



# LaTeX Class `yb-book`<sup>\*</sup>

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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 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   apa/.store in=\yb@apa,
5   authordraft/.store in=\yb@authordraft,
6   compact/.store in=\yb@compact,
7   manuscript/.store in=\yb@manuscript,
8   sparse/.store in=\yb@sparse,
9 }
10 \ProcessPgfPackageOptions{/yb}
```

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

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

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

```
26 \PassOptionsToPackage{utf8}{inputenc}
27 \RequirePackage{inputenc}
```

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

```
28 \RequirePackage{geometry}
29 \geometry{
30   paperwidth=6in, paperheight=9in,
```

```

31   bindingoffset=0.25in,
32   left=0.75in, right=0.75in, top=0.75in, bottom=1.25in}
33 \makeatletter
34 \ifdefined\yb@authordraft
35   \geometry{a4paper, margin=1in, left=1.5in}
36 \else
37   \ifdefined\yb@manuscript
38     \geometry{a4paper, margin=1.2in}
39   \fi
40 \fi
41 \makeatother

```

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

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

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

```
43 \RequirePackage{anyfontsize}
```

Then, we load `tikz` for graphics:

```

44 \RequirePackage{tikz}
45 \usetikzlibrary{positioning}
46 \usetikzlibrary{shapes}
47 \usetikzlibrary{fit}

```

Then, we load `chngcntr` for something else:

```

48 \RequirePackage{chngcntr}
49 \counterwithout{footnote}{chapter}

```

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

```
50 \RequirePackage{lastpage}
```

Then, we load `paralist` for inline enumeration:

```
51 \RequirePackage{paralist}
```

Then, we load `xcolor` for colors:

```
52 \RequirePackage{xcolor}
```

Then, we load `graphicx` to enable graphic files inclusion:

```
53 \RequirePackage{graphicx}
```

Then, we load `enumitem` for inline enumeration:

```

54 \PassOptionsToPackage{inline}{enumitem}
55 \RequirePackage{enumitem}
56 \setlist{nosep}

```

Then, we load `float` for floating figures:

```
57 \RequirePackage{float}
```

Then, we load `ulem` for inline lists:

```

58 \PassOptionsToPackage{normalem}{url}
59 \RequirePackage{ulem}

```

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

```

60 \RequirePackage{xfp}
61 \RequirePackage{xifthen}

```

Then, we load `soul` for highlighting:

```
62 \RequirePackage{soul}
```

Then, we load `csquotes` for better rendering:

```
63 \PassOptionsToPackage{autostyle=try}{csquotes}
64 \RequirePackage{csquotes}
```

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

```
65 \pagestyle{plain}
```

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

```
66 \RequirePackage{setspace}
67   \setstretch{1.2}
68   \makeatletter
69   \ifdefined\yb@compact\setstretch{1.0}\fi
70   \ifdefined\yb@manuscript\setstretch{1.1}\fi
71   \ifdefined\yb@authordraft\setstretch{1.4}\fi
72   \makeatother
```

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

```
73 \PassOptionsToPackage{indexing=cite,
74   natbib=true,maxnames=2,minnames=1,doi=true,
75   url=false,isbn=false,isbn=false}{biblatex}
76 \makeatletter
77 \ifdefined\yb@apa
78   \PassOptionsToPackage{style=authoryear}{biblatex}
79 \else
80   \PassOptionsToPackage{style=numeric}{biblatex}
81 \fi
82 \makeatother
83 \RequirePackage{doi}
84 \RequirePackage{biblatex}
85   \DeclareCiteCommand{\citetitle}
86     {\boolfalse{citetracker}%
87      \boolfalse{pagetracker}%
88      \usebibmacro{prenote}%
89      \ifcriteindex
90        {\indexnames{labelname}%
91         {}%
92         \printfield[citetitle]{labeltitle}%
93         {\multicitedelim}%
94         \usebibmacro{postnote}%
95       \DeclareCiteCommand*\{\citetitle}
96         {\boolfalse{citetracker}%
97          \boolfalse{pagetracker}%
98          \usebibmacro{prenote}%
99          \ifcriteindex
100            {\indexnames{labelname}%
101             {}%
102             \printfield[citetitle]{title}%
103             {\multicitedelim}%
104             \usebibmacro{postnote}}
```

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

```

105 \newenvironment{condensed}
106   {\begingroup\setstretch{1.0}\lsstyle}
107   {\endgroup}

```

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

```

108 \makeatletter
109 \ifdefined\yb@authordraft\else
110   \PassOptionsToPackage{letterspace=-50,nopatch=footnote}{microtype}
111   \RequirePackage{microtype}
112 \fi
113 \makeatother

```

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

```

114 \makeatletter
115 \ifdefined\yb@manuscript
116   \PassOptionsToPackage{tt=false,type1=true}{libertine}
117   \RequirePackage{libertine}
118 \fi
119 \makeatother

```

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

```

120 \makeatletter
121 \let\yb@oldsection\section
122 \def\yb@secstart{\ifdefined\yb@sparse\newpage\fi}
123 \ifdefined\yb@authordraft
124   \PassOptionsToPackage{medium}{titlesec}
125   \RequirePackage{titlesec}
126 \else
127   \PassOptionsToPackage{raggedright}{titlesec}
128   \RequirePackage{titlesec}
129   \titlespacing{\section}{0in}{6pt}{6pt}[1in]
130   \renewcommand\section{\yb@secstart\yb@oldsection}
131 \fi
132 \ifdefined\yb@compact
133   \renewcommand\section{\yb@secstart\vspace{2em}\yb@oldsection}
134 \fi
135 \makeatother

```

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

```

136 \makeatletter
137 \ifdefined\yb@authordraft
138   \PassOptionsToPackage{absolute}{textpos}
139   \RequirePackage{textpos}
140   \TPGrid{16}{16}
141   \RequirePackage{fancyhdr}
142   \pagestyle{fancy}
143   \renewcommand\headrulewidth{0pt}
144   \renewcommand\footrulewidth{0pt}
145   \setlength{\headheight}{16pt}
146   \fancyhf{}
147   \fancyhead[L,C,LO,CO]{}
148   \fancyhead[R,RO]{}
149   \begin{textblock}{16}[0.5,0.5](8,8)%
150     \tikz \node[minimum width=16\TPHorizModule] {%

```

```

151      \fontsize{64}{64}\selectfont\bfseries%
152      \rotatebox{45}%
153      \tikz \node
154      [fill=gray!6, font=\ttfamily\color{white}]
155      {it is a draft};%
156      }%
157      };%
158  \end{textblock}%
159  \begin{textblock}{4}(11.5,1)%
160  \tikz \node [color=gray, rotate=270,
161  font=\ttfamily\scriptsize, text width=8in] at (0,0) {%
162  Copyright \textcopyright{} \the\year{} by \theauthor{}.
163  All rights reserved. No part of the contents of
164  this book may be reproduced or transmitted in any
165  form or by any means without the written permission
166  of the publisher. This particular manuscript is
167  printed for \textbf{\thereviewer{}} and may be used only
168  for one-time review. The manuscript has to be destroyed
169  after the review.%}
170  };
171  \end{textblock}
172 }
173 \fancyfoot[C,CO,C]{\small\ttfamily%
174   page \#\thepage{} of \pageref{LastPage}}
175 \fi
176 \makeatother

```

\maketitle Then, we redefine \maketitle command:

```

177 \renewcommand\maketitle{
178   {\LARGE\textbf{\thetitle}}
179   \\[1em]
180   by \theauthor{}
181   \\[4em]
182   \ifx\thevolume\empty\else%
183     Volume \thevolume{}\\
184   \fi
185   \ifx\thedate\empty\else%
186     Rendered on \thedate{}
187   \fi
188   \ifx\theversion\empty\else%
189     \\
190     Ver. \theversion{}
191   \fi
192 }

```

\ybPrintTitlePage Then, we define \ybPrintTitlePage command:

```

193 \makeatletter
194 \newcommand\ybPrintTitlePage{%
195   \ifdefined\yb@authordraft\else
196     \begin{titlepage}
197       \ttfamily
198       \vspace*{\fill}
199       \noindent
200       {\Huge\thetitle}

```

```

201      \\[1em]
202      by \theauthor{}
203      \\[4em]
204      \ifx\thevolume\empty\else%
205          Volume \thevolume{}\\
206      \fi
207      \ifx\thedate\empty\else%
208          \thedate{}%
209      \fi
210      \ifx\thedate\empty\else%
211          \\
212          \theversion{}%
213      \fi
214      \vspace*{\fill}
215      \end{titlepage}
216  \fi
217 }
218 \makeatother

```

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

```

219 \makeatletter
220 \newcommand\ybPrintTOC{%
221   \ifdefined\yb@authordraft\else%
222     \ifdefined\yb@compact\else\cleardoublepage\fi%
223     {\setstretch{0.7}\tableofcontents}%
224   \fi%
225 }
226 \makeatother

```

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

```

227 \RequirePackage{imakeidx}
228 \renewbibmacro*[citeindex]{\indexnames{labelname}{}}%
229 \makeindex
230 \indexsetup{othercode={\hyphenpenalty=10000}}
231 \makeatletter
232 \newcommand\ybPrintIndex[1][Index]{%
233   \ifdefined\yb@authordraft\else%
234     \ifdefined\yb@compact\else\cleardoublepage\fi%
235   \fi%
236   \setstretch{1.0}%
237   \small%
238   \addcontentsline{toc}{chapter}{\#1}%
239   \printindex%
240   }%
241 \fi%
242 }
243 \makeatother

```

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

```

244 \RequirePackage{wrapfig}
245 \RequirePackage{mdframed}
246 \RequirePackage{changepage}
247 \strictpagecheck
248 \mdfdefinestyle{quoteodd}{backgroundcolor=black!0,

```

```

249  leftmargin=6pt,rightmargin=0pt,
250  innerleftmargin=6pt,innerrightmargin=0pt,
251  innertopmargin=0pt,innerbottommargin=0pt,
252  skipabove=0pt,skipbelow=0pt,
253  linewidth=2pt,
254  topline=false,bottomline=false,rightline=false}
255 \mdfdefinestyle{quoteeven}{backgroundcolor=black!0,
256  rightmargin=6pt,leftmargin=0pt,
257  innerrightmargin=6pt,innerleftmargin=0pt,
258  innertopmargin=0pt,innerbottommargin=0pt,
259  skipabove=0pt,skipbelow=0pt,
260  linewidth=2pt,
261  topline=false,bottomline=false,leftline=false}
262 \makeatletter
263 \newcommand\ybQuote[3]{%
264   \ifthenelse{\isempty{#3}}{}{%
265     \ifx\hfuzz\hfuzz%
266       \index{#3}%
267     \else%
268       \index{#3, #2}%
269     \fi%
270   }%
271   \def\yb@body{%
272     \raggedright%
273     \ifx\hfuzz\hfuzz%
274       #1%
275     \else%
276       '#1'\raggedleft---#2 #3%
277     \fi%
278   }
279   \ifdefined\yb@authordraft%
280     \begin{wrapfigure}{r}{0.4\textwidth}%
281       \begin{mdframed}[style=quoteodd]%
282         \yb@body%
283       \end{mdframed}%
284     \end{wrapfigure}%
285   \else%
286     \begin{wrapfigure}{o}[12pt]{0.4\textwidth}%
287       \sffamily\checkoddpage%
288       \ifoddpage%
289         \begin{mdframed}[style=quoteodd]\yb@body\end{mdframed}%
290       \else%
291         \begin{mdframed}[style=quoteeven]\yb@body\end{mdframed}%
292       \fi%
293       \vspace{-12pt}%
294     \end{wrapfigure}%
295   \fi%
296 }
297 \makeatother

```

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

```

298 \RequirePackage{perpage}
299 \PassOptionsToPackage{bottom,perpage,multiple}{footmisc}
300 \RequirePackage{footmisc}

```

```

301 \makeatletter
302   \let\yb@oldfootnote\footnote
303 \newcommand\yb@nexttoken\relax
304 \newcommand\yb@isfootnote{%
305   \ifx\footnote\yb@nexttoken\textsuperscript{,}\fi}
306 \renewcommand\footnote[1]{%
307   \yb@oldfootnote{\#1}\futurelet\yb@nexttoken\yb@isfootnote}
308 \makeatother

```

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

```

309 \makeatletter
310 \newcommand\ybPrintBibliography[1][Bibliography]{%
311   \AtNextBibliography{\small}%
312   \raggedright%
313   \ifdefined\yb@manuscript%
314     \setlength\bibitemsep{0pt}%
315     \newpage%
316     \begin{multicols}{2}%
317       {\setstretch{1.0}\printbibliography}%
318     \end{multicols}%
319   \else%
320     \setlength\bibitemsep{.2em}%
321     \ifdefined\yb@compact\@openrightfalse\fi%
322     \@openrightfalse%
323     \printbibliography[heading=bibintoc,title={#1}]%
324     \ifdefined\yb@compact\@openrighttrue\fi%
325   \fi%
326 }
327 \makeatother

```

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

```

328 \makeatletter
329 \AtBeginDocument{%
330   \raggedbottom%
331   \ifdefined\yb@authordraft%
332     \raggedright%
333   \fi%
334   \setlength\topskip{0mm}%
335   \setlength\parindent{0pt}%
336   \setlength\fboxsep{0pt}%
337   \setlength\parskip{6pt}%
338   \interfootnotelinepenalty=10000%
339 }
340 \makeatother

```

Finally, a few meta commands with default values:

```

341 \newcommand*\thetitle{\textbackslash{}thetitle}
342 \newcommand*\thevolume{ }
343 \newcommand*\thedate{ }
344 \newcommand*\theversion{\textbackslash{}theversion}
345 \newcommand*\theauthor{\textbackslash{}theauthor}
346 \newcommand*\therewviewer{\textbackslash{}therewviewer}
347
348 \endinput

```

## Change History

v0.1.0	General: Initial version . . . . .	3	v0.5.1	General: Added the usage of <code>inputenc</code> in order to ensure UTF-8 encoding for the sources. . . . .	3
v0.2.0	General: Started using l3build . . . . .	3	v0.6.0	General: The <code>apa</code> package option added, to enable APA citation style. . . . .	3
v0.3.0	General: The <code>pgfopts</code> package is now used to parse package options. . . . .	3	v0.6.2	\ybPrintBibliography: The <code>\ybPrintBibliography</code> command has an optional argument, which is the title of the chapter. . . . .	10
v0.4.0	<code>authordraft</code> : The package option <code>draft</code> renamed to <code>draft</code> . . . . .	2			
v0.5.0	General: The <code>sparse</code> 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	H	I	P
\# .....	174	\headheight .....	145
\@openrightfalse	321, 322	\headrulewidth .....	143
\@openrighttrue	324	\hfuzz .....	265, 273
\\" .....	179, 181, 183, 189, 201, 203, 205, 211, 276	\Huge .....	200
		\hyphenpenalty .....	230
<b>A</b>	<b>I</b>		
\addcontentsline ..	238	\ifciteindex .....	89, 99
Amazon .....	1	\ifdefined .....	12, 16, 34, 37, 69, 70, 71,
\AtBeginDocument ..	329		77, 109, 115, 122,
\AtNextBibliography	311		123, 132, 137, 195,
\authordraft .....	1		221, 222, 233, 234,
			279, 313, 321, 324, 331
<b>B</b>	<b>I</b>		
\bfseries .....	151	\ifoddpage .....	288
\bibitemsep .....	314, 320	\ifthenelse .....	264
\biblatex .....	73	\ifx .	182, 185, 188, 204, 207, 210, 265, 273, 305
\boolefalse ..	86, 87, 96, 97	\index .....	266, 268
		\indexnames ..	90, 100, 228
		\indexsetup .....	230
		\interfootnotelinepenalty .....	338
<b>C</b>	<b>L</b>		
\checkoddpage .....	287	\LARGE .....	178
\citetitle .....	85, 95	\libertine .....	114
\cleardoublepage	222, 234	\LoadClass .....	25
\color .....	154	\lsstyle .....	106
\compact .....	1		
\condensed .....	105		
\counterwithout .....	49		
<b>D</b>	<b>M</b>		
\DeclareCiteCommand .....	85, 95	\makeatletter .....	11,
			33, 68, 76, 108, 114,
<b>E</b>	<b>N</b>		120, 136, 193, 219,
\endinput .....	348		231, 262, 301, 309, 328
		\makeatother .....	24,
<b>F</b>	<b>S</b>		41, 72, 82, 113, 119,
\fancyfoot .....	173		135, 176, 218, 226,
\fancyhead .....	147, 148		243, 297, 308, 327, 340
\fancyhf .....	146	\makeindex .....	229
\fboxsep .....	336	\maketitle .....	177
\fill .....	198, 214	\manuscript .....	1
\fontsize .....	151	\mdfdefinestyle	248, 255
\footnote ..	302, 305, 306	\microtype .....	108
\footrulewidth .....	144	\multicitedelim .	93, 103
\futurelet .....	307		
<b>G</b>	<b>T</b>		
\geometry ..	28, 29, 35, 38	\newpage .....	122, 315

```

\setstretch . 67, 69, 70,          \theversion ..... 71, 109, 123, 137,
    71, 106, 223, 236, 317       ... 188, 190, 212, 344
\sffamily ..... 287           \thevolume ..... 182, 183, 204, 205, 342
\small ..... 173, 237, 311      \tikz ..... 150, 153, 160
\sparse ..... 1                \titlespacing ..... 129
\strictpagecheck ... 247       \topskip ..... 334
                                \TPGrid ..... 140
                                \TPHorizModule ..... 150
\tableofcontents ... 223        \ttfamily 154, 161, 173, 197
\textbackslash .....             \usebibmacro 88, 94, 98, 104
... 341, 344, 345, 346         \usetikzlibrary 45, 46, 47
\textbf ..... 167, 178          \vspace .. 133, 198, 214, 293
\textcopyright ..... 162         \yb@apa ..... 4, 77
\textsuperscript ... 305        \yb@authordraft ...
\textwidth ..... 280, 286       \yb@apa ..... 5, 12, 34,
\the ..... 162                 \yb@body 271, 282, 289, 291
\theauthor 162, 180, 202, 345   \yb@compact ..... 6, 69,
\thedate ..... 185,             132, 222, 234, 321, 324
... 186, 207, 208, 210, 343   \yb@isfootnote . 304, 307
\thepage ..... 174             \yb@manuscript .....
\thereviewer ... 167, 346       \yb@nexttoken 303, 305, 307
\thetitle ... 178, 200, 341    \yb@oldfootnote 302, 307

```

**T**

**U**

**V**

**Y**

**Z**