



L^AT_EX Class *yb-book*^{*}

Yegor Bugayenko
yegor256@gmail.com

2025/01/02, 0.5.0

1 Introduction

The provided class *yb-book* helps me design [my books](#) and publish them [on Amazon](#). You are welcome to use it 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 `\therewviewer{}` 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*\therewviewer{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*\therewviewer{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!
\end{document}
```

```
\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:

```
1 \RequirePackage{pgfopts}
2 \pgfkeys{
3   /yb/.cd,
4   authordraft/.store in=\yb@authordraft,
5   compact/.store in=\yb@compact,
6   manuscript/.store in=\yb@manuscript,
7   sparse/.store in=\yb@sparse,
8 }
9 \ProcessPgfPackageOptions{/yb}
```

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

```
10 \makeatletter
11 \ifdefined\yb@authordraft
12   \PassOptionsToClass{11pt}{book}
13   \PassOptionsToClass{oneside}{book}
14 \else
15   \ifdefined\yb@manuscript
16     \PassOptionsToClass{12pt}{book}
17     \PassOptionsToClass{oneside}{book}
18   \else
19     \PassOptionsToClass{11pt}{book}
20     \PassOptionsToClass{twoside}{book}
21   \fi
22 \fi
23 \makeatother
24 \LoadClass{book}
```

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

```
25 \RequirePackage{geometry}
26 \geometry{
27   paperwidth=6in, paperheight=9in,
28   bindingoffset=0.25in,
29   left=0.75in, right=0.75in, top=0.75in, bottom=1.25in}
30 \makeatletter
31 \ifdefined\yb@authordraft
32   \geometry{a4paper, margin=1in, left=1.5in}
```

```

33 \else
34   \ifdefined\yb@manuscript
35     \geometry{a4paper, margin=1.2in}
36   \fi
37 \fi
38 \makeatother

Then, we load anyfontsize to enable all sizes of fonts:
39 \RequirePackage{anyfontsize}

Then, we load tikz for graphics:
40 \RequirePackage{tikz}
41   \usetikzlibrary{positioning}
42   \usetikzlibrary{shapes}
43   \usetikzlibrary{fit}

Then, we load chngcntr for something else:
44 \RequirePackage{chngcntr}
45   \counterwithout{footnote}{chapter}

Then, we load lastpage to enable rendering of the last page number:
46 \RequirePackage{lastpage}

Then, we load paralist for inline enumeration:
47 \RequirePackage{paralist}

Then, we load xcolor for colors:
48 \RequirePackage{xcolor}

Then, we load graphicx to enable graphic files inclusion:
49 \RequirePackage{graphicx}

Then, we load enumitem for inline enumeration:
50 \RequirePackage[inline]{enumitem}
51   \setlist{nosep}

Then, we load float for floating figures:
52 \RequirePackage{float}

Then, we load ulem for inline lists:
53 \RequirePackage[normalem]{ulem}

Then, we load xfp and xifthen for if-then-else:
54 \RequirePackage{xfp}
55 \RequirePackage{xifthen}

Then, we load soul for highlighting:
56 \RequirePackage{soul}

Then, we load csquotes for better rendering:
57 \RequirePackage[autostyle=try]{csquotes}

\pagestyle Then, we set the layout of a page to plain:
58 \pagestyle{plain}

```

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

```
59 \RequirePackage{setspace}
60   \setstretch{1.2}
61   \makeatletter
62   \ifdefined\yb@authordraft\setstretch{1.1}\fi
63   \ifdefined\yb@compact\setstretch{1.0}\fi
64   \ifdefined\yb@manuscript\setstretch{1.1}\fi
65   \makeatother
```

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

```
66 \RequirePackage[indexing=cite,style=authoryear,
67   natbib=true,maxnames=1,minnames=1,doi=false,
68   url=false,isbn=false,isbn=false]{biblatex}
69 \DeclareCiteCommand{\citetitle}
70   {\boolfalse{citetracker}%
71    \boolfalse{pagetracker}%
72    \usebibmacro{prenote}%
73    {\ifcriteindex
74      {\indexnames{labelname}}%
75      {}%
76      \printfield[citetitle]{labeltitle}%
77      {\multicitedelim}%
78      \usebibmacro{postnote}%
79    \DeclareCiteCommand*\{\citetitle}
80      {\boolfalse{citetracker}%
81       \boolfalse{pagetracker}%
82       \usebibmacro{prenote}%
83       {\ifcriteindex
84         {\indexnames{labelname}}%
85         {}%
86         \printfield[citetitle]{title}%
87         {\multicitedelim}%
88         \usebibmacro{postnote}}}
```

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

```
89 \newenvironment{condensed}
90   {\begingroup\setstretch{1.0}\lsstyle}
91   {\endgroup}
```

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

```
92 \makeatletter
93 \ifdefined\yb@authordraft\else
94   \RequirePackage[letterspace=-50]{microtype}
95 \fi
96 \makeatother
```

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

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

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

```
102 \makeatletter
103 \let\yb@oldsection\section
104 \def\yb@secstart{\ifdefined\yb@sparse\newpage\fi}
105 \ifdefined\yb@authordraft
106   \RequirePackage[medium]{titlesec}
107 \else
108   \RequirePackage[raggedright]{titlesec}
109   \titlespacing{\section}{0in}{6pt}{6pt}[1in]
110   \renewcommand\section{\yb@secstart\newpage\yb@oldsection}
111 \fi
112 \ifdefined\yb@compact
113   \renewcommand\section{\yb@secstart\vspace{2em}\yb@oldsection}
114 \fi
115 \makeatother
```

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

```
116 \makeatletter
117 \ifdefined\yb@authordraft
118   \RequirePackage[absolute]{textpos}
119   \TPGrid{16}{16}
120   \RequirePackage{fancyhdr}
121   \pagestyle{fancy}
122   \renewcommand\headrulewidth{0pt}
123   \renewcommand\footrulewidth{0pt}
124   \setlength{\headheight}{16pt}
125   \fancyhf{}
126   \fancyhead[L,C,LO,CO]{}
127   \fancyhead[R,RO]{
128     \begin{textblock}{4}(11.5,1)
129       \tikz \node [color=gray, rotate=270,
130         font=\ttfamily\scriptsize, text width=5in] at (0,0) {
131           Copyright \textcopyright{} \the\year{} by \theauthor{}.
132           All rights reserved. No part of the contents of
133           this book may be reproduced or transmitted in any
134           form or by any means without the written permission
135           of the publisher. This particular manuscript is
136           printed for \textbf{\therewviewer{}} and may be used only
137           for one-time review. The manuscript has to be destroyed
138           after the review.
139     };
140     \end{textblock}
141   }
142   \fancyfoot[C,CO,CE]{\small\ttfamily
143     page \#\thepage{} of \pageref{LastPage}}
144 \fi
145 \makeatother
```

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

```
146 \renewcommand\maketitle{
147   {\LARGE\textbf{\thetitle}}
148   \\[1em]
149   by \theauthor{}
150   \\[4em]
```

```

151  \ifx\thevolume\empty\else%
152    Volume \thevolume{}\\
153  \fi
154  \ifx\thedate\empty\else%
155    Rendered on \thedate{}
156  \fi
157  \ifx\theversion\empty\else%
158    \\
159    Ver. \theversion{}
160  \fi
161 }

```

\ybPrintTitlePage Then, we define \ybPrintTitlePage command:

```

162 \makeatletter
163 \newcommand\ybPrintTitlePage{
164   \ifdefined\yb@authordraft\else
165     \begin{titlepage}
166       \ttfamily
167       \vspace*{\fill}
168       \noindent
169       {\Huge\thetitle}
170       \\[1em]
171       by \theauthor{}
172       \\[4em]
173       \ifx\thevolume\empty\else%
174         Volume \thevolume{}\\
175       \fi
176       \ifx\thedate\empty\else%
177         \thedate{}
178       \fi
179       \ifx\theversion\empty\else%
180         \\
181         \theversion{}
182       \fi
183       \vspace*{\fill}
184     \end{titlepage}
185   \fi
186 }
187 \makeatother

```

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

```

188 \makeatletter
189 \newcommand\ybPrintTOC{
190   \ifdefined\yb@authordraft\else
191     \ifdefined\yb@compact\else\cleardoublepage\fi
192     \setstretch{0.7}\tableofcontents
193   \fi
194 }
195 \makeatother

```

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

```

196 \RequirePackage{imakeidx}
197 \renewbibmacro*{citeindex}{\indexnames{labelname}{}}
198 \makeindex

```

```

199 \indexsetup{othercode={\hyphenpenalty=10000}}
200 \makeatletter
201 \newcommand{\ybPrintIndex}[1] [Index]{%
202   \ifdefined\yb@authordraft\else
203     \cleardoublepage
204   {
205     \setstretch{1.0}
206     \small
207     \addcontentsline{toc}{chapter}{\#1}
208     \printindex
209   }
210 \fi
211 }
212 \makeatother

```

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

```

213 \RequirePackage{wrapfig}
214 \RequirePackage{mdframed}
215 \RequirePackage{changepage}
216 \strictpagecheck
217 \mdfdefinestyle{quoteodd}{backgroundcolor=black!0,
218   leftmargin=6pt,rightmargin=0pt,
219   innerleftmargin=6pt,innerrightmargin=0pt,
220   innertopmargin=0pt,innerbottommargin=0pt,
221   skipabove=0pt,skipbelow=0pt,
222   linewidth=2pt,
223   topline=false,bottomline=false,rightline=false}
224 \mdfdefinestyle{quoteeven}{backgroundcolor=black!0,
225   rightmargin=6pt,leftmargin=0pt,
226   innerrightmargin=6pt,innerleftmargin=0pt,
227   innertopmargin=0pt,innerbottommargin=0pt,
228   skipabove=0pt,skipbelow=0pt,
229   linewidth=2pt,
230   topline=false,bottomline=false,leftline=false}
231 \makeatletter
232 \newcommand{\ybQuote}[3]{%
233   \ifthenelse{\isempty{#3}}{}{%
234     \ifx\hfuzz\hfuzz%
235       \index{#3}%
236     \else%
237       \index{#3, #2}%
238     \fi%
239   }%
240   \def\yb@body{%
241     \raggedright%
242     \ifx\hfuzz\hfuzz%
243       #1%
244     \else%
245       '#1'\\\raggedleft---#2 #3%
246     \fi%
247   }%
248   \ifdefined\yb@authordraft%
249     \begin{wrapfigure}{r}{0.4\textwidth}%
250       \begin{mdframed}[style=quoteodd]%

```

```

251      \yb@body%
252      \end{mdframed}%
253      \end{wrapfigure}%
254  \else%
255      \begin{wrapfigure}{o}[12pt]{0.4\textwidth}%
256          \sffamily\checkoddpage%
257          \ifoddpage%
258              \begin{mdframed}[style=quoteodd]\yb@body\end{mdframed}%
259          \else%
260              \begin{mdframed}[style=quoteeven]\yb@body\end{mdframed}%
261          \fi%
262          \vspace{-12pt}%
263      \end{wrapfigure}%
264  \fi%
265 }
266 \makeatother

```

Then, we use and configure `footmisc` as suggested [here](#):

```

267 \RequirePackage{perpage}
268 \RequirePackage[bottom,perpage,multiple]{footmisc}
269 \makeatletter
270 \let\yb@oldfootnote\footnote
271 \newcommand\yb@nexttoken\relax
272 \newcommand\yb@isfootnote{%
273     \ifx\footnote\yb@nexttoken\textsuperscript{,}\fi}
274 \renewcommand\footnote[1]{%
275     \yb@oldfootnote{\#1}\futurelet\yb@nexttoken\yb@isfootnote}
276 \makeatother

```

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

```

277 \makeatletter
278 \newcommand\ybPrintBibliography{%
279     \AtNextBibliography{\small}%
280     \raggedright%
281     \ifdefined\yb@manuscript%
282         \setlength\bibitemsep{0pt}%
283         \newpage%
284         \begin{multicols}{2}%
285             \setstretch{1.0}\printbibliography%
286         \end{multicols}%
287     \else
288         \printbibliography
289     \fi
290 }
291 \makeatother

```

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

```

292 \AtBeginDocument{%
293     \raggedbottom%
294     \setlength\topskip{0mm}%
295     \setlength\parindent{0pt}%
296     \setlength\fboxsep{0pt}%
297     \setlength\parskip{6pt}%
298     \interfootnotelinepenalty=10000%

```

299 }

Finally, a few meta commands with default values:

```
300 \newcommand*\thetitle{\textbackslash{}thetitle}
301 \newcommand*\thevolume{}
302 \newcommand*\thedate{}
303 \newcommand*\theversion{\textbackslash{}theversion}
304 \newcommand*\theauthor{\textbackslash{}theauthor}
305 \newcommand*\thereviewer{\textbackslash{}thereviewer}
306
307 \endinput
```

Change History

v0.1.0	v0.4.0
General: Initial version	3 authordraft : The package option draft renamed to draft
v0.2.0	2
General: Started using l3build	3 v0.5.0
v0.3.0	General: The pgfopts package is now used to parse package options.
	3 General: The sparse package option added, to place every section in a new page.
	3

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		
\#	143	\Huge 169
\\"	148, 150, 152, 158, 170, 172, 174, 180, 245	\hyphenpenalty 199
A		I
\addcontentsline	207	\ifciteindex 73, 83
Amazon	1	\ifdefined
\AtBeginDocument	292	11, 15, 31, 34, 62, 63, 64, 93, 98, 104, 105, 112, 117, 164,
\AtNextBibliography	279	190, 191, 202, 248, 281
\authordraft	1	\ifoddpage 257
\bibitemsep	282	\ifthenelse 233
\biblatex	66	\ifx 151, 154, 157, 173, 176, 179, 234, 242, 273
\boolfalse	70, 71, 80, 81	\index 235, 237
C		\indexnames 74, 84, 197
\checkoddpage	256	\indexsetup 199
\citetitle	69, 79	\interfootnotelinepenalty 298
\cleardoublepage	191, 203	L
\compact	1	\LARGE 147
\condensed	89	\libertine 97
\counterwithout	45	\LoadClass 24
\lsstyle		\lsstyle 90
D		M
\DeclareCiteCommand	69, 79	\makeatletter
		10, 30, 61, 92,
E		97, 102, 116, 162,
\endinput	307	188, 200, 231, 269, 277
F		\makeatother
\fancyfoot	142	23, 38, 65, 96, 101, 115, 145, 187,
\fancyhead	126, 127	195, 212, 266, 276, 291
\fancyhf	125	\makeindex 198
\fboxsep	296	\maketitle 146
\fill	167, 183	\manuscript 1
\footnote	270, 273, 274	\mdfdefinestyle 217, 224
\footrulewidth	123	\microtype 92
\futurelet	275	\multicitedelim 77, 87
G		N
\geometry	25, 26, 32, 35	\newpage 104, 110, 283
H		\node 129
\headheight	124	\noindent 168
\headrulewidth	122	P
\hfuzz	234, 242	\pageref 143
		T
		\tableofcontents 192
		\textbackslash 300, 303, 304, 305
		\textbf 136, 147

\textcopyright	131	\topskip	294	\yb@isfootnote	. 272, 275
\textsupscript	273	\TPGrid	119	\yb@manuscript	.... . 6, 15, 34, 64, 98, 281
\textwidth	249, 255	\ttfamily	.. 130, 142, 166	\yb@nexttoken	271, 273, 275
\the	131	U		\yb@oldfootnote	270, 275
\theauthor	131, 149, 171, 304	\usebibmacro	72, 78, 82, 88	\yb@oldsection	.... . 103, 110, 113
\thedate	154, 155, 176, 177, 179, 302	\usetikzlibrary	41, 42, 43	\yb@sectstart	104, 110, 113
\thepage	143	V		\yb@sparse	.... . 7, 104
\thereviewer	136, 305	\vspace	. 113, 167, 183, 262	\ybPrintBibliography	..... 1, 277
\thetitle	.. 147, 169, 300			\ybPrintIndex	.... . 1, 196
\theversion	..... ... 157, 159, 181, 303	Y		\ybPrintTitlePage	1, 162
\thevolume	..... 151, 152, 173, 174, 301	\yb@authordraft	.. 4, 11, 31, 62, 93, 105, 117, 164, 190, 202, 248	\ybPrintTOC	.... . 1, 188
\tikz	129	\yb@body	240, 251, 258, 260	\ybQuote	.... . 1, 213
\titlespacing	.... . 109	\yb@compact	5, 63, 112, 191	\year	.... . 131