

Y. B.

LaTeX Class yb-book*

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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 Lebowksi}
\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 for fiction books. I use this option to render [Code Ahead](#) book.
- `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.

*The sources are in GitHub at [yegor256/yb-book.cls](https://github.com/yegor256/yb-book.cls)

`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:

```
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 }
8 \ProcessPgfPackageOptions{/yb}
```

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

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

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

```
22 \RequirePackage{geometry}
23 \geometry{paperwidth=6in, paperheight=9in, bindingoffset=0.25in,
24   left=0.75in, right=0.75in, top=0.75in, bottom=1.25in}
25 \makeatletter\ifdefined\yb@authordraft
26  \geometry{a4paper, margin=1in, left=1.5in}
27 \else
28  \ifdefined\yb@manuscript
29    \geometry{a4paper, margin=1.2in}
30  \fi
31 \fi\makeatother
```

Then, we configure input encoding for UTF-8:

```
32 \RequirePackage[T1]{fontenc}
33 \RequirePackage[utf8]{inputenc}
34 \RequirePackage{lmodern}
```

Then, we load [anyfontsize](#) to enable all sizes of fonts:

```
35 \RequirePackage{anyfontsize}
```

Then, we load [tikz](#) for graphics:

```
36 \RequirePackage{tikz}
37 \usetikzlibrary{positioning}
38 \usetikzlibrary{shapes}
39 \usetikzlibrary{fit}
```

Then, we load [chngcntr](#) for something else:

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

Then, we load [lastpage](#) to enable rendering of the last page number:

```
42 \RequirePackage{lastpage}
```

Then, we load [paralist](#) for inline enumeration:

```
43 \RequirePackage{paralist}
```

Then, we load [xcolor](#) for colors:

```
44 \RequirePackage{xcolor}
```

Then, we load [graphicx](#) to enable graphic files inclusion:

```
45 \RequirePackage{graphicx}
```

Then, we load [enumitem](#) for inline enumeration:

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

Then, we load more packages:

```
48 \RequirePackage{float}
49 \RequirePackage[normalem]{ulem}
50 \RequirePackage{xfp}
51 \RequirePackage{soul}
52 \RequirePackage{xifthen}
53 \RequirePackage[autostyle=try]{csquotes}
```

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

```
54 \pagestyle{plain}
```

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

```
55 \RequirePackage{setspace}
56 \setstretch{1.2}
57 \makeatletter\ifdefined\yb@authordraft\setstretch{1.1}\fi\makeatother
58 \makeatletter\ifdefined\yb@compact\setstretch{1.0}\fi\makeatother
59 \makeatletter\ifdefined\yb@manuscript\setstretch{1.1}\fi\makeatother
```

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

```
60 \RequirePackage[indexing=cite,style=authoryear,
61 natbib=true,maxnames=1,minnames=1,doi=false,
62 url=false,isbn=false,isbn=false]{biblatex}
63 \DeclareCiteCommand{\citetitle}
64 {\boolfalse{citetracker}}%
65 {\boolfalse{pagetracker}}%
66 {\usebibmacro{prenote}}
```

```

67  {\ifcindex
68    {\indexnames{labelname}}
69    }%
70    \printfield[citetitle]{labeltitle}}
71  {\multicitedelim}
72  {\usebibmacro{postnote}}
73  \DeclareCiteCommand*{\citetitle}
74  {\boolfalse{citetracker}%
75   \boolfalse{pagetracker}%
76   \usebibmacro{prenote}}
77  {\ifcindex
78    {\indexnames{labelname}}
79    }%
80    \printfield[citetitle]{title}}
81  {\multicitedelim}
82  {\usebibmacro{postnote}}

```

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

```

83 \newenvironment{condensed}
84  {\begingroup\setstretch{1.0}\lsstyle}
85  {\endgroup}

```

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

```

86 \makeatletter\ifdefined\yb@authordraft\else
87   \RequirePackage[letterspace=-50]{microtype}
88 \fi\makeatother

```

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

```

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

```

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

```

92 \makeatletter
93 \let\yb@oldsection\section
94 \ifdefined\yb@authordraft
95   \RequirePackage[medium]{titlesec}
96 \else
97   \RequirePackage[raggedright]{titlesec}
98   \titlespacing{\section}{0in}{6pt}{6pt}[1in]
99   \renewcommand\section{\newpage\yb@oldsection}
100 \fi
101 \ifdefined\yb@compact
102   \renewcommand\section{\vspace{2em}\yb@oldsection}
103 \fi
104 \makeatother

```

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

```

105 \makeatletter\ifdefined\yb@authordraft
106   \RequirePackage[absolute]{textpos}
107   \TPGrid{16}{16}
108   \RequirePackage{fancyhdr}

```

```

109 \pagestyle{fancy}
110 \renewcommand\headrulewidth{0pt}
111 \renewcommand\footrulewidth{0pt}
112 \setlength\headheight{16pt}
113 \fancyhf{}
114 \fancyhead[L,C,LO,CO]{}
115 \fancyhead[R,RO]{
116   \begin{textblock}{4}(11.5,1)
117     \tikz \node [color=gray, rotate=270,
118       font=\ttfamily\scriptsize, text width=5in] at (0,0) {
119       Copyright \textcopyright{} \the\year{} by \theauthor{}.
120       All rights reserved. No part of the contents of
121       this book may be reproduced or transmitted in any
122       form or by any means without the written permission
123       of the publisher. This particular manuscript is
124       printed for \textbf{\thereviewer{}} and may be used only
125       for one-time review. The manuscript has to be destroyed
126       after the review.
127     };
128   \end{textblock}
129 }
130 \fancyfoot[C,CO,CE]{\small\ttfamily
131   page \#\thepage{} of \pageref{LastPage}}
132 \fi\makeatother

```

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

```

133 \renewcommand\maketitle{
134   {\LARGE\textbf{\thetitle}}
135   \[1em]
136   by \theauthor{}
137   \[4em]
138   \ifx\thevolume\empty\else%
139     Volume \thevolume{}\[
140   \fi
141   \ifx\thedate\empty\else%
142     Rendered on \thedate{}
143   \fi
144   \ifx\theversion\empty\else%
145     \[
146     Ver. \theversion{}
147   \fi
148 }

```

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

```

149 \makeatletter\newcommand\ybPrintTitlePage{
150   \ifdefined\yb@authordraft\else
151     \begin{titlepage}
152       \ttfamily
153       \vspace*{\fill}
154       \noindent
155       {\Huge\textbf{\thetitle}}
156       \[1em]
157       by \theauthor{}
158       \[4em]

```

```

159     \ifx\thevolume\empty\else%
160         Volume \thevolume{ }\
161     \fi
162     \ifx\thedate\empty\else%
163         \thedate{}
164     \fi
165     \ifx\thedate\empty\else%
166         \
167         \theversion{}
168     \fi
169     \vspace*{\fill}
170     \end{titlepage}
171 \fi
172 }\makeatother

```

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

```

173 \makeatletter\newcommand\ybPrintTOC{
174     \ifdefined\yb@authordraft\else
175         \ifdefined\yb@compact\else\cleardoublepage\fi
176         {\setstretch{0.7}\tableofcontents}
177     \fi
178 }\makeatother

```

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

```

179 \RequirePackage{imakeidx}
180 \renewbibmacro*{citeindex}{\indexnames{labelname}{}}
181 \makeindex
182 \indexsetup{othercode={\hyphenpenalty=10000}}
183 \makeatletter\newcommand\ybPrintIndex[1][Index]{
184     \ifdefined\yb@authordraft\else
185         \cleardoublepage
186         {
187             \setstretch{1.0}
188             \small
189             \addcontentsline{toc}{chapter}{#1}
190             \printindex
191         }
192     \fi
193 }\makeatother

```

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

```

194 \RequirePackage{wrapfig}
195 \RequirePackage{mdframed}
196 \RequirePackage{changepage}
197 \strictpagecheck
198 \mdfdefinestyle{quoteodd}{backgroundcolor=black!0,
199     leftmargin=6pt,rightmargin=0pt,
200     innerleftmargin=6pt,innerrightmargin=0pt,
201     innertopmargin=0pt,innerbottommargin=0pt,
202     skipabove=0pt,skipbelow=0pt,
203     linewidth=2pt,
204     topline=false,bottomline=false,rightline=false}
205 \mdfdefinestyle{quoteeven}{backgroundcolor=black!0,
206     rightmargin=6pt,leftmargin=0pt,

```

```

207 innerrightmargin=6pt,innerleftmargin=0pt,
208 innertopmargin=0pt,innerbottommargin=0pt,
209 skipabove=0pt,skipbelow=0pt,
210 linewidth=2pt,
211 topline=false,bottomline=false,leftline=false}
212 \makeatletter\newcommand\ybQuote[3]{%
213 \ifthenelse{\isempty{#3}}{ }{
214 \ifx\hfuzz#2\hfuzz%
215 \index{#3}%
216 \else%
217 \index{#3, #2}%
218 \fi%
219 }%
220 \def\yb@body{%
221 \raggedright%
222 \ifx\hfuzz#3\hfuzz%
223 #1%
224 \else%
225 ‘#1’\ \raggedleft---#2 #3%
226 \fi%
227 }
228 \ifdefined\yb@authordraft%
229 \begin{wrapfigure}{r}{0.4\textwidth}%
230 \begin{mdframed}[style=quoteodd]%
231 \yb@body%
232 \end{mdframed}%
233 \end{wrapfigure}%
234 \else%
235 \begin{wrapfigure}{o}[12pt]{0.4\textwidth}%
236 \sffamily\checkoddpage%
237 \ifoddpage%
238 \begin{mdframed}[style=quoteodd]\yb@body\end{mdframed}%
239 \else%
240 \begin{mdframed}[style=quoteeven]\yb@body\end{mdframed}%
241 \fi%
242 \vspace{-12pt}
243 \end{wrapfigure}%
244 \fi%
245 }\makeatother

```

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

```

246 \RequirePackage{perpage}
247 \RequirePackage[bottom,perpage,multiple]{footmisc}
248 \makeatletter
249 \let\yb@oldfootnote\footnote
250 \newcommand\yb@nexttoken\relax
251 \newcommand\yb@isfootnote{%
252 \ifx\footnote\yb@nexttoken\textsuperscript{,}\fi}
253 \renewcommand\footnote[1]{%
254 \yb@oldfootnote{#1}\futurelet\yb@nexttoken\yb@isfootnote}
255 \makeatother

```

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

```

256 \makeatletter\newcommand\ybPrintBibliography{%

```



```

257 \AtNextBibliography{\small}%
258 \raggedright%
259 \ifdefined\yb@manuscript%
260   \setlength\bibitemsep{0pt}%
261   \newpage%
262   \begin{multicols}{2}
263     {\setstretch{1.0}\printbibliography}
264   \end{multicols}
265 \else
266   \printbibliography
267 \fi
268 }\makeatother

```

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

```

269 \AtBeginDocument{%
270   \raggedbottom%
271   \setlength\topskip{0mm}%
272   \setlength\parindent{0pt}%
273   \setlength\fbboxsep{0pt}%
274   \setlength\parskip{6pt}%
275   \interfootnotelinepenalty=10000%
276 }

```

Finally, a few meta commands with default values:

```

277 \newcommand*\thetitle{\textbackslash{}thetitle}
278 \newcommand*\thevolume{}
279 \newcommand*\thedate{}
280 \newcommand*\theversion{\textbackslash{}theversion}
281 \newcommand*\theauthor{\textbackslash{}theauthor}
282 \newcommand*\thereviewer{\textbackslash{}thereviewer}

```

Change History

v0.1.0		used to parse package options. . . .	3
General: Initial version	3	v0.4.0	
v0.2.0		authordraft: The package option	
General: Started using l3build	3	draft renamed to draft	2
v0.3.0			
General: The pgfopts package is now			

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.

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