

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)

`draft` 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[draft]{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*\thedata{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 use `xkeyval` package for package options parsing:

```
1 \RequirePackage{xkeyval}
2 \makeatletter
3 \newif\ifyb@draft
4 \DeclareOptionX{draft}{\yb@draftrue}
5 \newif\ifyb@compact
6 \DeclareOptionX{compact}{\yb@compacttrue}
7 \newif\ifyb@manuscript
8 \DeclareOptionX{manuscript}{\yb@manuscripttrue}
9 \ProcessOptionsX
10 \makeatother
```

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

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

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

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

Then, we configure input encoding for UTF-8:

```
34 \RequirePackage[T1]{fontenc}
35 \RequirePackage[utf8]{inputenc}
36 \RequirePackage{lmodern}
```

Then, we load many important packages:

```
37 \RequirePackage{anyfontsize}
38 \RequirePackage{tikz}
39 \usetikzlibrary{positioning}
40 \usetikzlibrary{shapes}
41 \usetikzlibrary{fit}
42 \RequirePackage{chngcntr}
43 \counterwithout{footnote}{chapter}
44 \RequirePackage{lastpage}
45 \RequirePackage{paralist}
46 \RequirePackage{xcolor}
47 \RequirePackage{graphicx}
48 \RequirePackage[inline]{enumitem}
49 \setlist{nosep}
50 \RequirePackage{float}
51 \RequirePackage[normalem]{ulem}
52 \RequirePackage{xfp}
53 \RequirePackage{soul}
54 \RequirePackage{xifthen}
55 \RequirePackage[autostyle=try]{csquotes}
```

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

```
56 \pagestyle{plain}
```

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

```
57 \RequirePackage{setspace}
58 \setstretch{1.2}
59 \makeatletter\ifyb@draft\setstretch{1.1}\fi\makeatother
60 \makeatletter\ifyb@compact\setstretch{1.0}\fi\makeatother
61 \makeatletter\ifyb@manuscript\setstretch{1.1}\fi\makeatother
```

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

```
62 \RequirePackage[indexing=cite,style=authoryear,
63 natbib=true,maxnames=1,minnames=1,doi=false,
64 url=false,isbn=false,isbn=false]{biblatex}
65 \DeclareCiteCommand{\citetitle}
66 {\boolfalse{citetracker}%
67 \boolfalse{pagetracker}%
68 \usebibmacro{prenote}}
69 {\ifciteindex
70 {\indexnames{labelname}}
71 {}%
72 \printfield[citetitle]{labeltitle}}
73 {\multicitedelim}
74 {\usebibmacro{postnote}}
75 \DeclareCiteCommand*{\citetitle}
76 {\boolfalse{citetracker}%
77 \boolfalse{pagetracker}%
78 \usebibmacro{prenote}}
79 {\ifciteindex
80 {\indexnames{labelname}}
81 {}%
```

```

82 \printfield[citetitle]{title}}
83 {\multicitedelim}
84 {\usebibmacro{postnote}}

```

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

```

85 \newenvironment{condensed}
86 {\begin{group}\setstretch{1.0}\lsstyle}
87 {\end{group}}

```

microtype Then, we include microtype for better rendering:

```

88 \makeatletter\ifyb@draft\else
89 \RequirePackage[letterspace=-50]{microtype}
90 \fi\makeatother

```

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

```

91 \makeatletter\ifyb@manuscript
92 \RequirePackage[tt=false,type1=true]{libertine}
93 \fi\makeatother

```

\section Then, we redefine \section command:

```

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

```

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

```

107 \makeatletter\ifyb@draft
108 \RequirePackage{fancyhdr}
109 \pagestyle{fancy}
110 \renewcommand\headrulewidth{0pt}
111 \renewcommand\footrulewidth{0pt}
112 \fancyhf{}
113 \fancyhead[L,C,L0,C0]{}
114 \fancyhead[R,R0]{
115 \begin{tikzpicture}
116 \node [color=gray, rotate=270,
117 font=\ttfamily\scriptsize, text width=5in] at (0,0) {
118 Copyright \textcopyright{} \the\year{} by \theauthor{}.
119 All rights reserved. No part of the contents of
120 this book may be reproduced or transmitted in any
121 form or by any means without the written permission
122 of the publisher. This particular manuscript is
123 printed for \textbf{\thereviewer}} and may be used only

```

```

124     for one-time review. The manuscript has to be destroyed
125     after the review.
126   };
127   \end{tikzpicture}\end{textblock}
128 }
129 \fancyfoot[C,CO]{\small\ttfamily
130   page \#\thepage{} of \pageref{LastPage}}
131 \fi\makeatother

```

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

```

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

```

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

```

148 \makeatletter\newcommand\ybPrintTitlePage{
149   \ifyb@draft\else
150     \begin{titlepage}
151       \ttfamily
152       \vspace*{\fill}
153       \noindent
154       {\Huge\textbf{\thetitle}}
155       \[1em]
156       by \theauthor{}
157       \[4em]
158       \ifx\thevolume\empty\else%
159         Volume \thevolume{}\
160       \fi
161       \ifx\thedata\empty\else%
162         \thedata{}
163       \fi
164       \ifx\thedata\empty\else%
165         \
166         \theversion{}
167       \fi
168       \vspace*{\fill}
169     \end{titlepage}
170   \fi
171 }\makeatother

```

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

```

172 \makeatletter\newcommand\ybPrintTOC{
173   \ifyb@draft\else
174     \ifyb@compact\else\cleardoublepage\fi
175     {\setstretch{0.7}\tableofcontents}
176   \fi
177 }\makeatother

```

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

```

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

```

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

```

193 \RequirePackage{wrapfig}
194 \RequirePackage{mdframed}
195 \RequirePackage{changepage}
196 \strictpagecheck
197 \mdfdefinestyle{quoteodd}{backgroundcolor=black!0,
198   leftmargin=6pt,rightmargin=0pt,
199   innerleftmargin=6pt,innerrightmargin=0pt,
200   innertopmargin=0pt,innerbottommargin=0pt,
201   skipabove=0pt,skipbelow=0pt,
202   linewidth=2pt,
203   topline=false,bottomline=false,rightline=false}
204 \mdfdefinestyle{quoteeven}{backgroundcolor=black!0,
205   rightmargin=6pt,leftmargin=0pt,
206   innerrightmargin=6pt,innerleftmargin=0pt,
207   innertopmargin=0pt,innerbottommargin=0pt,
208   skipabove=0pt,skipbelow=0pt,
209   linewidth=2pt,
210   topline=false,bottomline=false,leftline=false}
211 \makeatletter\newcommand\ybQuote[3]{%
212   \ifthenelse{\isempty{#3}}{ }{
213     \ifx\hfuzz#2\hfuzz%
214       \index{#3}%
215     \else%
216       \index{#3, #2}%
217     \fi%
218   }%
219   \def\yb@body{%
220     \raggedright%
221     \ifx\hfuzz#3\hfuzz%

```

```

222     #1%
223     \else%
224     ‘#1’\raggedleft---#2 #3%
225     \fi%
226 }
227 \ifyb@draft%
228     \begin{wrapfigure}{r}{0.4\textwidth}%
229     \begin{mdframed}[style=quoteodd]%
230     \yb@body%
231     \end{mdframed}%
232     \end{wrapfigure}%
233 \else%
234     \begin{wrapfigure}{o}[12pt]{0.4\textwidth}%
235     \sffamily\checkoddpage%
236     \ifoddpage%
237     \begin{mdframed}[style=quoteodd]\yb@body\end{mdframed}%
238     \else%
239     \begin{mdframed}[style=quoteeven]\yb@body\end{mdframed}%
240     \fi%
241     \vspace{-12pt}
242     \end{wrapfigure}%
243     \fi%
244 }\makeatother

```

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

```

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

```

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

```

255 \makeatletter\newcommand\ybPrintBibliography{%
256 \AtNextBibliography{\small}%
257 \raggedright%
258 \ifyb@manuscript%
259 \setlength\bibitemsep{0pt}%
260 \newpage%
261 \begin{multicols}{2}
262 {\setstretch{1.0}\printbibliography}
263 \end{multicols}
264 \else
265 \printbibliography
266 \fi
267 }\makeatother

```

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

```

268 \AtBeginDocument{%
269 \raggedbottom%

```



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

Finally, a few meta commands with default values:

```
276 \newcommand\thetitle{\textbackslash{}thetitle}
277 \newcommand\thevolume{}
278 \newcommand\thedata{}
279 \newcommand\theversion{\textbackslash{}theversion}
280 \newcommand\theauthor{\textbackslash{}theauthor}
281 \newcommand\thereviewer{\textbackslash{}thereviewer}
```

Change History

v0.1.0		v0.2.0
General: Initial version	3	General: Started using l3build 3

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