1 Introduction

The provided class `huawei` helps you design your work documents and presentations keeping the code short and the style elegant enough both for management and technical papers. To use the class you simply mention its name in the preamble:

```latex
\documentclass{huawei}
\begin{document}
Hello, world!
\end{document}
```

We recommend you to use `latexmk` to compile your `.tex` files to `.pdf`. The simplest setup will require a few files staying next to your `.tex` file, in the same directory ("story" is the name of your project here):

```
story\latexmkrc
.gitignore
story.tex
```

The content of your `.latexmkrc` file would be this:

```
$pdflatex = 'pdflatex %O --shell-escape %S';
```

Make sure the `.gitignore` file lists all the files generated by `pdflatex` during the compilation. You don’t need to commit them to your repository, since they are temporary and will be generated again when you compile your document. In order to compile the document, just say `latexmk` on the command line.

*The sources are in GitHub at yegor256/huawei.cls*
2 Class Options

There are a few class options, provided in square brackets after the \documentclass, which can help you fine-tune the layout of your document:

- \texttt{landscape} The option \texttt{landscape} makes the document in landscape format, also changing the size of the paper to 16x9 inches (the default page size is A4), making it perfect for presentations.
- \texttt{dark} The option \texttt{dark} turns on a dark layout, where the page color is black and the text is white.
- \texttt{slides} The option \texttt{slides} makes all headers a bit larger, assuming that the document is in the landscape mode and being presented as a slide deck.
- \texttt{nocover} The option \texttt{nocover}, if it’s present, avoids printing the cover images on the first page by the \texttt{\PrintTitlePage} command.
- \texttt{anonymous} The anonymous removes the name of the author everywhere, including the bottom of the page, where the author’s name stays next to the name of the company.
- \texttt{nobrand} The option \texttt{nobrand} avoids mentioning the brand of Huawei anywhere in the document and removes the logo too.
- \texttt{nosecurity} The option \texttt{nosecurity} avoids mentioning the level of security at the right top corner of the document and also avoids showing the ID of the author where it usually is visible.
- \texttt{nodate} The option \texttt{nodate} doesn’t show the date and time at the bottom of each page, where they usually are rendered in ISO 8601 format.
- \texttt{nopaging} The option \texttt{nopaging} avoids page numbers at the bottom of each page.
- \texttt{authordraft} The option \texttt{authordraft} prints a big "It’s a draft" message across each page.
- \texttt{breaks} The option \texttt{breaks} forces all \texttt{\section} to start from a new page.

3 Preamble

In the preamble you can specify meta information about the document, such as its title or author’s name, here is how:

```
\documentclass{huawei}
\renewcommand*\thetitle{15\% Faster Algorithm}
\renewcommand*\thesubtitle{Technical Report}
\renewcommand*\theauthor{Yegor Bugayenko}
\begin{document}
\maketitle
Hello, world!
\end{document}
```

It’s recommended to use \texttt{\renewcommand*} instead of \texttt{\renewcommand} in order to let \LaTeX{} catch you if by mistake a new line gets into the content.

The following meta commands are defined:

- \texttt{\thetitle} \texttt{\thetitle} is the main title of the document to be used in the text and in the properties of the PDF document.
- \texttt{\thesubtitle} \texttt{\thesubtitle} is the subtitle to be printed under the title.
Inside the document body you can use these commands:

\PrintFirstPage It is recommended to use \PrintFirstPage for rendering the first page in landscape document, for example a project charter. The only argument of the command is the name of an image to render at the right bottom corner. You can omit the name and just call the command with an empty argument. In this case the default image will be rendered, a pretty good looking one:

\PrintLastPage \PrintLastPage prints the last page of a project charter or a similar landscape document:

\PrintThankYouPage \PrintThankYouPage prints the last page with a “Thank You” message in the center.

\PrintDisclaimer \PrintDisclaimer prints a paragraph at the bottom of the page with a standard disclaimer:
5 Best Practices

You are free to design your documents any way you want. However, it would be convenient for yourself and for your readers, if you follow the convention we have for business and technical documents.

The rule of thumb is simple: try not to format your documents. Instead, let the class designed by us do this work for you. Just type the content without changing the layout, adding colors, changing fonts, etc. The less you modify the look-and-feel, the better your documents will be perceived by your readers.

5.1 Two Columns

In the landscape format it’s recommended to use two columns, for better readability of the text. Here is how:

5.2 Crumbs

When you need to put many small information pieces into one page, we recommend you to use "crumbs":

```latex
\documentclass{huawei}
\begin{document}
\section{Introduction}
Hello, world!
\subsection{More Details}
Hello again!
\PrintDisclaimer
\end{document}

\documentclass[landscape]{huawei}
\begin{document}
\newpage
\begin{multicols}{2}
\section{First}
Here goes the first column content.
\columnbreak
\section{Second}
Here goes the second column content.
\end{multicols}
\end{document}
```
6 Implementation

First, we load the parent class:
\LoadClass[12pt]{article}

Then, we parse package options:
\makeatletter
\DeclareOption{breaks}{
  \let\huawei@oldsection\section
  \renewcommand\section{\clearpage\huawei@oldsection}
}
\newif\ifhuawei@dark
\DeclareOption{dark}{\huawei@darktrue}
\newif\ifhuawei@slides
\DeclareOption{slides}{\huawei@slidestrue}
\newif\ifhuawei@nosecurity
\DeclareOption{nosecurity}{\huawei@nosecuritytrue}
\newif\ifhuawei@authordraft
\DeclareOption{authordraft}{\huawei@authordrafttrue}
\newif\ifhuawei@nobrand
\DeclareOption{nobrand}{\huawei@nobrandtrue}
\newif\ifhuawei@nodate
\DeclareOption{nodate}{\huawei@nodatetrue}
\newif\ifhuawei@nocover
\DeclareOption{nocover}{\huawei@nocovertrue}
\newif\ifhuawei@nopaging
\DeclareOption{nopaging}{\huawei@nopagingtrue}
\newif\ifhuawei@landscape
\DeclareOption{landscape}{\huawei@landscapetrue}
\newif\ifhuawei@anonymous
\DeclareOption{anonymous}{\huawei@anonymoustrue}
\ProcessOptions\relax
\makeatother

Then, we set the size of the page:
\RequirePackage{geometry}
\makeatletter
\ifhuawei@landscape
  \geometry{paperwidth=16in, paperheight=9in, left=4in, right=2in, top=1.5in, bottom=1.5in}
\else
  \geometry{paperwidth=8.5in, paperheight=11in, left=1.5in, right=1.5in, top=1.5in, bottom=1.5in}
\fi
\makeatother
Then, we set the size of the font:
\makeatletter\ifhuawei@slides
\usepackage[fontsize=24pt]{fontsize}
\fi\makeatother
Then, we include some important packages:
\RequirePackage[T1]{fontenc}
\RequirePackage[utf8]{inputenc}
\RequirePackage{tabularx}
\RequirePackage{anyfontsize}
\RequirePackage{multicol}
\RequirePackage{ragged2e}
\RequirePackage{multicol}
\RequirePackage[mmdyyyy,iso]{datetime}
\newtimeformat{daytime}{\twodigit{\THEHOUR}:\twodigit{\THEMINUTE}}
\RequirePackage[tt=false,type1=true]{libertine}
\RequirePackage{paralist}
\RequirePackage{makecell}
\RequirePackage[para]{footmisc}
\setlength{\footnotemargin}{2pt}
\setlength{\footnotesep}{2pt}
\RequirePackage{graphicx}
\RequirePackage{array}
\RequirePackage[hidelinks]{hyperref} % to enable \pageref* command
\RequirePackage[abspath]{currfile}
\RequirePackage{enumitem}
\setlist{nosep}
\RequirePackage{microtype}
\AddToHook{env/verbatim/begin}{\microtypesetup{protrusion=false}}
\RequirePackage{wrapfig}
\RequirePackage{lastpage}
\RequirePackage{tikz}
\RequirePackage{tabularx}
\RequirePackage{titling}
\RequirePackage{svg}
\RequirePackage[absolute]{textpos}
\TPGrid{16}{16}

Then, we configure biblatex:
\RequirePackage[maxnames=1,minnames=1,natbib=true,
citestyle=numeric,bibstyle=numeric,
url=false,isbn=false,isbn=false]{biblatex}

Then, we set spacing between lines:
\RequirePackage{setspace}
\setstretch{1.08}

Then, we define branded colors:
\PassOptionsToPackage{table}{xcolor}
\RequirePackage{xcolor}
\definecolor{red}{HTML}{CF0A2C}
\definecolor{black}{HTML}{232527}
\definecolor{gray}{HTML}{878C8F}
\definecolor{yellow}{HTML}{F2DC5D}
\definecolor{blue}{HTML}{2274A5}
\definecolor{green}{HTML}{499167}
\definecolor{orange}{HTML}{F06543}

\huawei@header Then, we define \huawei@header:
\makeatletter
\newcommand\huawei@header[1]{{% 
  \ifhuawei@slides%
    \setstretch{0.8}%
    \fontsize{19pt}{24pt}\selectfont%
  \else%
    \setstretch{0.8}%
    \fontsize{11pt}{13pt}\selectfont%
  \fi%
  \sffamily\color{gray}#1\par%
}}\makeatother

\huawei@bar Then, we define \huawei@bar:
\makeatletter
\newcommand\huawei@bar{% 
  \begin{textblock}{1}[0,0](0,0)%
    \tikz 
    \node[fill=red,minimum width=\TPHorizModule, 
    minimum height=16\TPVertModule \{};%
  \end{textblock}%
}\makeatother

\huawei@logo Then, we define \huawei@logo:
\makeatletter
\newcommand\huawei@logo[1]{{% 
  \def\BLACK{\ifhuawei@dark white\else black\fi} 
  \def\BLANK{\ifhuawei@dark black\else white\fi} 
  \begin{tikzpicture}[y=0.800pt, x=0.800pt, yscale=-#1, 
  xscale=#1, inner sep=0pt, outer sep=0pt]
  \begin{scope}[even odd rule,line width=0.800pt] 
  \begin{scope}[shift={(0,-0.00024)}]
    \path[fill=\BLACK] (10.9375,30.2240) -- (10.9375,33.6097) .. controls (10.9375,34.5713) and (10.4603,35.0845) .. (9.5932,35.0845) .. controls (8.7212,35.0845) and (8.2411,34.5565) .. (8.2411,33.5686) -- (8.2411,30.2278) -- (8.2411,33.6097) .. controls (8.2411,35.2737) and (7.9658,36.2272) .. (9.5774,36.2272) .. controls (11.2041,36.2272) and (12.1371,33.5609) -- (12.1371,30.2240) -- cycle;
  \end{scope}
  \path[fill=\BLACK] (27.3592,30.2240) -- (26.1152,30.2240) -- (24.8055,34.2912) -- (24.3664,30.2240) -- cycle;
  \end{scope}
}\makeatother
Then, we configure headers using fancyhdr:

\RequirePackage{fancyhdr}
\pagestyle{fancy}
\renewcommand\headrulewidth{0pt}
\fancyhf{}
\makeatletter\fancyfoot[L]{
    \ifhuawei@authordraft%
    \begin{textblock}{14}[0.5,0.5](8,8)\%
    \tikz
    \node[minimum width=14\TPHorizModule]{
        \fontsize{64}{64}\selectfont\sffamily\scshape
        \color{gray!20}\rotatebox{30}{it is a draft}\
    };
\end{textblock}%;
\else\fi\makeatother
\end{fancyfoot}%
\else\fi\makeatother
\makeatletter\fancyhead[L]{
    \ifnum\value{page}=1\else\fi\ifhuawei@nobrand\else\fi\begin{textblock}{8}[0,0](1.2,0.2)\huawei@logo{\ifhuawei@slides 1.8\else 1\fi}\makeatother\end{textblock}%;
\else\fi\makeatother
\makeatletter\fancyhead[R]{
    \begin{textblock}{8}[1,0](15.8,0.2)\raggedleft\huawei@header{\ifhuawei@nosecurity\else\thesecurity\fi}\makeatother\end{textblock}%;
\else\fi\makeatother
\makeatletter\fancyfoot[R]{
    \begin{textblock}{8}[0,1](1.2,15.8)\ifnum\value{page}=1\else\fi\huawei@header{\ifnum\value{page}=1\else\fi\ifx\theid\empty\else, \theid\fi}\makeatother\end{textblock}%;
\else\fi\makeatother

Then, we redefine abstract environment:
\begin{abstract}
\begin{adjustwidth}{0pt}{1in}{\scshape Abstract:}
\end{adjustwidth}
\end{abstract}

Then, we redefine \maketitle:

\maketitle
Then, we define `\PrintCrumb`:

```latex
\newcommand{\PrintCrumb}[2]{%
  \begin{minipage}{\columnwidth}%
    \raggedright\textsc{#1}:\#2%
  \end{minipage}
vspace{1em}%
}\makeatother
```

Then, we define `\PrintThankYouPage`:

```latex
\newcommand{\PrintThankYouPage}{%
  \newpage
  \vspace*{\fill}
  \begin{center}
    \normalsize
    \Huge\color{red}\textbf{Thank you!}}
  \end{center}
  \vspace*{\fill}
}\PrintDisclaimer
```

Then, we define `\PrintDisclaimer`:

```latex
\makeatletter
\newcommand{\PrintDisclaimer}{%
  \justify
  \vspace*{\fill}%
  \begingroup%
    \setstretch{0.55}%
    \sffamily\scriptsize\color{gray!50!black}%
    \textbf{Disclaimer}: The opinions expressed in
    this document are in good faith and
    while every care has been taken in preparing it,
    \ifhuawei@nobrand%
      The author%
    \else%
      the company()
    \fi
    makes no representations and gives no warranties
    of whatever nature in respect of these documents,
    including but not limited to the accuracy or completeness
    of any information, facts and/or opinions contained therein.
    \ifhuawei@nobrand%
      The author%
    \else%
      the company()
    \fi,
    its subsidiaries, the directors, employees and agents
    cannot be held liable for the use of and reliance of
    the opinions, estimates, forecasts and findings in
    these documents.
  \par
  \endgroup%
}\makeatother
```
Then, we define `\PrintFirstPage`

```latex
\makeatletter
\newcommand\PrintFirstPage[1]{
  \ifhuawei@landscape\else
    \PackageError{huawei}{It’s allowed to use \PrintFirstPage only in landscape mode}{Read huawei.pdf for more information}
  \fi
  \huawei@bar
  \def\param{#1}%
  \ifx\param\empty\else
  \includegraphics[height=2in]{#1}\newline
  \fi
  \vspace*{0.5in}
}
\makeatother
```

Then, we define `\PrintLastPage`

```latex
\makeatletter
\newcommand\PrintLastPage{
  \ifhuawei@landscape\else
    \PackageError{huawei}{It’s allowed to use \PrintLastPage only in landscape mode}{Read huawei.pdf for more information}
  \fi
  \newpage
  \vspace*{1in}
  \begin{center}
  \begin{minipage}{0.6\columnwidth}
    \raggedright
    \normalsize
    \setlength{\parskip}{6pt}
    \begin{Huge}\color{red}\textbf{Thank you!}}\end{Huge}\textbf{
    \copyright \the\year \thecompany \allrightsreserved.\textbf{
    \vspace{0.5in}
    Bring digital to every person, home and organization
    for a fully connected, intelligent world.\textbf{
    \vspace{6pt}
    \textbf{Copyright \copyright \the\year \thecompany}\linebreak
    \textbf{All Rights Reserved.}}}}\textbf{
    \vspace*{1in}
    The information in this document may contain predictive
    statements including, without limitation, statements regarding
    the future financial and operating results, future product
```
There are a number of factors that could cause actual results and developments to differ materially from those expressed or implied in the predictive statements. Therefore, such information is provided for reference purpose only and constitutes neither an offer nor an acceptance.

The information may change the information at any time without notice.
\newcommand*{\thesecurity}{Confidential}
\newcommand*{\theid{}}
\ifcsname nospell\endcsname\else\newcommand\nospell[1]{#1}\fi
Change History

v0.1.0
  General: The first draft version. ........ 5

v0.10.0
  General: Some colors redefined. ........ 5

v0.11.0
  General: The fixed-width font is rendered correctly now, without \texttt{ffcode}. ................. 5

v0.12.0
  General: The \texttt{abstract} is now formatted correctly. ............... 5

v0.14.0
  General: The \texttt{l3build} is now used for build automation, instead of \texttt{Makefile}. ............... 5

v0.15.0
  General: A new package option \texttt{breaks} introduced, which forces all sections to start from a new page. ................. 5

v0.16.0
  General: The doi tag enabled for \texttt{biblatex}. ...................... 6

v0.3.0
  General: The cover picture added for front pages. ...................... 5

v0.4.0
  General: The current time is rendered without seconds. .................... 5

v0.5.0
  General: The \texttt{DEPENDS.txt} file added. 5

v0.6.0
  General: The \texttt{ffcode} and \texttt{href-ul} packages created an their code removed from this class. ................. 5

v0.7.0
  General: The \texttt{authordraft} option is now supported. ................. 5
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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