

Documented Code For mfirstuc v2.0

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1 Introduction

This is the documented code for the mfirstuc package. See `mfirstuc-manual.pdf` for the main user guide.

2 Main Package Code

2.1 Mfirstuc Documented Code

```
1 \NeedsTeXFormat{LaTeX2e}
2 \ProvidesPackage{mfirstuc}[2015/09/09 v2.0 (NLCT)]
```

Requires etoolbox:

```
3 \RequirePackage{etoolbox}
```

`\makefirstuc` Syntax:

`\makefirstuc{text}`

Makes the first letter uppercase, but will skip initial control sequences if they are followed by a group and make the first thing in the group uppercase, unless the group is empty. Thus `\makefirstuc{abc}` will produce: `Abc`, `\makefirstuc{\ae bc}` will produce: `Æbc`, but `\makefirstuc{\emph{abc}}` will produce `Abc`. This is required by `\Gls` and `\Glspl`.

```

4 \newif\if@glscs
5 \newtoks\@glsmfirst
6 \newtoks\@glsmrest
7 \newrobustcmd*{\makefirstuc}[1]{%
8   \def\gls@argi{#1}%
9   \ifx\gls@argi\@empty

```

If the argument is empty, do nothing.

```

10  \else

11    \def\@gls@tmp{\ #1}%
12    \@onelevel@sanitize\@gls@tmp
13    \expandafter\@gls@checkcs\@gls@tmp\relax\relax
14    \if@glscs

```

Check if we have two sequential control sequences.

```

15    \expandafter\def\expandafter\@gls@tmp\expandafter{\expandafter
16      \ \gobble #1}%
17    \@onelevel@sanitize\@gls@tmp
18    \expandafter\@gls@checkcs\@gls@tmp\relax\relax
19    \if@glscs\@glscsfalse\else\@glscstrue\fi
20  \fi
21  \if@glscs
22    \@gls@getbody #1{\@nil
23      \ifx\@gls@rest\@empty
24        \glsmakefirstuc{#1}%
25      \else
26        \expandafter\@gls@split\@gls@rest\@nil
27        \ifx\@gls@first\@empty
28          \glsmakefirstuc{#1}%
29        \else
30          \expandafter\@glsmfirst\expandafter{\@gls@first}%
31          \expandafter\@glsmrest\expandafter{\@gls@rest}%
32          \edef\@gls@domfirstuc{\noexpand\@gls@body
33            {\noexpand\glsmakefirstuc\the\@glsmfirst}%
34            \the\@glsmrest}%
35          \@gls@domfirstuc
36        \fi
37      \fi
38    \else
39      \glsmakefirstuc{#1}%
40    \fi
41  \fi
42 }

```

Put first argument in \@gls@first and second argument in \@gls@rest:

```
43 \def\@gls@split#1#2\@nil{%
44   \def\@gls@first{#1}\def\@gls@rest{#2}%
45 }

46 \def\@gls@checkcs#1 #2#3\relax{%
47   \def\@gls@argi{#1}\def\@gls@argii{#2}%
48   \ifx\@gls@argi\@gls@argii
49     \@glscstrue
50   \else
51     \@glscsfalse
52   \fi
53 }
```

\@gls@makefirstuc Make first thing upper case:

```
54 \def\@gls@makefirstuc#1{\mfirstucMakeUppercase #1}
```

\mfirstucMakeUppercase Allow user to replace \MakeUppercase with another case changing command.

```
55 \newcommand*{\mfirstucMakeUppercase}{\MakeUppercase}
```

\glsmakefirstuc Provide a user command to make it easier to customise.

```
56 \newcommand*{\glsmakefirstuc}[1]{\@gls@makefirstuc{#1}}
```

Get the first grouped argument and store in \@gls@body.

```
57 \def\@gls@getbody#1#{\def\@gls@body{#1}\@gls@gobbletonil}
```

Scoup up everything to \@nil and store in \@gls@rest:

```
58 \def\@gls@gobbletonil#1\@nil{\def\@gls@rest{#1}}
```

\xmakefirstuc Expand argument once before applying \makefirstuc (added v1.01).

```
59 \newcommand*{\xmakefirstuc}[1]{%
60   \expandafter\makefirstuc\expandafter{#1}}
```

\emakefirstuc Fully expand argument before applying \makefirstuc

```
61 \DeclareRobustCommand*{\emakefirstuc}[1]{%
62   \protected@edef\@MFU@caparg{#1}%
63   \expandafter\makefirstuc\expandafter{\@MFU@caparg}%
64 }
```

\capitalisewords Capitalise each word in the argument. Words are considered to be separated by plain spaces (i.e. non-breakable spaces won't be considered a word break).

```
65 \newrobustcmd*{\capitalisewords}[1]{%
66   \def\gls@add@space{}%
67   \let\@mfu@domakefirstuc\makefirstuc
68   \let\@mfu@checkword\@gobble
69   \mfu@capitalisewords#1 \@nil\mfu@endcap
70 }
```

```

71 \def\mfu@capitalisewords#1 #2\mfu@endcap{%
72   \def\mfu@cap@first{#1}%
73   \def\mfu@cap@second{#2}%
74   \gls@add@space
75   \@mfu@checkword{#1}%
76   \@mfu@domakefirstuc{#1}%
77   \def\gls@add@space{ }%
78   \ifx\mfu@cap@second\@nnil
79     \let\next@mfu@cap\mfu@noop
80   \else
81     \let\next@mfu@cap\mfu@capitalisewords
82     \let\@mfu@checkword\mfu@checkword
83   \fi
84   \next@mfu@cap#2\mfu@endcap
85 }
86 \def\mfu@noop#1\mfu@endcap{}

```

\mfu@checkword Check if word should be capitalised.

```

87 \newcommand*\mfu@checkword[1]{%
88   \ifinlist{#1}{\@mfu@nocaplist}%
89   {%
90     \let\@mfu@domakefirstuc\@firstofone
91   }%
92   {%
93     \let\@mfu@domakefirstuc\makefirstuc
94   }%
95 }

```

\@mfu@nocaplist List of words that shouldn't be capitalised.

```

96 \newcommand*\@mfu@nocaplist{}

```

\MFUnocap Provide the user with a means to add a word to the list.

```

97 \newcommand*\MFUnocap[1]{\listadd{\@mfu@nocaplist}{#1}}

```

\gMFUnocap Global version.

```

98 \newcommand*\gMFUnocap[1]{\listgadd{\@mfu@nocaplist}{#1}}

```

\MFUclear Clear the list

```

99 \newcommand*\MFUclear{\renewcommand*\@mfu@nocaplist{}}

```

\xcapitalisewords Short-cut command:

```

100 \newcommand*\xcapitalisewords[1]{%
101   \expandafter\capitalisewords\expandafter{#1}%
102 }

```

\ecapitalisewords Fully expand argument before applying \capitalisewords

```

103 \DeclareRobustCommand*\ecapitalisewords[1]{%
104   \protected@edef\@MFU@caparg{#1}%
105   \expandafter\capitalisewords\expandafter{\@MFU@caparg}%
106 }

```

2.2 Mfirstuc-english Documented Code

```
107 \NeedsTeXFormat{LaTeX2e}
108 \ProvidesPackage{mfirstuc-english}[2015/09/09 v2.0 (NLCT)]
```

Load mfirstuc if not already loaded:

```
109 \RequirePackage{mfirstuc}
```

Add no-cap words. This list isn't complete. I don't intend adding disputed words. Additional words can be added to the document in a similar manner.

```
110 \MFUnocap{a}
111 \MFUnocap{an}
112 \MFUnocap{and}
113 \MFUnocap{but}
114 \MFUnocap{for}
115 \MFUnocap{in}
116 \MFUnocap{of}
117 \MFUnocap{or}
118 \MFUnocap{no}
119 \MFUnocap{nor}
120 \MFUnocap{so}
121 \MFUnocap{some}
122 \MFUnocap{the}
123 \MFUnocap{with}
124 \MFUnocap{yet}
```

Change History

1.03		\capitalisewords: added check
	\makefirstuc: changed	for words that shouldn't be
	\protected@edef to \def ... 2	capitalised 3
1.05		\gMFUnocap: new 4
	\glsmakefirstuc: new 3	\mfu@checkword: new 4
1.06		\MFUclear: new 4
	General: now requires etoolbox ... 1	1.10
	\capitalisewords: new 3	\ecapitalisewords: new 4
	\xcapitalisewords: new 4	\emakefirstuc: new 3
1.08		2.0
	\capitalisewords: made robust . 3	General: package split from glos-
	\makefirstuc: made robust 2	saries 1
1.09		\makefirstuc: added check for
	\@mfu@nocaplist: new 4	two control sequences 2

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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.

Symbols			
\@gls@makefirstuc	3	\Glspl	2
\@mfu@nocaplist	4	\gMFUnocap	4
		M	
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\capitalisewords	3	mfirstuc package	5
		\mfirstucMakeUppercase	3
E		\mfu@checkword	4
\ecapitalisewords	4	\MFUclear	4
\emakefirstuc	3	\MFUnocap	4
etoolbox package	1		
		X	
G		\xcapitalisewords	4
\Gls	2	\xmakefirstuc	3
\glsmakefirstuc	3		