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The UStitle Package*

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2005/05/17

Abstract

The UStitle package redefine the standard title page of the LaTeX classes to add a logo at the to and an address line below the author.

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*This document corresponds to UStitle v1.0, dated 2005/05/17.

1 User Interface

1.1 Loading the **UStitle** packages

The UStitle package is loaded in the document preamble, for example:

> \usepackage[⟨*key=value list*⟩]{ustitle}

1.2 Options

The package input parameters are entered with key-values. The parameters, with default options and initial values are:

- titlepage = [true], false

  This option corresponds with the global LaTeX class option `titlepage`. Specifies whether a new page should be started after the document title or not. The article class does not start a new page by default, while report and book do. The default initial setup is `titlepage = false`.

- BW   = [true], false

  The option specifies whether the black and white or the color version of the logo is used. The default initial setup is `BW = false`.

- logo   = none, plain, [top], stacked, left

  Selection of the specific logo at the top of the title page:

	BW=false	BW=true
plain	USlogo	USlogo-BW
top	USlogo-top	USlogo-BW-top
stacked	USlogo-stack	USlogo-BW-stack
left	USlogo-left	USlogo-BW-left

- scale   = [1.0]

  Scale factor when logo graphics file is imported. The default initial setup is `scale = 1.0`.

- vspace   = [0pt]

  The logo can be shifted up or downwards with the amount `vspace`.

1.3 User macros

Only one command, \address, is provided in addition to the standard LaTeX title page commands, \title, \author and \date. As an example:

```
\documentclass[12pt,a4paper,UKenglish]{article}
\usepackage{babel}
\usepackage[bw]{ustitle}

\title  {A Beautiful Document}
\author {Danie Els \and John Doe}
\address{Department of Mechanical Engineering,\\
         University of Stellenbosch,\\
         Private Bag X1, Matieland, 7602.}
\date   {2005/05/17}

\begin{document}
   \maketitle
    :
```

2 Implementation: **UStitle**

2.1 Identification

1 ⟨∗pkg⟩

2 \NeedsTeXFormat{LaTeX2e}[1999/12/01]

3 \ProvidesPackage{ustitle}[\USTitleFileDate\space
4   \USTitleFileVersion\space
5   Stellenbosh Title Page Package (DNJ ELS)]

2.2 External packages

The following packages are required by UStitle.

6 \RequirePackage{ifthen}
7 \RequirePackage{keyval}

We do not load the graphicx package, but requests its loading in the document preamble to prevent global option conflicts.

8 \AtBeginDocument{%
9   \@ifpackageloaded{graphicx}{}{%
10   \PackageError{ustitle}{You must load the graphicx package}{}%
11   }}

2.3 Input options with **keyval**

2.3.1 Helper macros

`\UST@true`
`\UST@false` Define true and false test macros.

```
12 \def\UST@true{true}
13 \def\UST@false{false}
```

`\UST@boolkey`
`\UST@@boolkey` Define a boolean key `\UST@boolkey`[⟨*default*⟩]{⟨*Key*⟩}{⟨*test opt*⟩} that test if a key input is true or false.

```
14 \def\UST@boolkey{\@dblarg\UST@@boolkey}
```

```
15 \def\UST@@boolkey[#1]#2#3{%
16     \lowercase{\def\UST@tempa{#3}}%
17     \ifx\UST@tempa\@empty
18         \let\UST@tempa\UST@true
19     \fi
20     \ifx\UST@tempa\UST@true
21     \else
22         \ifx\UST@tempa\UST@false
23         \else
24             \let\UST@tempa\relax
25         \fi
26     \fi
27     \ifx\UST@tempa\relax
28         \PackageWarning{ustitle}{%
29             Unexpected value '#3'\MessageBreak
30             of option '#1' instead of\MessageBreak
31             'true' or 'false'}
32     \else
33         \csname UST@#2\UST@tempa\endcsname
34     \fi}
```

`\UST@processKVoptions` Process all key value options in the package parameter list, including global options.

```
35 \newcommand*{\UST@processKVoptions}[1]{%
36     \let\@tempa\@empty
37     \@for\CurrentOption:=\@classoptionslist\do{%
38         \@ifundefined{KV@#1@\CurrentOption}%
39             {}%
40             {\edef\@tempa{\@tempa,\CurrentOption,}}}%
41     \edef\@tempa{%
42         \noexpand\setkeys{#1}{\@tempa\@ptionlist{\@currname.\@currext}}}%
43     \@tempa
44     \AtEndOfPackage{\let\@unprocessedoptions\relax}}%
```

2.3.2 Key value: `titlepage`

```
45 \newif\ifUST@titlepage
46 \UST@titlepagefalse
```

```
47 \define@key{UST@KeyOpt}{titlepage}[true]{%
48     \UST@boolkey{titlepage}{#1}}
```

2.3.3 Key value: `BW` (Black and White)

4

```
49 \newif\ifUST@BW
50 \UST@BWfalse

51 \define@key{UST@KeyOpt}{BW}[true]{
52     \UST@boolkey{BW}{#1}%
53     \UST@SetUSLogo}
```

2.3.4 Key value: `scale`

```
54 \define@key{UST@KeyOpt}{scale}[1.0]{%
55     \def\UST@logoscale{#1}}
```

2.3.5 Key value: `vspace`

```
56 \def\UST@vspace{0pt}%
57 \define@key{UST@KeyOpt}{vspace}[0pt]{%
58     \def\UST@vspace{#1}}
```

2.3.6 Key value: `logo`

```
59 \newcounter{UST@logocnt}

60 \newif\ifUST@logo
61 \UST@logotrue

62 \define@key{UST@KeyOpt}{logo}[top]{%
63     \ifthenelse{\equal{#1}{none}}   {\UST@logofalse}            {%
64     \ifthenelse{\equal{#1}{plain}}  {\setcounter{UST@logocnt}{0}}{%
65     \ifthenelse{\equal{#1}{top}}    {\setcounter{UST@logocnt}{1}}{%
66     \ifthenelse{\equal{#1}{stacked}}{\setcounter{UST@logocnt}{2}}{%
67     \ifthenelse{\equal{#1}{left}}   {\setcounter{UST@logocnt}{3}}{%
68        \PackageWarning{ustitle}{logo='#1' is invalid, default to 'top'}%
69        \setcounter{UST@logocnt}{0}%
70        }}}}}%
71     \UST@SetUSLogo}
```

Logos are Scaled to give USLogo-top a width of 89.5mm

```
72 \def\UST@logoname{}%
73 \newlength\UST@logowdt

74 \newcommand\UST@SetUSLogo{%
75 \ifcase\c@UST@logocnt%..................... 0 plain
76     \ifUST@BW
77         \def\UST@logoname{USlogo-BW}%
78     \else
79         \def\UST@logoname{USlogo}%
80     \fi
81     \setlength\UST@logowdt{15.08mm}%
82 \or%................................... 1 top
83     \ifUST@BW
84         \def\UST@logoname{USlogo-BW-top}%
85     \else
86         \def\UST@logoname{USlogo-top}%
87     \fi
88     \setlength\UST@logowdt{89.50mm}%
89 \or%................................... 2 stacked
90     \ifUST@BW
91         \def\UST@logoname{USlogo-BW-stack}%
92     \else
93         \def\UST@logoname{USlogo-stack}%
```

```
94        \fi
95        \setlength\UST@logowdt{32.08mm}%
96 \or%................................... 3 left
97        \ifUST@BW
98            \def\UST@logoname{USlogo-BW-left}%
99        \else
100           \def\UST@logoname{USlogo-left}%
101       \fi
102       \setlength\UST@logowdt{108.60mm}%
103 \fi}
104 \newcommand\UST@putlogo{%
105     \ifUST@logo
106         {\vspace*{\UST@vspace}%
107          \centering%
108          \makebox[0pt][c]{%
109              \includegraphics[width=\UST@logoscale\UST@logowdt]{\UST@logoname}}\par
110         }%
111     \fi
112 }
```

2.3.7   Set and process options

Set the default keys

```
113 \setkeys{UST@KeyOpt}{%
114     titlepage = false,
115         logo,
116             BW = false,
117         scale}
```

Process the options

```
118 \UST@processKVoptions{UST@KeyOpt}
```

2.4   Title Page

\address
\@address

```
119 \let\@address\relax
120 \newcommand\address[1]{\def\@address{#1}}
```

\maketitle   Redefine the standard LaTeX \maketitle command to include a logo and and address.

```
121 \ifUST@titlepage
122     \renewcommand\maketitle{%
123     \begin{titlepage}%
124         \let\footnotesize\small
125         %\let\footnoterule\relax
126         \let \footnote \thanks
127         \null
128         \UST@putlogo
129         \vfil
130         \vskip 20mm
131         \begin{center}%
132             {\LARGE \@title \par}%
133             \vskip 10mm%
134             {\large
```

```
135            \lineskip .75em%
136            \begin{tabular}[t]{c}%
137                \@author
138            \end{tabular}\par}%
139            \ifx\@address\relax\else
140                \vskip 10mm%
141              {\normalsize\@address\par}
142            \fi
143            \vskip 10mm%
144            {\large \@date \par}%            % Set date in \large size.
145        \end{center}\par
146            \vfil\null
147        \@thanks
148 %        \ifx\@address\relax
149 %            \vfil\null
150 %        \fi
151    \end{titlepage}%
152    \setcounter{footnote}{0}%
153    \global\let\thanks\relax
154    \global\let\maketitle\relax
155    \global\let\@thanks\@empty
156    \global\let\@author\@empty
157    \global\let\@date\@empty
158    \global\let\@title\@empty
159    \global\let\title\relax
160    \global\let\author\relax
161    \global\let\date\relax
162    \global\let\and\relax}
163 \else
164    \renewcommand\maketitle{%
165    \par
166    \begingroup
167        \renewcommand\thefootnote{\@fnsymbol\c@footnote}%
168        \def\@makefnmark{\rlap{\@textsuperscript{\normalfont\@thefnmark}}}%
169        \long\def\@makefntext##1{\parindent 1em\noindent
170                \hb@xt@1.8em{%
171                    \hss\@textsuperscript{\normalfont\@thefnmark}}##1}%
172        \if@twocolumn
173        \ifnum \col@number=\@ne
174            \@maketitle
175        \else
176            \twocolumn[\@maketitle]%
177        \fi
178        \else
179        \newpage
180        \global\@topnum\z@   % Prevents figures from going at top of page.
181        \@maketitle
182        \fi
183        \thispagestyle{plain}\@thanks
184    \endgroup
185    \setcounter{footnote}{0}%
186    \global\let\thanks\relax
187    \global\let\maketitle\relax
188    \global\let\@maketitle\relax
```

```
189    \global\let\@thanks\@empty
190    \global\let\@author\@empty
191    \global\let\@date\@empty
192    \global\let\@title\@empty
193    \global\let\title\relax
194    \global\let\author\relax
195    \global\let\date\relax
196    \global\let\and\relax}
```

\@maketitle   Redefine the standard LaTeX \@maketitle command to include a logo and and address.

```
197 \def\@maketitle{%
198   \newpage
199   \null
200   \begin{center}%
201      \let \footnote \thanks
202      \UST@putlogo
203      \vskip 15mm%
204    {\LARGE \@title \par}%
205      \vskip 5mm%
206    {\large
207     \lineskip .5em%
208     \begin{tabular}[t]{c}%
209        \@author
210     \end{tabular}\par}%
211     \ifx\@address\relax\else
212        \vskip 10mm%
213       {\normalsize\@address\par}
214     \fi
215     \vskip 5mm%
216    {\large \@date}%
217   \end{center}%
218   \par
219   \vskip 5mm}
220 \fi
```

```
221 ⟨/pkg⟩
```

The end of this package.

Change History

v1.0
    General: Initial version 1