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The UStitle Package*

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Abstract

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

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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 L^AT_EX 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 L^AT_EX 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 Define true and false test macros.
\UST@false 12 \def\UST@true{true}
13 \def\UST@false{false}

\UST@boolkey Define a boolean key \UST@boolkey[⟨default⟩]{⟨Key⟩}{⟨test opt⟩} that test if a
\UST@@boolkey 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 op-
tions.
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\@optionlist{\@currname.\@currentt}}}%
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)

```

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[Opt][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
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=\@one
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 L^AT_EX `\@maketitle` command to include a logo 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