The gsemthesis class*

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January 16, 2015

Abstract

This article introduces the <code>gsemthesis</code> class for LaTeX. The <code>gsemthesis</code> class is a PhD thesis template for the Geneva School of Economics and Management (GSEM), University of Geneva, Switzerland. The class provides utilities to easily set up the cover page, the front matter pages, the pages headers, etc. with respect to the official guidelines of the GSEM Faculty for writing PhD dissertations. This class is released under the LaTeX Project Public License version 1.3c.

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^{*}This document corresponds to gsemthesis v0.9.2, dated 2015/01/09.

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1 Introduction

PhD thesis published within the Geneva School of Economics and Management have to follows some guidelines, especially for the cover page. The gsemthesis class is a IATEX template providing utilities to easily set up these guidelines in your thesis. In addition the class loads several usefull packages generally used when writing a thesis. We recommend the user to have a look to the class definition in Section 3.1 to be aware of the list of packages that the class already includes. The Section 2 details how to start with the gsemthesis class and how to configure your thesis. The user interested in customizing the class can read the Section 3 which details the full implementation of the class with usefull comments.

This class was successfully tested with pdfTeX 3.1415926-2.5-1.40.14 (TeX Live 2013/Debian) and with pdfTeX Version 3.14159265-2.6-1.40.15 (TeX Live 2014/Windows).

This class has been written by Emmanuel ROUSSEAUX with contributions from William AEBERHARD and Tuan NGUYEN.

2 Usage

This Section introduces the use of the gsemthesis class. All macros and environments the class provides are described. We assume the user is already familiar with LATEX.

2.1 Installation

2.1.1 Requirements

2.2 Getting started

To use the class start your document with the command \documentclass{gsemthesis}. A minimal file is:

\documentclass{gsemthesis}
\begin{document}
Here is it, I started my PhD!
\end{document}

2.3 Writing the dissertation in French

The GSEM accepts English and French for PhD thesis dissertations. Default language is English. If you write your dissertation in French, you have to you the fr class option as follows:

\documentclass[fr]{gsemthesis}

2.4 Configuring and printing the cover page

\printcoverpage

The class provides the GSEM PhD thesis cover page ready to be printed. You can ask to print it by calling \printcoverpage just after the \begin{document}. Before printing the cover page you first need to configure it with your thesis details: title, author, supervisors, committee, etc. The minimal example becomes:

\documentclass{gsemthesis}
\title{My PhD thesis}
\date{\today}
\thesisNumber{480}
... (others configuration commands)
\begin{document}
\printcoverpage
Here is it, I started my PhD!
\end{document}

\title
\date
\authorFirstname
\authorLastname
\thesisField

\thesisCommitteeA-F

\thesisNumber

The class uses the classical \title{text} and \date{text} commands of the book class to set the title and the date. Instead of using the \author{text} command we provide the two commands \authorFirstname{text} and \authorLastname{text} to separately handle the firstname and the lastname. You specify the PhD you are enrolled in with the \thesisField{text}, among others: Economics, Management, Statistics, Information Systems. Please contact the scientific committee of your PhD to obtain the applicable title. You can specify information about members of your thesis committee with the six \thesisCommitteeA-F{title}{firstname}{lastname}{role} commands. With the role field you specify the role played by this member in the committee and his/her affiliation. Generally you specify the role "Chair" in \thesisCommitteeA, the role "adviser" for your adviser/co-advisers, and leave the field empty for the other members. When your manuscript has been accepted by your jury, the Faculty attributes a unique thesis number which has to be printed on the cover page. The \thesisNumber{text} allows to supply it.

2.5 Configuring and printing the front matter pages

After the cover page the thesis has to provide in a the following order (1) the acknowledgements, (2,3) an abstract in both English and French (the order depending on the main language of your dissertation: if your dissertation is written in English you will start with the English abstract; if your dissertation is written in Frenchyou will start with the French abstract), (4) the table of contents, and (5) an optional dedication. These elements are usually called the front matter. These pages will be printed by calling the $\operatorname{printfrontmatter}$ command. The best place for this command is just after the $\operatorname{printcoverpage}$ command. To fill these pages use the commands $\operatorname{acknowledgements}\{text\}$, $\operatorname{abstractEN}\{text\}$, $\operatorname{adstractEN}\{text\}$, and $\operatorname{dedication}\{text\}$. We suggest you use these commands in the preambule of the document, just after the commands used to set the cover page.

\printfrontmatter

\acknowledgements
\abstractEN
\abstractFR
\dedication

2.6 Introduction and conclusion

\startintroduction \startconclusion

Generally we don't want to number the introduction and the conclusion, but we want they appear in the table of contents. This leads to a specific handling of the creation of these chapter, especially to have correct page headers. Therefore, instead of using \chapter{introduction} (respectively \chapter{conclusion}) to start a such chapter we provide the function \startintroduction (respectively \startconclusion) to easily start the chapter with a correct handling of the table of contents and page headers.

2.7 Bibliography

To produce the bibliography, the gsemthesis class uses the package biblatex with biber in backend instead of the package bibtex. The package biblatex is installed by default with any recent version of TeX Live¹ (full installation) and MiKTeX, but you must first configure your TeX Editor to use it.

2.7.1 Configure TeXstudio to run biber

In the TeXstudio preferences (click on Options \rightarrow Configure TeXstudio), choose the 'Build' tab and modify the 'Default Bibliography' to 'Biber'.

Run 'Build & View' from the 'Tools' menu (or press the two green arrows icon), which will create a PDF but with the bibliography not completed.

Run 'Bibliography' from the 'Tools' menu.

Run 'Build & View' again to create a PDF with the bibliography.

2.7.2 Configure Texmaker to run biber

In the Texmaker preferences (click on Options \rightarrow Configure Texmaker), choose the 'Commands' tab and replace bibtex % by biber % in the field Bib(la)tex. On Windows, you may also browse to the biber.exe using the folder icon on the side.

Choose the 'Quick Build' tab and select the second option PdfLaTeX + Bib(la)tex + PdfLaTex (x2) + View Pdf

Now your 'Quick Build' button will create a PDF with the bibliography.

2.7.3 Configure Rstudio/knitr to run biber

In Rstudio/knitr you have to include the following chunk in your .Rnw document.

```
<<tex-setup, include=FALSE, cache=FALSE, echo=FALSE>>=
Sys.setenv(
   TEXINPUTS=getwd(),
   BIBINPUTS=getwd(),
   BSTINPUTS=getwd()
)
@
```

2.7.4 Basic commands

To add a bibliography into your document, you have to define your bib file in the preamble of your tex file: \addbibresource{literature-review-topic1.bib} Then, at the end of your document, the command \printbibliography will create the bibliography.

2.8 Draft mode

When sharing draft versions of your dissertation you may prefer to hide some items of the cover page (thesis committee, thesis number, etc.) and some Sections (acknowledgments, the dedications. etc.) that probably have not been defined yet. For this purpose you can use the draft option:

\documentclass[draft]{gsemthesis}

 $^{^1}$ On Ubuntu/Debian, you may have to install it manually: sudo apt-get install texlive-bibtex-extra biber

2.9 Miscellaneous

itemize*

The class also provides some optional functions that can turn out to be usefull when writing your thesis. The default itemize environment set important spaces between each items, the previous paragraph and the next paragraph. The itemize* environment reduces these spaces to allow a more compact (and nicer) presentation of a list item. Forthcoming. To add: section in reduction, todonotes

3 Implementation

In this Section the full code of the gsemthesis is discussed. The reader interested in customizing the class will find useful comments to understand the design of the class.

3.1 Document properties

The class is derived from the standard book class as follows:

1 \LoadClass[a4paper,12pt,twoside]{book}

We set the document encoding to UTF-8

2 \usepackage[utf8]{inputenc}

We use the lmodern vectorial fonts to render the document.

3 \usepackage{lmodern}

We use the etoolbox package for defining class options (fr, draft)

4 \usepackage{etoolbox}

We add the option fr

- 5 \newtoggle{fr}
- 6 \DeclareOption{fr}{\toggletrue{fr}}

We add the option draft

- 7 \newtoggle{draft}
- 8 \DeclareOption{draft}{\toggletrue{draft}}

We process options we just defined

9 \ProcessOptions

We use the geometry package to set margin properties

10 \RequirePackage[top=2.5cm, bottom=2.5cm, left=2.5cm, right=2.5cm]{geometry}

We use the package to handle some specific text spacing (title)

11 \usepackage{setspace}

3.2 Colors

We define some nice colors that will be later used for links (url, email, citations, etc.). The gsemblue color is the official color (to date 2014.02.20) of the GSEM Faculty.

- 12 \usepackage{xcolor}
- 13 \definecolor{erblue}{HTML}{126199}
- 14 \definecolor{erorange}{HTML}{FF7F00}
- $15 \label{lem:lemblue} \label{lemblue} \label{lemblue} \label{lemblue} \label{lemblue} I5 \label{lemblue} $$15 \$

3.3 Graphics

We add some practical packages to handle several image files (.png, .pdf), handle placement of graphics, and handle subfigures

- 16 \usepackage{graphicx}
- 17 \usepackage{float}
- 18 \usepackage{subfigure}

3.4 Link management

We use the hyperref package to manage internal links and set colors for each link type.

```
19 \RequirePackage{hyperref}
20 % \hypersetup{%
21 % colorlinks=true,%
22 % linkcolor=black,%
23 % filecolor=gsemblue,%
24 % citecolor=gsemblue,%
25 % urlcolor=gsemblue%
26 % }%
27 \hypersetup{%
28 colorlinks=true,%
29 linkcolor=black,%
30 filecolor=erblue,%
31 citecolor=erblue,%
32 urlcolor=erblue,%
33 }%
```

We use the url package for a complete support of external links and define a nice font style.

```
34 \RequirePackage{url}
35 \urlstyle{sf}
```

3.5 Maths

We add standard packages from the American Mathematical Society to handle mathematical symbols, environment (equations, etc.) and the Computer Modern font use by default to render math.

36 \usepackage{amssymb,amsmath,amsfonts}

3.6 Page headers management

We use the fancyhdr package for a fine tuning of headers and footers of the different page type (cover page, chapters, unumbered chapters, etc.)

```
37 \usepackage{fancyhdr}
```

```
We set the fancy page style (default page style) as follows:
```

```
38 \pagestyle{fancy}
39 \fancyhf{}
40 \fancyhead[LO]{\thepage\hfill\nouppercase{\leftmark}}
41 \fancyhead[RE]{\nouppercase{\rightmark}\hfill\thepage}
42 \fancyfoot[LE,RO]{}
We reset the plain style
43 \fancypagestyle{plain}{
    \fancyhf{}
    \renewcommand{\headrulewidth}{Opt}
46
    \fancyfoot[LE,RO]{}
47 }
We define a style for the cover page (actually not used)
48 \fancypagestyle{cover}{
    \fancyhf{}
    \renewcommand{\headrulewidth}{0.5pt}
    \renewcommand{\footrulewidth}{0.5pt}
52 }
```

```
We define a style for unumbered chapters (starred chapters)
53 \fancypagestyle{unnumberedchapter}{
    \fancyhf{}
55
    \renewcommand{\headrulewidth}{Opt}
56
    \renewcommand{\footrulewidth}{Opt}
    \fancyhead[LO]{\nouppercase{\leftmark}}
57
    \fancyhead[RE]{\nouppercase{\rightmark}}
    \fancyfoot[LE,RO]{}
60 }
When a new chapter starts on a odd number, we add a blank page to force it to start to
a even number. We define an empty style for this blank page
61 \fancypagestyle{empty}{
    \fancyhf{}
    \renewcommand{\headrulewidth}{Opt}
    \fancyfoot[LE,RO]{}
65 }
Then we apply the empty style to odd page before a new chapter
66 \def\cleardoublepage{\clearpage\if@twoside \ifodd\c@page\else
      \hbox{}
      \thispagestyle{empty}
68
      \newpage
69
      \if@twocolumn\hbox{}\newpage\fi\fi\fi}
70
71 \clearpage{\pagestyle{empty}\cleardoublepage}
We define the default language of the document.
72 \iftoggle{fr}{
    \usepackage[francais]{babel}
74 }{
    \usepackage[english]{babel}
75
76 }
This package provides the commands \og and \fg for correctly handling French quotes.
77 \usepackage{csquotes}
We define the date format for the cover page (non-draft mode).
78 \usepackage{datetime}
79 \newdateformat{monthyeardate}{\monthname[\THEMONTH] \THEYEAR}
```

3.7 Bibliography management

We use biblatex/biber to process the bibliography with the following settings: (1) citations with more than two authors will always be writen as "First author et al.", (2) this "et al." rule is applied even if it leads to ambiguities between long list of authors with the same first author.

```
80 \ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensuremath{\,^{80}}\ensurem
```

We use the style authoryear to print authors and the year when citing a document in the text. We define a customized sorting style to sort the list of references (printed at the end of the document) according to this (ordered) attributes: name, year, month, day, and title. We define the following sorting scheme:

```
82 \DeclareSortingScheme{nymdt}{
83   \sort{
84   \field{presort}
85   }
86   \sort[final]{
87   \field{sortkey}
88  }
```

```
\sort{
89
90
       \name{sortname}
       \name{author}
       \name{editor}
92
       \name{translator}
93
       \field{sorttitle}
94
       \field{title}
95
     }
96
97
     \sort{
       \field{sortyear}
98
       \field{year}
99
100
     \sort{
101
       \field[padside=left,padwidth=2,padchar=0]{month}
102
103
       \literal{00}
104
105
       \field[padside=left,padwidth=2,padchar=0]{day}
106
       \literal{00}
107
108
     \sort{
109
       \field{sorttitle}
110
111
112
       \field[padside=left,padwidth=4,padchar=0]{volume}
113
       \literal{0000}
114
     }
115
116 }
```

3.8 Cover page

3.8.1 System-level functions

The following commands define labels for the different parts of the cover page

```
117 \def\theFaculty{Geneva School of Economics and Management}
118
119 \def\thesisLocationLabel{
120
     ~ \\[0.4em]%
     \iftoggle{fr}{
121
       Une thèse soumise à la\[0.2em]
122
       \t [0.2em]
123
       Université de Genève, Suisse, \\[0.2em]
124
       pour l'obtention du\\[0.2em]
125
     }{
126
127
       A thesis submitted to the \\[0.2em]
128
       \theFaculty, \\[0.2em]
129
       University of Geneva, Switzerland, \\[0.2em]
       in fulfillment of the requirements for the degree of \\[0.2em]
130
    }
131
132 }
134 \leftff \right
     \def\thesisByLabel{par}
135
136 }{
     \def\thesisByLabel{by}
137
138 }
139 \iftoggle{fr}{
    \def\thesisFieldLabel{Doctorat en}
141 }{
```

```
142 \def\thesisFieldLabel{PhD in}
                  143 }
                  144 \iftoggle{fr}{
                      \def\thesisCommitteeLabel{Membres du jury:}
                  146 }{
                      \def\thesisCommitteeLabel{Members of the thesis committee:}
                  147
                  148 }
                  149 \iftoggle{fr}{
                       \def\thesisNumberLabel{Thèse no.}
                  152 \def\thesisNumberLabel{Thesis No.}
                  153 }
                  154
                   3.8.2 User-level functions
                   Set up of the cover page and assimilated functions.
                   Set up the \theauthorFirstname variable.
 \authorFirstname
                  155 \newcommand{\authorFirstname}[1]{\def\theauthorFirstname{#1}}
  \authorLastname Set up the \theauthorLastname variable.
                  156 \mbox{$\authorLastname} [1] {\def\theauthorLastname} {\textsc} \\
     \thesisField Set up the \thethesisField variable.
                  157 \end{thesisField} [1] {\end{thesisField} } \label{thesisField}
\thesisCommitteeA Set up the \thethesisCommitteeA variable.
                  158 \newcommand{\thesisCommitteeA}[4]{%
                  159 \ifx&#3&%
                  160 \def\thethesisCommitteeA{}%
                  161 \else
                  163 \fi
                  164 }
\thesisCommitteeB Set up the \thethesisCommitteeB variable.
                  165 \newcommand{\thesisCommitteeB}[4]{%
                  166 \ifx&#3&%
                  167 \def\thethesisCommitteeB{}%
                  168 \else
                  169 \quad \texttt{\def}\thethesisCommitteeB{\#1~\#2~\text{\textsc}{\#3},~\#4}{\%}
                  170 \fi
                  171 }
\thesisCommitteeC Set up the \thethesisCommitteeC variable.
                  172 \newcommand{\thesisCommitteeC}[4]{%
                  173 \ifx&#3&%
                  174 \def\thethesisCommitteeC{}%
                  175 \ensuremath{\setminus} else
                  \def\thethesisCommitteeC{\#1^{\#2}\textsc{\#3}, \#4}%
                  177 \fi
                  178 }
\thesisCommitteeD Set up the \thethesisCommitteeD variable.
                  179 \newcommand{\thesisCommitteeD}[4]{%
                  180 \ifx&#3&%
                  181 \def\thethesisCommitteeD{}%
```

```
182 \ensuremath{\setminus} else
                   183 \def\thethesisCommitteeD{#1~#2~\textsc{#3},~#4}%
                   184 \fi
                   185 }
\thesisCommitteeE Set up the \thethesisCommitteeE variable.
                   186 \newcommand{\thesisCommitteeE}[4]{%
                   187 \ifx&#3&%
                   188 \def\thethesisCommitteeE{}%
                   189 \else
                   190 \def\thethesisCommitteeE{#1~#2~\textsc{#3},~#4}%
                   191 \fi
                   192 }
\thesisCommitteeF Set up the \thethesisCommitteeF variable.
                   193 \newcommand{\thesisCommitteeF}[4]{%
                   194 \ifx&#3&%
                   195 \def\thethesisCommitteeF{}%
                   196 \else
                   197 \def\thethesisCommitteeF{#1~#2~\textsc{#3},~#4}%
                   198 \fi
                   199 }
    \thesisNumber Set up the \thethesisNumber variable.
                   200 \newcommand{\thesisNumber}[1]{\def\thethesisNumber{#1}}
                    The cover page is created with the following code
  \printcoverpage Print the cover page of the thesis.
                   201 \newcommand{\printcoverpage}{%
                        \thispagestyle{empty}
                        \begin{center}
                   203
                   204
                        \rule{\linewidth}{0.4pt}
                   205
                        \vspace*{1.2cm}
                   206
                   207
                   208
                        {\huge
                           {\scshape
                   209
                   210
                             \begin{spacing}{0.8}
                               \@title
                   211
                             \end{spacing}
                   212
                          }
                   213
                   214
                        }
                   215
                   216
                        \vspace*{1.2cm}
                   217
                   218
                        \thesisByLabel
                   219
                        \vspace*{0.4cm}
                   220
                   221
                   222
                        {\large \theauthorFirstname~\theauthorLastname}
                   223
                   224
                        \vspace*{0.8cm}
                   225
                        \thesisLocationLabel
                   226
                   227
                        \thesisFieldLabel{~}\thethesisField
                   228
                   229
                        \vfill
                   230
```

```
\iftoggle{draft}{
                               231
                               232
                                           \iftoggle{fr}{
                                               \emph{Ébauche}
                               233
                               234
                                               \emph{Draft}
                               235
                               236
                                       }
                               237
                               238
                                        \vspace*{0.8cm}
                               239
                               240
                                        \iftoggle{draft}{~}{\thesisCommitteeLabel}
                               241
                               242
                                        \vspace*{0.2em}
                               243
                               244
                               245
                                        \iftoggle{draft}{~}{\thethesisCommitteeA}
                               246
                                        \vspace*{0.2em}
                               247
                               248
                                        \iftoggle{draft}{~}{\thethesisCommitteeB}
                               249
                               250
                                        \vspace*{0.2em}
                               251
                               252
                                        \iftoggle{draft}{~}{\thethesisCommitteeC}
                               253
                               254
                                        \vspace*{0.2em}
                               255
                               256
                                        257
                               258
                                        \vspace*{0.2em}
                               259
                               260
                                        \iftoggle{draft}{~}{\thethesisCommitteeE}
                               261
                               262
                                        \vspace*{0.2em}
                               263
                               264
                                        \iftoggle{draft}{~}{\thethesisCommitteeF}
                               ^{265}
                               266
                                        \vspace*{1.4cm}
                               267
                               268
                                        \label{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{$\rath{}\rath{$\rath{$\rath{}}}}}}}}}}}}}}}}} }}}} }} }} }} }} 
                               269
                               270
                                        \vspace*{0.1cm}
                               271
                               272
                               273
                                        \iftoggle{draft}{\@date}{\monthyeardate\today}
                               274
                                        \vspace*{0.1cm}
                               275
                               276
                                        \rule{\linewidth}{0.4pt}
                               277
                                        \end{center}
                               278
                               279 }
                                3.9
                                           Front matter
\acknowledgements
                                Set up the \theacknowledgements variable.
                               \abstractEN Set up the \theabstractEN variable.
                               281 \newcommand{\abstractEN}[1]{\def\theabstractEN{#1}}
          \abstractFR Set up the \theabstractFR variable.
```

```
282 \newcommand{\abstractFR}[1]{\def\theabstractFR{#1}}
      \dedication Set up the \thededication variable.
                   283 \newcommand{\dedication}[1]{\def\thededication{#1}}
\printfrontmatter The front matter pages are created with the following code
                   284 \newcommand{\printfrontmatter}{%
                   285
                   286
                        \iftoggle{draft}{~}{
                          \frontmatter
                   287
                   288
                   289
                          \iftoggle{fr}{
                            \chapter*{Remerciements}
                   291
                            \addcontentsline{toc}{chapter}{Remerciements}
                   292
                          }{
                            \chapter*{Acknowledgements}
                   293
                            \addcontentsline{toc}{chapter}{Acknowledgements}
                   294
                   295
                   296
                          \label{ch:acknowledgements}
                   297
                          \thispagestyle{plain}
                   298
                          \theacknowledgements
                   299
                          \newpage
                   300
                   301
                          \iftoggle{fr}{
                   302
                            \chapter*{Résumé}
                   303
                   304
                            \addcontentsline{toc}{chapter}{Résumé}
                   305
                            \label{ch:abstractFR}
                   306
                            \thispagestyle{plain}
                            \theabstractFR
                   307
                   308
                   309
                            \newpage
                   310
                   311
                            \chapter*{Abstract}
                            \addcontentsline{toc}{chapter}{Abstract}
                   312
                            \label{ch:abstractEN}
                   313
                            \thispagestyle{plain}
                   314
                            \theabstractEN
                   315
                   316
                          }{
                   317
                            \chapter*{Abstract}
                   318
                            \addcontentsline{toc}{chapter}{Abstract}
                   319
                            \label{ch:abstractEN}
                   320
                            \thispagestyle{plain}
                            \theabstractEN
                   321
                   322
                   323
                            \newpage
                   325
                            \chapter*{Résumé}
                            \addcontentsline{toc}{chapter}{Résumé}
                   326
                            \label{ch:abstractFR}
                   327
                            \thispagestyle{plain}
                   328
                   329
                            \theabstractFR
                   330
                   331
                        }
                   332
                        \tableofcontents
                   333
                   334
                        \iftoggle{draft}{~}{
                   335
                   336
                          \cleardoublepage
```

```
337
        \thispagestyle{plain}
338
339
        \vspace*{4cm}
340
        {\em
341
        \raggedleft\thededication\par
342
343
344
345
        \newpage
346
347
348
     \mainmatter
349 }%
```

3.10 Introduction and conclusion starter

```
\startintroduction The front matter pages are created with the following code

350 \newcommand{\startintroduction}{%

351 \chapter*{Introduction}

352 \addcontentsline{toc}{chapter}{Introduction}

353 \label{ch:introduction}

354 \markboth{}{Introduction}

355 }

\startconclusion The front matter pages are created with the following code

356 \newcommand{\startconclusion}{%

357 \chapter*{Conclusion}

358 \addcontentsline{toc}{chapter}{Conclusion}

359 \label{ch:conclusion}

360 \markboth{}{Conclusion}

361 }
```

3.11 Miscellaneous

itemize* A narrowed version of the itemize environment. implementation here.

```
362 \newenvironment{itemize*}%
363 {\vspace{-2mm}\begin{itemize}%
364 \setlength{\itemsep}{0pt}%
365 \setlength{\parskip}{0pt}%
366 }%
367 {\end{itemize}\vspace{-2mm}%
368 }
```

4 Minimal working example

Forthcoming