

Y.B.

L^AT_EX 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 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 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](#)

`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@drafttrue}
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   {\begingroup\setstretch{1.0}\lsstyle}
87   {\endgroup}

```

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{textblock}{4}(11.5,1)
116     \tikz \node [color=gray, rotate=270,font=\ttfamily\scriptsize, text width=5in] at (0,0) {
117       Copyright \textcopyright{} \the\year{} by \theauthor{}.
118       All rights reserved. No part of the contents of
119       this book may be reproduced or transmitted in any
120       form or by any means without the written permission
121       of the publisher. This particular manuscript is
122       printed for \textbf{\thereviewer{}} and may be used only
123       for one-time review. The manuscript has to be destroyed

```

```

124         after the review.
125     }
126 \end{textblock}
127 }
128 \fancyfoot[C,CO]{\small\ttfamily
129   page \#\thepage{} of \pageref{LastPage}}
130 \fi\makeatother

```

\maketitle Then, we redefine \maketitle command:

```

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

```

\ybPrintTitlePage Then, we define \ybPrintTitlePage command:

```

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

```

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

```

171 \makeatletter\newcommand\ybPrintTOC{

```

```

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

```

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

```

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

```

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

```

192 \RequirePackage{wrapfig}
193 \RequirePackage{mdframed}
194 \RequirePackage{changepage}
195 \strictpagecheck
196 \mdfdefinestyle{quoteodd}{backgroundcolor=black!0,
197 leftmargin=6pt,rightmargin=0pt,
198 innerleftmargin=6pt,innerrightmargin=0pt,
199 innertopmargin=0pt,innerbottommargin=0pt,
200 skipabove=0pt,skipbelow=0pt,
201 linewidth=2pt,
202 topline=false,bottomline=false,rightline=false}
203 \mdfdefinestyle{quoteeven}{backgroundcolor=black!0,
204 rightmargin=6pt,leftmargin=0pt,
205 innerrightmargin=6pt,innerleftmargin=0pt,
206 innertopmargin=0pt,innerbottommargin=0pt,
207 skipabove=0pt,skipbelow=0pt,
208 linewidth=2pt,
209 topline=false,bottomline=false,leftline=false}
210 \makeatletter\newcommand\ybQuote[3]{%
211 \ifthenelse{\isempty{#3}}{}{
212 \ifx\hfuzz#2\hfuzz%
213 \index{#3}%
214 \else%
215 \index{#3, #2}%
216 \fi%
217 }%
218 \def\yb@body{%
219 \raggedright%
220 \ifx\hfuzz#3\hfuzz%
221 #1%

```

```

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

```

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

```

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

```

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

```

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

```

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

```

267 \AtBeginDocument{%
268   \raggedbottom%
269   \setlength\topskip{0mm}%

```



```

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

```

Finally, a few meta commands with default values:

```

275 \newcommand*\thetitle{\textbackslash{}thetitle}
276 \newcommand*\thevolume{}
277 \newcommand*\thedata{}
278 \newcommand*\theversion{\textbackslash{}theversion}
279 \newcommand*\theauthor{\textbackslash{}theauthor}
280 \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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