elsevierbook.cls class

deimi

1 Introduction

`elsevierbook.cls` is designed for preparation LaTeX books to be published by Elsevier. The document class is built on `book.cls` and require following packages:

- `etoolbox`
- `calc`
- `afterpackage`
- `numname`
- `xcolor`
- `colortbl` for table with colored rows, columns;
- `fontenc`
- `textcomp`
- `amsmath` for math typesetting;
- `amsmath,amssymb,amsfonts`
- `amsthm` for theorem and alike;
- `caption` for table, figure caption control;
- `titlesec` for sectioning control;
- `enumitem` for lists control;
- `mdframed` for boxed text elements;
- `footmisc` for footnote control;
- `natbib` for bibliography;
- `minitoc` for producing chaper's minitoc;
- `multicol`

2 Installation

The package is available at TeX Support page on github (`https://github.com/vtex-soft/texsupport.elsevier-book`) It can also be found on CTAN (Comprehensive TeX Archive Network) (http://www.ctan.org/tex-archive/macros/latex/contrib/elsevierbook/) Please download the `elsevierbook.dtx`

which is a class source file and `elsevierbook.ins` which is a driver file for extraction the class file. To produce `elsevier.cls` file, run LaTeX on the `elsarticle.ins`. The class file may be moved to a place, usually, ($TEXMF/tex/latex/elsevierbook/), or a folder that TeX can read from. The TeX file database needs to be regenerated after moving the class file. Usually, we use commands like `mktexlsr` or `texhash` depending upon the distribution and operating system.

However, the installation is optional and you can skip this phase. The bundle is self-contained and after unzipping your have everything you need for book preparation. (see **??**)

3 Book structure

Organising book can be challenging. Here we discribe two possible ways of book organisation. The first one is pretty simple with flat folder structure that can suit for short books, the other is more complex that can serve for more complex books.

3.1 Option 1 - simple stucture

```
book.tex
chapter01.tex
chapter02.tex
dediction.tex
preface.tex
bibliography.tex
[...]
img/
  ch01-figure01.eps
  ch02-figure02.eps
sty/
  elsevierbook.cls
```

```
book.tex:
\documentclass{elsevierbook.cls}
\begin{document}
\Frontmatter
  \include{titlepage}
  \include{dedication}
  \tableofcontents
  \include{preface}
  \include{acknowledgement}
  [...]
\Mainmatter
  \include{chapter01}
  \include{chapter02}
  [...]
\Backmatter
  \include{appendix01}
  [...]
  \include{bibliograhy}
  \printindex
\end{document}
```

3.2 Option 2 - more complex structure

For more complex projects this can be more suitable

```
book.tex
dediction.tex
preface.tex
bibliography.tex
[...]
chapter01/
  chapter01.tex
  img/
    ch01-figure01.eps
    ch02-figure02.eps
    [...]
chapter02/
  chapter02.tex
  img/
    ch02-figure01.eps
    ch02-figure02.eps
    [...]
[...]
appendix01/
  appendix01.tex
  img/
    appendix01-figure01.eps
    appendix01-figure02.eps
bibliography.tex
sty/
  elsevierbook.cls
```

```
book.tex:

\documentclass{elsevierbook.cls}
\begin{document}
\Frontmatter
  \include{titlepage}
  \include{dedication}
  \tableofcontents
  \include{preface}
  \include{acknowledgement}
  [...]
\Mainmatter
  \include{chapter01}
  \include{chapter02}
  [...]
\Backmatter
  \include{appendix01}
  [...]
  \include{bibliograhy}
  \printindex
\end{document}
```

4 Usage

The class should be loaded with the following command:

`\documentclass[<options>]{elsevierboook}`

where the `options` can be following:

a02	sets `a02` book model settings
a08a	sets `a08a` book model settings
p05	sets `p05` book model settings
authoryear	for `natbib` package.

5 Frontmatter

- chapter - author - address - footnotes - dispquotes - chapter points - minitoc - abstract - keywords

6 Tables, Figures

Figures may be included using the command `\includegraphics`. Please check `graphicx` package for available options. Please use EPS format for figures working with LaTeX, and PDF, PNG, MPS formats for pdfLaTeX. Do not use file extensions and path in order to load file. If you need LaTeX to find your graphics files in other folder than in setup, set the path into `input@path`.

```
\begin{figure}
\includegraphics{file-name}% no path, no extension
\caption%
  {Figure caption %
     \source{Cortesy of [...]}%
  }
\end{figure}
```

Table environment may be enhanced depending on model chosen.

```
\begin{table}
\begin{tableframe}
\caption{Table caption text [...]  }%
\begin{tabularx}{\textwidth}{X||X}
\Hline
\tch{Item A} & \tch{Item B}\tabnoteref{tn1}\\\hline
\tchi{Item A2} & \tchi{Item B2}\tabnoteref{tn1}\\\hline
\rowcolor{thd}
\multicolumn{2}{l}{\textbf{Item}} \\
Item A & Item B\\\hline
Item C & Item D\tabnoteref{tn2}\\\Hline
\end{tabularx}
\begin{tabnotes}
  \tabnotetext[*]{tn1}{Table footnote}
  \tabnotetext[a]{tn2}{Table footnote}
  \legend{EL=empirical likelihook.}
  \source{foo}
\end{tabnotes}
```

```
\end{tableframe}
\end{table}
```

tableframe - environment
source - source
Hline - heavy line
tch - table column head
rowcolorthd for colored rows
tabnoteref table footnote reference
tabnotetext table footnote text. Must be on `tabnotes` environment
legend table legend. Must be inside `tabnotes` environment.

7 Boxed text

Boxed text environments uses mdframed package as its basic. There are two types defined: Box Type A (BtypeA) and Box Type B (BtypeB)

Unnumbered text boxes

```
\begin{textbox}[style=BtypeA,frametitle={Box type A}]
 Some text [...]
\end{textbox}
[...]
\begin{textbox}[style=BtypeB,frametitle={Box type B}]
 Some text [...]
\end{textbox}
```

Numbered text boxes are defined pretty much the same as theorem like environments.

```
\mdtheorem[style=BtypeA]{example}{Example}[chapter]
\mdtheorem[style=BtypeB]{boxb}{Box}
\begin{example}[Numbered Box type A ]
  Some text [..]
\end{example}
[...]
\begin{boxb}[NUmbered Box type B]
  Some text [..]
\end{boxb}
```

You can use other options from mdframed package to fine tune the `textbox` environment.

8 Theorems and friends

The class loads amsthm package to make it easier to define theorem environments and the alike.

```
\newtheorem{theorem}{Theorem}
\theoremstyle{definition}
\newtheorem{definition}{Definition}
\theoremstyle{remark}
\newtheorem{remark}{Remark}
```

Please refer to amsthm package documentation for details.

9 Lists

We use enumitem package for enumerate, itemize and other lists environments. It is possible to supply optional arguments to fine control the appearance of list.

```
\begin{enumerate}[<options>]
\item [..]
\end{enumerate}
```

Please check enumitem documentation for details.

10 Display mathematics

The package amsmath is loaded by the class file. You can use all environments form amsmath package. Please do not use faulty 'eqnarray' environment, but eqnalign or .. instead.

11 Program Lists

not available yet.