Production Effects
- Foley
  - Movement
  - Steps
  - Props
  - Foley Effects
- Hard Effects
- Special Effects
- Ambience
  - Background
  - Foreground
  - Ambience Effects
- Music
  - Source Music
  - Score Music
  - Music Effects

Figure 2.1: Complex film-soundtracks usually apply variations of this layer structure

Ambience or *Atmo* is usually a mixture of longer noisy field-recordings for building an appropriate background for the action on screen. Also many single cues ("sweeteners") with more distinguishable sounds are added to enhance the immersion of the film for example bird calls, wood creaking, distant dog barking, traffic and so on. This is the second layer where a large collection of sound effect recordings are necessary to build a good soundtrack.

Foley can be enhanced or complemented as well by pre-recorded material, perhaps of elements that were difficult to produce in a studio (for example *Hard Effects* like door sounds). Or maybe the low budget does not allow a human foley artist to be payed for his or her performance, so the editor is in charge of delivering movement and prop sounds for the scene.

Dialog needs from time to time a very specific background noise to stitch gaps between the edges of the edited audio regions that could be found in a library.

Music composers frequently use sound effects as well, since the boundary between sound design and music is fluid, but we will not concentrate on this exiting topic here. We assume here that composers and sound designers have the same way of accessing sound effects collections.

Games and Animations also have a high demand for sound effects, maybe even higher, as there is no production sound at all - everything is silent at the beginning and has to be generated and assigned. In game audio the mentioned layers are also used, but as the mix is dynamically generated depending on in-game parameters, this separation often becomes less obvious in editing projects.

Barbara could certainly write a book of her own. So we will concentrate on the relevant aspects of searching for sounds in her storage devices.

2.1.1 Subsection 1.1

	Spreadsheet view	Grid view	Color mapping	Scatter-plot	Glyphs	Inline Preview
Metadata Management Software	8	1	1	0	0	2
Interactive Visualization Software	3	5	6	6	3	5

Table 2.1: Metadata application feature frequency[1]

[1] you can even have footnotes in captions! See: 1.1 and 3.1 on page 11

Chapter 3

Applied Methods in Sound Search Interfaces

Use the optional positional agrument to place the figure on top [t], bottom [b] or just somewhere here [h] or exactly here [H] or [h!].

The

```
$$
```

$$T1 = \frac{a_1}{\sum_h a_h} = Red$$

$$T2 = \frac{a_2 + a_3 + a_4}{\sum_h a_h} = Green$$

$$T3 = \frac{\sum_{h=5}^{H} a_h}{\sum_h a_h} = Blue$$

a_h = harmonic with index h
H = highest harmonic of the spectrum

Figure 3.1: Tristiumulus equations

```
// comments are colored differently than the actual code

import Sun from 'galaxy';
const speedOfLight = 9999999999999
Sun.shine(speedOfLight)

export Sun
```

Listing 2: Javascript example

References

[Bates 1979] Bates, Marcia J.: Information Search Tactics. In: *Journal of the American Society for Information Science* 30 (1979), No. 4, S. 205 – 214. – URL http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=17236092&site=ehost-live. – ISSN 00028231

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[Cooper et al. 2014] Cooper, Alan ; Reimann, Robert ; Cronin, David ; Noessel, Christopher: *About face: the essentials of interaction design.* John Wiley & Sons, 2014 2, 3

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[Heise et al. 2009] Heise, Sebastian ; Hlatky, Michael ; Loviscach, Jörn: Aurally and visually enhanced audio search with soundtorch. In: *CHI'09 Extended Abstracts on Human Factors in Computing Systems*, ACM, 2009, S. 3241–3246

[Kim et al. 2006] Kim, Hyoung-Gook ; Moreau, Nicolas ; Sikora, Thomas: *MPEG-7 audio and beyond: Audio content indexing and retrieval.* John Wiley & Sons, 2006

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Declaration

I hereby declare that this thesis is my original work and it has been written by me in its entirety. I have duly acknowledged all the sources of information which have been used in the thesis.

This thesis has also not been submitted for any other degree in any other university previously.

Full Name
01. November 2018