

The `titling` package*

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Abstract

The `titling` package provides control over the typesetting of the `\maketitle` command. The values of `\title`, `\author` and `\date` are also retained.

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1 Introduction

The format for typesetting the `\maketitle` command is fixed in the standard \LaTeX classes. The `titling` package provides some controls for modifying the appearance of the titling information presented via `\maketitle`.

This manual is typeset according to the conventions of the \LaTeX `DOCSTRIP` utility which enables the automatic extraction of the \LaTeX macro source files [GMS94].

Section 2 describes the usage of the `titling` package and commented source code is in Section 3.

2 The `titling` package

The typeset format of the `\maketitle` command is virtually fixed within the \LaTeX standard classes. The `titling` package provides a set of formatting commands that can be used to modify the appearance of the titling information; that is, the contents of the `\title`, `\author` and `\date` commands. It also keeps the values of these commands so that they may be printed again later in the document.

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2.1 Commands and environments

`\maketitle` The titling package provides a configurable `\maketitle` command.
`\titlefont` These commands control the typesetting of the document's `\maketitle` command. The `\title` is processed between the `\titlefont` and `\posttitle` commands; that is, like:
`\posttitle`
`\authorfont`
`\postauthor` `{\titlefont \title \posttitle}`
`\datefont` and similarly for the `\author` and `\date` commands. The commands are initialised to mimic the normal result of `\maketitle` typesetting in the `article/report` classes. For example, the default definitions of the `\...title...` and `\...author...` commands are:

```
\newcommand{\titlefont}{\begin{center}\LARGE}
\newcommand{\posttitle}{\par\end{center}\vskip 0.5em}
\newcommand{\authorfont}{\begin{center}
  \large \lineskip 0.5em%
  \begin{tabular}[t]{c}}
\newcommand{\postauthor}{\end{tabular}\par\end{center}}
```

They can be renewed to obtain different effects, for instance removing the `center` environment from `\...title...` will result in the title being typeset as a normal paragraph.

`\thetitle` In the usual document classes, the `\title`, `\author` and `\date` macros used for `\maketitle` are unavailable once `\maketitle` has been issued. The package provides the `\thetitle`, `\theauthor` and `\thedata` commands that can be used for printing these elements of the title later in the document, if desired. The `\killtitle` macro makes `\thetitle`, `\theauthor` and `\thedata` unavailable from the point that it is issued (using this command will save some macro space if the `\thetitle`, etc., commands are not required).

`\appendiargdef` The (internal) command `\appendiargdef{<macro>}{<stuff>}` appends `<stuff>` at the end of the current definition of `<macro>`, where `<macro>` is the name of a macro (including the backslash) which takes a single argument. For example the following are two equivalent definitions of `\mymacro`:

```
\newcommand{\mymacro}[1]{#1 is a violinist}
\appendiargdef{\mymacro}{ in spite of being tone deaf}
% or
\newcommand{\mymacro}[1]{# is a violinist in spite of being tone deaf}
```

The usual advice about creating a one-column abstract in a two-column document is to write code like this:

```
\documentclass[twocolumn...]{...}
...
\twocolumn[
  \begin{@twocolumnfalse}
    \maketitle           % need full-width title
    \begin{abstract}
      abstract text...
    \end{abstract}
  \end{@twocolumnfalse}
```

```

]
... hand make footnotes for any \thanks commands
...

```

The titling package gives no assistance for doing this, but the `abstract` package provides a command that caters for the somewhat non-intuitive `... hand make footnotes ... aspect`.

3 The package code

To try and avoid name clashes, all the internal commands include the string `@bs` (this code was initially part of the `abstract` package).

3.1 Preliminaries

Announce the name and version of the package, which requires $\text{\LaTeX} 2_{\epsilon}$.

```

1 (*usc)
2 \NeedsTeXFormat{LaTeX2e}
3 \ProvidesPackage{titling}[2000/06/11 v1.0 maketitle typesetting]
4

```

The original code for `\maketitle` is shown in Section A. Changes to `\maketitle` and friends are defined here.

```

\titlefont To provide some flexibility in the titling style of the document, user level commands
\posttitle are provided that can be changed to reconfigure the appearance resulting from
\authorfont \maketitle. These are defined initially to mimic the normal  $\text{\LaTeX}$  style.
\postauthor
5 \if@titlepage
\datefont 6 \newcommand{\titlefont}{\begin{center}\LARGE}
\postdate 7 \newcommand{\posttitle}{\par\end{center}\vskip 2em}
8 \newcommand{\authorfont}{\begin{center}
9 \large \lineskip .75em%
10 \begin{tabular}[t]{c}}
11 \newcommand{\postauthor}{\end{tabular}\par\end{center}}
12 \newcommand{\datefont}{\begin{center}\large}
13 \newcommand{\postdate}{\par\end{center}}
14 \else
15 \newcommand{\titlefont}{\begin{center}\LARGE}
16 \newcommand{\posttitle}{\par\end{center}\vskip 0.5em}
17 \newcommand{\authorfont}{\begin{center}
18 \large \lineskip .5em%
19 \begin{tabular}[t]{c}}
20 \newcommand{\postauthor}{\end{tabular}\par\end{center}}
21 \newcommand{\datefont}{\begin{center}\large}
22 \newcommand{\postdate}{\par\end{center}}
23 \fi
24
\maketitle The following is a modification of \maketitle as in the article, report, and book
classes (see Section A for the original definition).
25 \providecommand{\maketitle}{}

```

```

26 \if@titlepage
27   \renewcommand{\maketitle}{\begin{titlepage}%
28     \let\footnotesize\small
29     \let\footnoterule\relax
30     \let \footnote \thanks
31     \null\vfil
32     \vskip 60\p@
33     {\titlefont \@title \posttitle}
34     {\authorfont \@author \postauthor}
35     {\datefont \@date \postdate}
36     \par
37     \@thanks
38     \vfil\null
39   \end{titlepage}%
40   \setcounter{footnote}{0}%
41   \@bsmtitleempty
42 } % end titlepage defs
43 \else
44   \renewcommand{\maketitle}{\par
45     \begingroup
46       \renewcommand\thefootnote{\@fnsymbol\c@footnote}%
47       \def\@makefnmark{\rlap{\@textsuperscript{\normalfont\@thefnmark}}}%
48       \long\def\@makefntext##1{\parindent 1em\noindent
49         \hb@xt@1.8em{%
50           \hss\@textsuperscript{\normalfont\@thefnmark}}##1}%
51       \if@twocolumn
52         \ifnum \col@number=\@ne
53           \@maketitle
54         \else
55           \twocolumn[\@maketitle]%
56         \fi
57       \else
58         \newpage
59         \global\@topnum\z@
60         \@maketitle
61       \fi
62       \thispagestyle{plain}\@thanks
63     \endgroup
64     \setcounter{footnote}{0}%
65     \@bsmtitleempty
66 } % end non-titlepage

```

`\@maketitle` I use `\def\@maketitle` to account for the cases where the main class does not have titling commands, and to ensure an existing `\@maketitle` gets overridden.

```

67
68 \def\@maketitle{%
69   \newpage
70   \null
71   \vskip 2em%
72   {\titlefont \@title \posttitle}
73   {\authorfont \@author \postauthor}
74   {\datefont \@date \postdate}
75   \par
76   \vskip 1.5em}

```

```

77 \fi
78

\@bsmtitleempty \@bsmtitleempty is a helper macro to save some macro space. It empties some
elements of \maketitle.
79 \newcommand{\@bsmtitleempty}{%
80   \global\let\maketitle\relax
81   \global\let\@maketitle\relax
82   \global\let\title\relax
83   \global\let\author\relax
84   \global\let\date\relax
85 }
86

\killtitle \killtitle undefines the remaining macros of \maketitle.
87 \providecommand{\killtitle}{}
88 \renewcommand{\killtitle}{%
89   \global\let\thanks\relax
90   \global\let\and\relax
91   \global\let\thetitle\relax
92   \global\let\theauthor\relax
93   \global\let\thedata\relax
94   \global\let\@thanks\@empty
95   \global\let\@title\@empty
96   \global\let\@author\@empty
97   \global\let\@date\@empty
98 }
99

\appendiargdef The code is copied from the abstract package.
100 \providecommand{\appendiargdef}[2]{\begingroup
101   \toks@{\expandafter{#1{##1}#2}}%
102   \edef\@bsx{\endgroup \def\noexpand#1####1{\the\toks@}}%
103   \@bsx}
104

\thetitle In order to make the \title, etc., values available for printing their definitions
\theauthor need extending (see Section A for their original definitions).
\thedata 105 \appendiargdef{\title}{%
106   \begingroup
107     \renewcommand{\thanks}[1]{ }
108     \protected@xdef\thetitle{#1}
109   \endgroup}
110 \appendiargdef{\author}{%
111   \begingroup
112     \renewcommand{\thanks}[1]{ }
113     \renewcommand{\and}{\unskip, }
114     \protected@xdef\theauthor{#1}
115   \endgroup}
116 \appendiargdef{\date}{%
117   \begingroup
118     \renewcommand{\thanks}[1]{ }
119     \protected@xdef\thedata{#1}

```

```
120 \endgroup}
121
```

The end of this package.

```
122 </usc>
```

A Original code for making a title

These are the kernel commands (from `ltsect.dtx`) for the elements of `\maketitle`.

```
\def\title#1{\gdef\@title{#1}}
\def\@title{\@latex@error{No \noexpand\title given}\@ehc}
\def\author#1{\gdef\@author{#1}}
\def\@author{\@latex@warning@no@line{No \noexpand\author given}}
\def\date#1{\gdef\@date{#1}}
\def\@date{\today}
\def\thanks#1{\footnotemark
\protected@xdef\@thanks{\@thanks
\protect\footnotetext[\the\c@footnote]{#1}}%
}
\let\@thanks\empty
\def\and{%
\end{tabular}%
\hskip 1em \@plus.17fil%
\begin{tabular}[t]{c}% % \end{tabular}

```

This is the version of `\maketitle` and `\@maketitle` from `classes.dtx`.

```
\if@titlepage
\newcommand{\maketitle}{\begin{titlepage}%
\let\footnotesize\small
\let\footnoterule\relax
\let \footnote \thanks
\null\vfil
\vskip 60\p@
\begin{center}%
{\LARGE \@title \par}%
\vskip 3em%
{\large
\lineskip .75em%
\begin{tabular}[t]{c}%
\@author
\end{tabular}\par}
\vskip 1.5em%
{\large \@date \par}%
\end{center}\par
\@thanks
\vfil\null
\end{titlepage}%
\setcounter{footnote}{0}%
\global\let\thanks\relax
\global\let\maketitle\relax

```

```

\global\let\@maketitle\relax
\global\let\@thanks\@empty
\global\let\@author\@empty
\global\let\@date\@empty
\global\let\@title\@empty
\global\let\title\relax
\global\let\author\relax
\global\let\date\relax
\global\let\and\relax
}
\else
\newcommand{\maketitle}{\par
\begingroup
\renewcommand\thefootnote{\@fnsymbol\c@footnote}%
\def\@makefnmark{\rlap{\@textsuperscript{\normalfont\@thefnmark}}}%
\long\def\@makefntext##1{\parindent 1em\noindent
\hb@xt@1.8em{%
\hss\@textsuperscript{\normalfont\@thefnmark}}##1}%
\if@twocolumn
\ifnum \col@number=\@ne
\@maketitle
\else
\twocolumn[\@maketitle]%
\fi
\else
\newpage
\global\@topnum\z@
\@maketitle
\fi
\thispagestyle{plain}\@thanks
\endgroup
\setcounter{footnote}{0}%
\global\let\thanks\relax
\global\let\maketitle\relax
\global\let\@maketitle\relax
\global\let\@thanks\@empty
\global\let\@author\@empty
\global\let\@date\@empty
\global\let\@title\@empty
\global\let\title\relax
\global\let\author\relax
\global\let\date\relax
\global\let\and\relax
}

\def\@maketitle{%
\newpage
\null
\vskip 2em%
\begin{center}%
\let \footnote \thanks
{\LARGE \@title \par}%
\vskip 1.5em%
{\large

```

```

\lineskip .5em%
\begin{tabular}[t]{c}%
  \@author
\end{tabular}\par}
\vskip 1em%
{\large \@date}%
\end{center}
\par
\vskip 1.5em}
\fi

```

References

[GMS94] Michel Goossens, Frank Mittelbach, and Alexander Samarin. *The LaTeX Companion*. Addison-Wesley Publishing Company, 1994.

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Numbers written in italic refer to the page where the corresponding entry is described, the ones underlined to the code line of the definition, the rest to the code lines where the entry is used.

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