elsevierbook.cls class

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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
                                 book.tex:
chapter01.tex
                                 \documentclass{elsevierbook.cls}
chapter02.tex
                                 \begin{document}
dediction.tex
                                 \Frontmatter
preface.tex
                                   \include{titlepage}
bibliography.tex
                                   \include{dedication}
                                   \tableofcontents
[...]
                                   \include{preface}
img/
                                   \include{acknowledgement}
  ch01-figure01.eps
  ch02-figure02.eps
                                   [...]
                                 \Mainmatter
sty/
  elsevierbook.cls
                                   \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
                                 book.tex:
dediction.tex
preface.tex
                                 \documentclass{elsevierbook.cls}
bibliography.tex
                                 \begin{document}
[...]
                                 \Frontmatter
chapter01/
                                   \include{titlepage}
                                   \include{dedication}
  chapter01.tex
  img/
                                   \tableofcontents
    ch01-figure01.eps
                                   \include{preface}
    ch02-figure02.eps
                                   \include{acknowledgement}
    [\ldots]
                                    Γ...
                                 \Mainmatter
chapter02/
  chapter02.tex
                                   \include{chapter01}
  img/
                                   \include{chapter02}
    ch02-figure01.eps
                                    [\ldots]
    ch02-figure02.eps
                                 \Backmatter
    [...]
                                   \include{appendix01}
[...]
                                    [...]
appendix01/
                                   \include{bibliograhy}
                                   \printindex
  appendix01.tex
  img/
                                 \end{document}
    appendix01-figure01.eps
    appendix01-figure02.eps
bibliography.tex
sty/
  elsevierbook.cls
```

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.