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 is 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.

`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*\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:

```
\RequirePackage{pgfopts}
\pgfkeys{
  /yb/.cd,
  draft/.store in=\yb@draft,
  compact/.store in=\yb@compact,
  manuscript/.store in=\yb@manuscript,
}
\ProcessPgfPackageOptions{/yb}
```

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

```
\makeatletter\ifdefined\yb@draft
  \PassOptionsToClass{11pt}{book}
  \PassOptionsToClass{oneside}{book}
\else
  \ifdefined\yb@manuscript
    \PassOptionsToClass{12pt}{book}
    \PassOptionsToClass{oneside}{book}
  \else
    \PassOptionsToClass{11pt}{book}
    \PassOptionsToClass{twoside}{book}
  \fi
\fi\makeatother
\LoadClass{book}
```

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

```
\RequirePackage{geometry}
\geometry{paperwidth=6in, paperheight=9in, bindingoffset=0.25in,
  left=0.75in, right=0.75in, top=0.75in, bottom=1.25in}
\makeatletter\ifdefined\yb@draft
  \geometry{a4paper, margin=1in, left=1.5in}
\else
  \ifdefined\yb@manuscript
    \geometry{a4paper, margin=1.2in}
  \fi
\fi\makeatother
```

Then, we configure input encoding for UTF-8:

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

Then, we load many important packages:

```
\RequirePackage{anyfontsize}
\RequirePackage{tikz}
  \usetikzlibrary{positioning}
  \usetikzlibrary{shapes}
  \usetikzlibrary{fit}
\RequirePackage{chngcntr}
  \counterwithout{footnote}{chapter}
\RequirePackage{lastpage}
\RequirePackage{paralist}
\RequirePackage{xcolor}
\RequirePackage{graphicx}
\RequirePackage[inline]{enumitem}
  \setlist{nosep}
\RequirePackage{float}
\RequirePackage[normalem]{ulem}
\RequirePackage{xfp}
\RequirePackage{soul}
\RequirePackage{xifthen}
\RequirePackage[autostyle=try]{csquotes}
```

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

```
\pagestyle{plain}
```

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

```
\RequirePackage{setspace}
  \setstretch{1.2}
  \makeatletter\ifdefined\yb@draft\setstretch{1.1}\fi\makeatother
  \makeatletter\ifdefined\yb@compact\setstretch{1.0}\fi\makeatother
  \makeatletter\ifdefined\yb@manuscript\setstretch{1.1}\fi\makeatother
```

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

```
\RequirePackage[indexing=cite,style=authoryear,
  natbib=true,maxnames=1,minnames=1,doi=false,
  url=false,isbn=false,isbn=false]{biblatex}
  \DeclareCiteCommand{\citetitle}
    {\boolfalse{citetracker}%
     \boolfalse{pagetracker}%
     \usebibmacro{prenote}}
    {\ifciteindex
       {\indexnames{labelname}}
       {}%
     \printfield[citetitle]{labeltitle}}
    {\multicitedelim}
    {\usebibmacro{postnote}}
  \DeclareCiteCommand*{\citetitle}
    {\boolfalse{citetracker}%
     \boolfalse{pagetracker}%
     \usebibmacro{prenote}}
    {\ifciteindex
       {\indexnames{labelname}}
       {}%
```

```
    \printfield[citetitle]{title}}
  {\multicitedelim}
  {\usebibmacro{postnote}}
```

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

```
\newenvironment{condensed}
  {\begingroup\setstretch{1.0}\lsstyle}
  {\endgroup}
```

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

```
\makeatletter\ifdefined\yb@draft\else
  \RequirePackage[letterspace=-50]{microtype}
\fi\makeatother
```

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

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

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

```
\makeatletter
\let\yb@oldsection\section
\ifdefined\yb@draft
  \RequirePackage[medium]{titlesec}
\else
  \RequirePackage[raggedright]{titlesec}
    \titlespacing{\section}{0in}{6pt}{6pt}[1in]
  \renewcommand\section{\newpage\yb@oldsection}
\fi
\ifdefined\yb@compact
  \renewcommand\section{\vspace{2em}\yb@oldsection}
\fi
\makeatother
```

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

```
\makeatletter\ifdefined\yb@draft
  \RequirePackage[absolute]{textpos}
    \TPGrid{16}{16}
  \RequirePackage{fancyhdr}
  \pagestyle{fancy}
  \renewcommand\headrulewidth{0pt}
  \renewcommand\footrulewidth{0pt}
  \setlength{\headheight}{16pt}
  \fancyhf{}
  \fancyhead[L,C,LO,CO]{}
  \fancyhead[R,RO]{
    \begin{textblock}{4}(11.5,1)
      \tikz \node [color=gray, rotate=270,
        font=\ttfamily\scriptsize, text width=5in] at (0,0) {
        Copyright \textcopyright{} \the\year{} by \theauthor{}.
        All rights reserved. No part of the contents of
        this book may be reproduced or transmitted in any
```

```
        form or by any means without the written permission
        of the publisher. This particular manuscript is
        printed for \textbf{\thereviewer{}} and may be used only
        for one-time review. The manuscript has to be destroyed
        after the review.
      };
    \end{textblock}
  }
  \fancyfoot[C,CO,CE]{\small\ttfamily
    page \#\thepage{} of \pageref{LastPage}}
\fi\makeatother
```

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

```
\renewcommand\maketitle{
  {\LARGE\textbf{\thetitle}}
  \\[1em]
  by \theauthor{}
  \\[4em]
  \ifx\thevolume\empty\else%
    Volume \thevolume{}\\
  \fi
  \ifx\thedate\empty\else%
    Rendered on \thedate{}
  \fi
  \ifx\theversion\empty\else%
    \\
    Ver. \theversion{}
  \fi
}
```

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

```
\makeatletter\newcommand\ybPrintTitlePage{
  \ifdefined\yb@draft\else
    \begin{titlepage}
      \ttfamily
      \vspace*{\fill}
      \noindent
      {\Huge\textbf{\thetitle}}
      \\[1em]
      by \theauthor{}
      \\[4em]
      \ifx\thevolume\empty\else%
        Volume \thevolume{}\\
      \fi
      \ifx\thedate\empty\else%
        \thedate{}
      \fi
      \ifx\thedate\empty\else%
        \\
        \theversion{}
      \fi
      \vspace*{\fill}
    \end{titlepage}
  \fi
```

```
}\makeatother
```

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

```
\makeatletter\newcommand\ybPrintTOC{
  \ifdefined\yb@draft\else
    \ifdefined\yb@compact\else\cleardoublepage\fi
    {\setstretch{0.7}\tableofcontents}
  \fi
}\makeatother
```

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

```
\RequirePackage{imakeidx}
  \renewbibmacro*{citeindex}{\indexnames{labelname}{}}
  \makeindex
  \indexsetup{othercode={\hyphenpenalty=10000}}
\makeatletter\newcommand\ybPrintIndex[1][Index]{
  \ifdefined\yb@draft\else
    \cleardoublepage
    {
      \setstretch{1.0}
      \small
      \addcontentsline{toc}{chapter}{#1}
      \printindex
    }
  \fi
}\makeatother
```

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

```
\RequirePackage{wrapfig}
\RequirePackage{mdframed}
\RequirePackage{changepage}
  \strictpagecheck
\mdfdefinestyle{quoteodd}{backgroundcolor=black!0,
  leftmargin=6pt,rightmargin=0pt,
  innerleftmargin=6pt,innerrightmargin=0pt,
  innertopmargin=0pt,innerbottommargin=0pt,
  skipabove=0pt,skipbelow=0pt,
  linewidth=2pt,
  topline=false,bottomline=false,rightline=false}
\mdfdefinestyle{quoteeven}{backgroundcolor=black!0,
  rightmargin=6pt,leftmargin=0pt,
  innerrightmargin=6pt,innerleftmargin=0pt,
  innertopmargin=0pt,innerbottommargin=0pt,
  skipabove=0pt,skipbelow=0pt,
  linewidth=2pt,
  topline=false,bottomline=false,leftline=false}
\makeatletter\newcommand\ybQuote[3]{%
  \ifthenelse{\isempty{#3}}{}{
    \ifx\hfuzz#2\hfuzz%
      \index{#3}%
    \else%
      \index{#3, #2}%
    \fi%
  }%
```

```
  \def\yb@body{%
    \raggedright%
    \ifx\hfuzz#3\hfuzz%
      #1%
    \else%
      ``#1''\\\raggedleft---#2 #3%
    \fi%
  }
  \ifdefined\yb@draft%
    \begin{wrapfigure}{r}{0.4\textwidth}%
      \begin{mdframed}[style=quoteodd]%
        \yb@body%
      \end{mdframed}%
    \end{wrapfigure}%
  \else%
    \begin{wrapfigure}{o}[12pt]{0.4\textwidth}%
      \sffamily\checkoddpage%
      \ifoddpage%
        \begin{mdframed}[style=quoteodd]\yb@body\end{mdframed}%
      \else%
        \begin{mdframed}[style=quoteeven]\yb@body\end{mdframed}%
      \fi%
      \vspace{-12pt}
    \end{wrapfigure}%
  \fi%
}\makeatother
```

Then, we use and configure `footmisc` as suggested here:

```
\RequirePackage{perpage}
\RequirePackage[bottom,perpage,multiple]{footmisc}
\makeatletter
  \let\yb@oldfootnote\footnote
\newcommand\yb@nexttoken\relax
\newcommand\yb@isfootnote{%
  \ifx\footnote\yb@nexttoken\textsuperscript{,}\fi}
\renewcommand\footnote[1]{%
  \yb@oldfootnote{#1}\futurelet\yb@nexttoken\yb@isfootnote}
\makeatother
```

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

```
\makeatletter\newcommand\ybPrintBibliography{%
  \AtNextBibliography{\small}%
  \raggedright%
  \ifdefined\yb@manuscript%
    \setlength\bibitemsep{0pt}%
    \newpage%
    \begin{multicols}{2}
      {\setstretch{1.0}\printbibliography}
    \end{multicols}
  \else
    \printbibliography
  \fi
}\makeatother
```

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

```
\AtBeginDocument{%
  \raggedbottom%
  \setlength\topskip{0mm}%
  \setlength\parindent{0pt}%
  \setlength\fboxsep{0pt}%
  \setlength\parskip{6pt}%
  \interfootnotelinepenalty=10000%
}
```

Finally, a few meta commands with default values:

```
\newcommand*\thetitle{\textbackslash{}thetitle}
\newcommand*\thevolume{}
\newcommand*\thedate{}
\newcommand*\theversion{\textbackslash{}theversion}
\newcommand*\theauthor{\textbackslash{}theauthor}
\newcommand*\thereviewer{\textbackslash{}thereviewer}
```

Change History

v0.1.0
General: Initial version 3
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