LaTeX Class yb-book*

Yegor Bugayenko
yegor256@gmail.com

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1 Introduction

The provided class yb-book helps me design my books and publish them on Amazon. You are welcome to use is for your own books. It is as simple as this:

```
\documentclass{yb-book}
\renewcommand*\thetitle{New Book About OOP}
\renewcommand*\theauthor{Jeff Lebowski}
\renewcommand*\thevolume{1}
\renewcommand*\theversion{1.0}
\begin{document}
\ybPrintTitlePage
\chapter{First One}
\section{About Something Interesting}
Hello, world!
\end{document}
```

You are welcome to suggest additional options and commands, but the style of my books is intentionally as simple as possible, avoiding formatting as much as possible. Here is why.

2 Options

There are a few class options you can use:

`compact` Use this package option when you need to make text more compact and take less vertical space. This may be convenient fiction books. I use this option to render Code Ahead book.

`sparse` With this package option every section will start from a new page.

*The sources are in GitHub at yegor256/yb-book.cls

`manuscript` When the format is not for Amazon printing, but for some other purposes (the page size is A4), this option may be convenient. I also use it when I want the book to be rendered for printing on paper for review purposes.

`authordraft` When it's a draft for reviewers (the page size is A4) and you want to have a watermark and a compact form of the content. This option goes together with `\thereviewer{}` command, which you may redefine, in order to embed the name of the reviewed in the watermark. This may help you prevent theft of your book:

```
\documentclass[authordraft]{yb-book}
\renewcommand*\thereviewer{Walter Sobchak}
\begin{document}
Hello, world!
\end{document}
```

3 Meta Commands

There are a number of commands that you may redefine in the preamble:

```
\documentclass{yb-book}
\newcommand*\thetitle{My New Book About OOP}
\newcommand*\theauthor{Yegor Bugayenko}
\newcommand*\thevolume{1}
\newcommand*\thedate{24 Feb 2022}
\newcommand*\theversion{1.4}
\newcommand*\thereviewer{Jeff Lebowski}
\begin{document}
... the content goes here ...
\end{document}
```

4 Printers

There are a number of printers — commands that print large blocks of text in the expected format:

`\ybPrintTitlePage` Prints the first page of a book. It expects at least `\thetitle` and `theauthor` to be defined:

```
\documentclass{yb-book}
\renewcommand*\thetitle{My New Book}
\renewcommand*\theauthor{Yegor Bugayenko}
\begin{document}
\ybPrintTitlePage
.. the rest of the book goes here
\end{document}
```

`\ybPrintTOC` Prints the table of contents.

`\ybQuote` Prints a side quote:

```
\documentclass{yb-book}
\begin{document}
Hello, world!
```

```
\ybQuote{Never tell the truth to people who
  are not worthy of it}{Mark Twain}{}
\end{document}
```

`\ybPrintBibliography` Prints the list of bib references.

`\ybPrintIndex` Prints index with an optional name of the section (instead of “Index”):

```
\documentclass{yb-book}
\begin{document}
Hello, world!
\ybPrintIndex{Recommended Books}
\end{document}
```

5 Implementation

First, we parse package options:

```
\RequirePackage{pgfopts}
\pgfkeys{
  /yb/.cd,
  apa/.store in=\yb@apa,
  authordraft/.store in=\yb@authordraft,
  compact/.store in=\yb@compact,
  manuscript/.store in=\yb@manuscript,
  sparse/.store in=\yb@sparse,
}
\ProcessPgfPackageOptions{/yb}
```

Then, depending on the options like `authordraft` and `manuscript`, we preset options of the class `book` and then load it:

```
\makeatletter
\ifdefined\yb@authordraft
  \PassOptionsToClass{11pt}{book}
  \PassOptionsToClass{oneside}{book}
\else
  \ifdefined\yb@manuscript
    \PassOptionsToClass{12pt}{book}
    \PassOptionsToClass{oneside}{book}
  \else
    \PassOptionsToClass{11pt}{book}
    \PassOptionsToClass{twoside}{book}
  \fi
\fi
\makeatother
\LoadClass{book}
```

Then, we load inputenc for UTF-8 encoding of the sources:

```
\RequirePackage[utf8]{inputenc}
```

`geometry` Then, using `geometry`, we setup page layout:

```
\RequirePackage{geometry}
\geometry{
  paperwidth=6in, paperheight=9in,
  bindingoffset=0.25in,
```

```
  left=0.75in, right=0.75in, top=0.75in, bottom=1.25in}
\makeatletter
\ifdefined\yb@authordraft
  \geometry{a4paper, margin=1in, left=1.5in}
\else
  \ifdefined\yb@manuscript
    \geometry{a4paper, margin=1.2in}
  \fi
\fi
\makeatother
```

Then, we load href-ul to underline links correctly:

```
\RequirePackage{href-ul}
```

Then, we load anyfontsize to enable all sizes of fonts:

```
\RequirePackage{anyfontsize}
```

Then, we load tikz for graphics:

```
\RequirePackage{tikz}
  \usetikzlibrary{positioning}
  \usetikzlibrary{shapes}
  \usetikzlibrary{fit}
```

Then, we load chngcntr for something else:

```
\RequirePackage{chngcntr}
  \counterwithout{footnote}{chapter}
```

Then, we load lastpage to enable rendering of the last page number:

```
\RequirePackage{lastpage}
```

Then, we load paralist for inline enumeration:

```
\RequirePackage{paralist}
```

Then, we load xcolor for colors:

```
\RequirePackage{xcolor}
```

Then, we load graphicx to enable graphic files inclusion:

```
\RequirePackage{graphicx}
```

Then, we load enumitem for inline enumeration:

```
\RequirePackage[inline]{enumitem}
  \setlist{nosep}
```

Then, we load float for floating figures:

```
\RequirePackage{float}
```

Then, we load ulem for inline lists:

```
\RequirePackage[normalem]{ulem}
```

Then, we load xfp and xifthen for if-then-else:

```
\RequirePackage{xfp}
\RequirePackage{xifthen}
```

Then, we load soul for highlighting:

```
\RequirePackage{soul}
```

Then, we load csquotes for better rendering:

```
\RequirePackage[autostyle=try]{csquotes}
```

`\pagestyle` Then, we set the layout of a page to `plain`:

```
\pagestyle{plain}
```

`setspace` Then, using `setspace` package we set the spacing between lines in the text, depending on the package options:

```
\RequirePackage{setspace}
  \setstretch{1.2}
  \makeatletter
  \ifdefined\yb@compact\setstretch{1.0}\fi
  \ifdefined\yb@manuscript\setstretch{1.1}\fi
  \ifdefined\yb@authordraft\setstretch{1.4}\fi
  \makeatother
```

`biblatex` Then, we configure `biblatex`, for citation management:

```
\PassOptionsToPackage{indexing=cite,
  natbib=true,maxnames=2,minnames=1,doi=true,
  url=false,isbn=false,isbn=false}{biblatex}
\makeatletter
\ifdefined\yb@apa
  \PassOptionsToPackage{style=authoryear}{biblatex}
\else
  \PassOptionsToPackage{style=numeric}{biblatex}
\fi
\makeatother
\RequirePackage{doi}
\RequirePackage{biblatex}
  \DeclareCiteCommand{\citetitle}
    {\boolfalse{citetracker}%
     \boolfalse{pagetracker}%
     \usebibmacro{prenote}}
    {\ifciteindex
       {\indexnames{labelname}}
       {}%
     \printfield[citetitle]{labeltitle}}
    {\multicitedelim}
    {\usebibmacro{postnote}}
  \DeclareCiteCommand*{\citetitle}
    {\boolfalse{citetracker}%
     \boolfalse{pagetracker}%
     \usebibmacro{prenote}}
    {\ifciteindex
       {\indexnames{labelname}}
       {}%
     \printfield[citetitle]{title}}
    {\multicitedelim}
    {\usebibmacro{postnote}}
```

`condensed` Then, we define `condensed` environment for snippets (`lsstyle` is defined by `letterspace` in `microtype`):

```
\newenvironment{condensed}
  {\begingroup\setstretch{1.0}\lsstyle}
  {\endgroup}
```

`microtype` Then, we include `microtype` for better rendering:

```
\makeatletter
\ifdefined\yb@authordraft\else
  \PassOptionsToPackage{letterspace=-50,nopatch=footnote}{microtype}
  \RequirePackage{microtype}
\fi
\makeatother
```

`libertine` Then, we include `libertine`, for a good looking font:

```
\makeatletter
\ifdefined\yb@manuscript
  \RequirePackage[tt=false,type1=true]{libertine}
\fi
\makeatother
```

`\section` Then, we redefine `\section` command:

```
\makeatletter
\let\yb@oldsection\section
\def\yb@secstart{\ifdefined\yb@sparse\newpage\fi}
\ifdefined\yb@authordraft
  \RequirePackage[medium]{titlesec}
\else
  \RequirePackage[raggedright]{titlesec}
    \titlespacing{\section}{0in}{6pt}{6pt}[1in]
  \renewcommand\section{\yb@secstart\yb@oldsection}
\fi
\ifdefined\yb@compact
  \renewcommand\section{\yb@secstart\vspace{2em}\yb@oldsection}
\fi
\makeatother
```

Then, if it's a `authordraft`, we put a watermark comment:

```
\makeatletter
\ifdefined\yb@authordraft
  \RequirePackage[absolute]{textpos}
    \TPGrid{16}{16}
  \RequirePackage{fancyhdr}
  \pagestyle{fancy}
  \renewcommand\headrulewidth{0pt}
  \renewcommand\footrulewidth{0pt}
  \setlength{\headheight}{16pt}
  \fancyhf{}
  \fancyhead[L,C,LO,CO]{}
  \fancyhead[R,RO]{
    \begin{textblock}{16}[0.5,0.5](8,8)%
      \tikz \node[minimum width=16\TPHorizModule] {%
        \fontsize{64}{64}\selectfont\bfseries%
        \rotatebox{45}{
          \tikz \node
          [fill=gray!6, font=\ttfamily\color{white}]
          {it is a draft};%
        }%
      };%
    \end{textblock}%
```

```
    \begin{textblock}{4}(11.5,1)%
      \tikz \node [color=gray, rotate=270,
        font=\ttfamily\scriptsize, text width=8in] at (0,0) {%
        Copyright \textcopyright{} \the\year{} by \theauthor{}.
        All rights reserved. No part of the contents of
        this book may be reproduced or transmitted in any
        form or by any means without the written permission
        of the publisher. This particular manuscript is
        printed for \textbf{\thereviewer{}} and may be used only
        for one-time review. The manuscript has to be destroyed
        after the review.%
      };
    \end{textblock}
  }
  \fancyfoot[C,CO,C]{\small\ttfamily%
    page \#\thepage{} of \pageref{LastPage}}
\fi
\makeatother
```

`\maketitle` Then, we redefine `\maketitle` command:

```
\renewcommand\maketitle{
  {\LARGE\textbf{\thetitle}}
  \\[1em]
  by \theauthor{}
  \\[4em]
  \ifx\thevolume\empty\else%
    Volume \thevolume{}\\
  \fi
  \ifx\thedate\empty\else%
    Rendered on \thedate{}
  \fi
  \ifx\theversion\empty\else%
    \\
    Ver. \theversion{}
  \fi
}
```

`\ybPrintTitlePage` Then, we define `\ybPrintTitlePage` command:

```
\makeatletter
\newcommand\ybPrintTitlePage{
  \ifdefined\yb@authordraft\else
    \begin{titlepage}
      \ttfamily
      \vspace*{\fill}
      \noindent
      {\Huge\thetitle}
      \\[1em]
      by \theauthor{}
      \\[4em]
      \ifx\thevolume\empty\else%
        Volume \thevolume{}\\
      \fi
      \ifx\thedate\empty\else%
        \thedate{}
```

```
      \fi
      \ifx\thedate\empty\else%
        \\
        \theversion{}
      \fi
      \vspace*{\fill}
    \end{titlepage}
  \fi
}
\makeatother
```

\ybPrintTOC Then, we define ybPrintTOC command to print table of contents:

```
\makeatletter
\newcommand\ybPrintTOC{
  \ifdefined\yb@authordraft\else
    \ifdefined\yb@compact\else\cleardoublepage\fi
    {\setstretch{0.7}\tableofcontents}
  \fi
}
\makeatother
```

\ybPrintIndex Then, we configure imakeidx package and define \ybPrintIndex command:

```
\RequirePackage{imakeidx}
  \renewbibmacro*{citeindex}{\indexnames{labelname}{}}
  \makeindex
  \indexsetup{othercode={\hyphenpenalty=10000}}
\makeatletter
\newcommand\ybPrintIndex[1][Index]{%
  \ifdefined\yb@authordraft\else
    \cleardoublepage%
    {%
      \setstretch{1.0}%
      \small%
      \addcontentsline{toc}{chapter}{#1}%
      \printindex%
    }%
  \fi%
}
\makeatother
```

\ybQuote Then, with the help of wrapfig and mdframed, we define \ybQuote command:

```
\RequirePackage{wrapfig}
\RequirePackage{mdframed}
\RequirePackage{changepage}
  \strictpagecheck
\mdfdefinestyle{quoteodd}{backgroundcolor=black!0,
  leftmargin=6pt,rightmargin=0pt,
  innerleftmargin=6pt,innerrightmargin=0pt,
  innertopmargin=0pt,innerbottommargin=0pt,
  skipabove=0pt,skipbelow=0pt,
  linewidth=2pt,
  topline=false,bottomline=false,rightline=false}
\mdfdefinestyle{quoteeven}{backgroundcolor=black!0,
  rightmargin=6pt,leftmargin=0pt,
```

```
  innerrightmargin=6pt,innerleftmargin=0pt,
  innertopmargin=0pt,innerbottommargin=0pt,
  skipabove=0pt,skipbelow=0pt,
  linewidth=2pt,
  topline=false,bottomline=false,leftline=false}
\makeatletter
\newcommand\ybQuote[3]{%
  \ifthenelse{\isempty{#3}}{}{
    \ifx\hfuzz#2\hfuzz%
      \index{#3}%
    \else%
      \index{#3, #2}%
    \fi%
  }%
  \def\yb@body{%
    \raggedright%
    \ifx\hfuzz#3\hfuzz%
      #1%
    \else%
      ``#1''\\\raggedleft---#2 #3%
    \fi%
  }
  \ifdefined\yb@authordraft%
    \begin{wrapfigure}{r}{0.4\textwidth}%
      \begin{mdframed}[style=quoteodd]%
        \yb@body%
      \end{mdframed}%
    \end{wrapfigure}%
  \else%
    \begin{wrapfigure}{o}[12pt]{0.4\textwidth}%
      \sffamily\checkoddpage%
      \ifoddpage%
        \begin{mdframed}[style=quoteodd]\yb@body\end{mdframed}%
      \else%
        \begin{mdframed}[style=quoteeven]\yb@body\end{mdframed}%
      \fi%
      \vspace{-12pt}
    \end{wrapfigure}%
  \fi%
}
\makeatother
```

Then, we use and configure `footmisc` as suggested here:

```
\RequirePackage{perpage}
\RequirePackage[bottom,perpage,multiple]{footmisc}
\makeatletter
  \let\yb@oldfootnote\footnote
\newcommand\yb@nexttoken\relax
\newcommand\yb@isfootnote{%
  \ifx\footnote\yb@nexttoken\textsuperscript{,}\fi}
\renewcommand\footnote[1]{%
  \yb@oldfootnote{#1}\futurelet\yb@nexttoken\yb@isfootnote}
\makeatother
```

\ybPrintBibliography Then, we define \ybPrintBibliography, to print a list of references:

```
\makeatletter
\newcommand\ybPrintBibliography[1][Bibliography]{%
  \AtNextBibliography{\small}%
  \raggedright%
  \ifdefined\yb@manuscript%
    \setlength\bibitemsep{0pt}%
    \newpage%
    \begin{multicols}{2}%
      {\setstretch{1.0}\printbibliography}%
    \end{multicols}%
  \else%
    \setlength\bibitemsep{.2em}%
    \printbibliography[heading=bibintoc,title={#1}]%
  \fi%
}
\makeatother
```

Then, a few layout configurations at the beginning of the document:

```
\makeatletter
\AtBeginDocument{%
  \raggedbottom%
  \ifdefined\yb@authordraft%
    \raggedright%
  \fi%
  \setlength\topskip{0mm}%
  \setlength\parindent{0pt}%
  \setlength\fboxsep{0pt}%
  \setlength\parskip{6pt}%
  \interfootnotelinepenalty=10000%
}
\makeatother
```

Finally, a few meta commands with default values:

```
\newcommand*\thetitle{\textbackslash{}thetitle}
\newcommand*\thevolume{}
\newcommand*\thedate{}
\newcommand*\theversion{\textbackslash{}theversion}
\newcommand*\theauthor{\textbackslash{}theauthor}
\newcommand*\thereviewer{\textbackslash{}thereviewer}

\endinput
```

Change History

v0.1.0
General: Initial version 3
v0.2.0
General: Started using l3build 3
v0.3.0
General: The `pgfopts` package is now used to parse package options. . . . 3
v0.4.0
`authordraft`: The package option `draft` renamed to `draft` 2
v0.5.0
General: The `sparse` package option added, to place every section in a new page. 3
v0.5.1
General: Added the usage of `inputenc` in order to ensure UTF-8 encoding for the sources. 3
v0.6.0
General: The `apa` package option added, to enable APA citation style. 3
v0.6.2
`\ybPrintBibliography`: The `\ybPrintBibliography` command has an optional argument, which is the title of the chapter. 10

Index

Numbers written in italic refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in roman refer to the code lines where the entry is used.

Symbols

\# 166
\\ . . . 171, 173, 175, 181, 193, 195, 197, 203, 268

A

\addcontentsline . . 230
Amazon 1
\AtBeginDocument . . 317
\AtNextBibliography 302
\authordraft 1

B

\bfseries 143
\bibitemsep 305, 311
\biblatex 69
\boolfalse . . 82, 83, 92, 93

C

\checkoddpage 279
\citetitle 81, 91
\cleardoublepage 214, 226
\color 146
\compact 1
\condensed 101
\counterwithout 48

D

\DeclareCiteCommand 81, 91

E

\endinput 336

F

\fancyfoot 165
\fancyhead 139, 140
\fancyhf 138
\fboxsep 324
\fill 190, 206
\fontsize 143
\footnote . . 293, 296, 297
\footrulewidth 136
\futurelet 298

G

\geometry . . 27, 28, 34, 37

H

\headheight 137
\headrulewidth 135
\hfuzz 257, 265
\Huge 192
\hyphenpenalty 222

I

\ifciteindex 85, 95
\ifdefined . . 12, 16, 33, 36, 65, 66, 67, 73, 105, 111, 117, 118, 125, 130, 187, 213, 214, 225, 271, 304, 319
\ifoddpage 280
\ifthenelse 256
\ifx . 174, 177, 180, 196, 199, 202, 257, 265, 296
\index 258, 260
\indexnames . . . 86, 96, 220
\indexsetup 222
\interfootnotelinepenalty 326

L

\LARGE 170
\libertine 110
\LoadClass 25
\lsstyle 102

M

\makeatletter . . . 11, 32, 64, 72, 104, 110, 115, 129, 185, 211, 223, 254, 292, 300, 316
\makeatother 24, 40, 68, 78, 109, 114, 128, 168, 210, 218, 235, 289, 299, 315, 328
\makeindex 221
\maketitle 169
\manuscript 1
\mdfdefinestyle 240, 247
\microtype 104
\multicitedelim . . 89, 99

N

\newpage 117, 306
\node 142, 145, 152
\noindent 191

P

\pageref 166
\pagestyle 61, 134
\parindent 323
\parskip 325
\PassOptionsToClass . 13, 14, 17, 18, 20, 21
\PassOptionsToPackage 69, 74, 76, 106
\pgfkeys 2
\printbibliography 308, 312
\printfield 88, 98
\printindex 231
\ProcessPgfPackageOptions 10

R

\raggedbottom 318
\raggedleft 268
\raggedright 264, 303, 320
\relax 294
\renewbibmacro 220
\renewcommand . . 123, 126, 135, 136, 169, 297
\RequirePackage . . . 1, 26, 27, 41, 42, 43, 47, 49, 50, 51, 52, 53, 55, 56, 57, 58, 59, 60, 62, 79, 80, 107, 112, 119, 121, 131, 133, 219, 236, 237, 238, 290, 291
\rotatebox 144

S

\scriptsize 153
\section 115
\selectfont 143
\setlength . . 137, 305, 311, 322, 323, 324, 325
\setlist 54
\setspace 62
\setstretch . 63, 65, 66, 67, 102, 215, 228, 308

\sffamily 279
\small 165, 229, 302
\sparse 1
\strictpagecheck . . 239

T

\tableofcontents . . 215
\textbackslash 329, 332, 333, 334
\textbf 159, 170
\textcopyright 154
\textsuperscript . . 296
\textwidth 272, 278
\the 154
\theauthor 154, 172, 194, 333
\thedate 177, 178, 199, 200, 202, 331
\thepage 166
\thereviewer . . . 159, 334
\thetitle . . 170, 192, 329
\theversion 180, 182, 204, 332
\thevolume 174, 175, 196, 197, 330
\tikz 142, 145, 152
\titlespacing 122
\topskip 322
\TPGrid 132
\TPHorizModule 142
\ttfamily 146, 153, 165, 189

U

\usebibmacro 84, 90, 94, 100
\usetikzlibrary 44, 45, 46

V

\vspace . 126, 190, 206, 285

Y

\yb@apa 4, 73
\yb@authordraft 5, 12, 33, 67, 105, 118, 130, 187, 213, 225, 271, 319
\yb@body 263, 274, 281, 283
\yb@compact 6, 65, 125, 214
\yb@isfootnote . 295, 298
\yb@manuscript 7, 16, 36, 66, 111, 304
\yb@nexttoken 294, 296, 298
\yb@oldfootnote 293, 298
\yb@oldsection 116, 123, 126
\yb@secstart 117, 123, 126
\yb@sparse 8, 117
\ybPrintBibliography 1, 300
\ybPrintIndex 1, 219
\ybPrintTitlePage 1, 185
\ybPrintTOC 1, 211
\ybQuote 1, 236
\year 154