stmlistings package description

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Martin Rädel

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These are the listings definitions for `stmlatex`. It is build upon the listings package.

Contents

1. Usage

1.1. Load the whole `stmlistings` package

1.1.1. Description

This is an interface package which loads listings styles and commands commonly required throughout document creation.

By default the package loads

1

- `stmlistingscommands.sty`
- `stmlistingsenvironments.sty`
- `stmlistingsstyles.sty`

See subsubsection 1.1.2 for options to change the default package behavior.

1.1.2. Options

Option *styles*   This is a boolean option. Expected values are either `true` or `false`. It controls whether to load the predefined listings styles.

`\usepackage[styles=true|false]{stmlistings}`

`styles=true` is the default. It is used in case `styles=false` is not set explicitly.

Option *commands*   This is a boolean option. Expected values are either `true` or `false`. It enables and disables the loading of specific listings commands.

`\usepackage[commands=true|false]{stmlistings}`

`commands=true` is the default. It is used in case `commands=false` is not set explicitly.

Option *environments*   This is a boolean option. Expected values are either `true` or `false`. It enables and disables the loading of specific listings environments.

`\usepackage[environments=true|false]{stmlistings}`

`commands=true` is the default. It is used in case `commands=false` is not set explicitly.

1.2. `stmlistingsstyles`

1.2.1. Description

1.2.2. Styles

1.3. `stmlistingscommands`

1.3.1. Description

These are commands and shortcuts for listings.

1.3.2. Command `\inlinecode`

Description   Create an code snippet in the current line.

Usage   The command arguments are

Nr.	Entity	Type	Default	Description
1	Delimiter	optional	+	Defines beginning and end of the code snippet.
2	Color	optional	`verbgraycolor`	Background color
3	Style	optional	`inlinecodestyle`	Listings style
3	Content	mandatory		Code

Examples

- `\inlinecode{Example}`: This is an `Example` for an in line code definition.

- `\inlinecode[+][verbgraycolor][inlinecodestyle]{Example}`: This is an `Example` for an in line code definition.

- `\inlinecode[+][green]{Example}`: This is an `Example` for an in line code definition.

- `\inlinecode[|]{1+2}`: Example for a different delimiter `1+2` in case the default delimiter is used in the expression.

A. The code

A.1. stmlistings.sty

```
 1  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
 2  % Header                        %
 3  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
 4  %
 5  % This file includes listings definitions.
 6  % Based upon the listings package:
 7  %   https://ctan.org/pkg/listings
 8  %
 9  % Usage
10  %  - Preamble:
11  %    - \usepackage{stmlistings}
12  %
13  % Revisions: 2019-10-27 Martin Raedel <martin.raedel@dlr.de>
14  %                       Initial draft
15  %
16  % Contact:   Martin Raedel,  martin.raedel@dlr.de
17  %            DLR Lightweight Systems
18  %
19  %                                   __/|__
20  %                                  /_/_/_/
21  %            www.dlr.de/sy/en      |/ DLR
22  %
23  % Copyright (C) 2019-... DLR Lightweight Systems
24  %
25  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
26  % Content                       %
27  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
28
29  % Declare that this style file requires at least LaTeX version 2e.
30  \NeedsTeXFormat{LaTeX2e}
31
32  % Provide the name of your page, the date it was last updated, and a
        comment about what it's used for
33  \ProvidesPackage{stmlistings}[2023/02/12 STMs custom LaTeX listings
        definitions]
34
35  % -------------------------
36  % Package
37  % -------------------------
38
```

```
39  \@ifpackageloaded{listings}{}{\RequirePackage{listings}}%
40  \@ifpackageloaded{stmcolors}{}{\RequirePackage{stmcolors}}%
41  \@ifpackageloaded{kvoptions}{}{\RequirePackage{kvoptions}}%
42
43  % ------------------------
44  % Options
45  % ------------------------
46
47  \SetupKeyvalOptions{%
48    family=stmlistings,%
49    prefix=stmlistings@,%
50    setkeys=\kvsetkeys,%
51  }
52
53  % Styles
54  \DeclareBoolOption[true]{styles}
55
56  % Environments
57  \DeclareBoolOption[true]{environments}
58
59  % Commands
60  \DeclareBoolOption[true]{commands}
61
62  % Process options
63  \ProcessKeyvalOptions{stmlistings}
64
65  % ------------------------
66  % Modules
67  % ------------------------
68
69  % Styles
70  \ifstmlistings@styles
71    \@ifpackageloaded{stmlistingsstyles}{}{\RequirePackage{
       stmlistingsstyles}}%
72  \fi
73
74  % Environments
75  \ifstmlistings@environments
76    \@ifpackageloaded{stmlistingsenvironments}{}{\RequirePackage{
       stmlistingsenvironments}}%
77  \fi
78
79  % Commands
80  \ifstmlistings@commands
```

```
81    \@ifpackageloaded{stmlistingscommands}{}{\RequirePackage{
         stmlistingscommands}}%
82  \fi
83
84  % -------------------------
85  % Preferences
86  % -------------------------
87
88  % http://tex.stackexchange.com/a/64845/44634
89  \makeatletter
90  \@ifundefined{KOMAClassName}
91    {% true -> no KOMA class
92      %
93    }%
94    {% false -> KOMA class
95      \newcaptionname{english}{\lstlistlistingname}{List of \lstlistingname
         s}%
96      \newcaptionname{ngerman}{\lstlistlistingname}{Quelltextverzeichnis}%
97    }%
98  \makeatother
99
100 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
101 % That's it                      %
102 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
103
104 % Finally, we'll use \endinput to indicate that LaTeX can stop reading
         this file. LaTeX will ignore anything after this line.
105 \endinput
```

A.2. stmlistingscommands.sty

```
 1  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
 2  % Header                          %
 3  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
 4  %
 5  % This file includes listings definitions.
 6  % Based upon the listings package:
 7  %   https://ctan.org/pkg/listings
 8  %
 9  % Usage
10  %  - Preamble:
11  %    - \usepackage{stmlistingscommands}
12  %
13  % Revisions: 2019-10-27 Martin Raedel <martin.raedel@dlr.de>
14  %                       Initial draft
15  %
16  % Contact:   Martin Raedel,  martin.raedel@dlr.de
17  %            DLR Lightweight Systems
18  %
19  %                                 __/|__
20  %                                /_/_/_/
21  %            www.dlr.de/sy/en        |/ DLR
22  %
23  % Copyright (C) 2019-... DLR Lightweight Systems
24  %
25  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
26  % Content                         %
27  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
28
29  % Declare that this style file requires at least LaTeX version 2e.
30  \NeedsTeXFormat{LaTeX2e}
31
32  % Provide the name of your page, the date it was last updated, and a
        comment about what it's used for
33  \ProvidesPackage{stmlistingscommands}[2023/02/12 STMs custom LaTeX
        listings definitions]
34
35  % -------------------------
36  % Package
37  % -------------------------
38
39  \@ifpackageloaded{listings}{}{\RequirePackage{listings}}%
40  \@ifpackageloaded{stmcolors}{}{\RequirePackage{stmcolors}}%
```

```latex
41  \@ifpackageloaded{stmlistingsstyles}{}{\RequirePackage{stmlistingsstyles
        }}%
42  \@ifpackageloaded{xparse}{}{\RequirePackage{xparse}}%
43  \@ifpackageloaded{ifmtarg}{}{\RequirePackage{ifmtarg}}%
44
45  % ------------------------
46  % Commands
47  % ------------------------
48
49  \newcommand*{\lstcomment}[1]{\hfill\makebox[5.25cm][l]{#1}}%
50
51
52  % https://tex.stackexchange.com/a/33753
53  \DeclareDocumentCommand{\inlinecode}{%
54    O{+}% Delimiters - optional, default in brackets
55    O{verbgraycolor}% Color for the colorbox - optional, default in
        brackets
56    O{inlinecodestyle}% Style definition for code - optional, default in
        brackets
57    m% content
58  }{%
59    \colorbox{#2}{\lstinline[style=#3]#1#4#1}%
60  }
61
62  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
63  % That's it                    %
64  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
65
66  % Finally, we'll use \endinput to indicate that LaTeX can stop reading
        this file. LaTeX will ignore anything after this line.
67  \endinput
```

A.3. `stmlistingsenvironments.sty`

```
 1  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
 2  % Header                          %
 3  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
 4  %
 5  % This file includes listings definitions.
 6  % Based upon the listings package:
 7  %    https://ctan.org/pkg/listings
 8  %
 9  % Usage
10  %  - Preamble:
11  %    - \usepackage{stmlistingsenvironments}
12  %
13  % Revisions: 2019-10-27 Martin Raedel <martin.raedel@dlr.de>
14  %                       Initial draft
15  %
16  % Contact:   Martin Raedel,  martin.raedel@dlr.de
17  %            DLR Lightweight Systems
18  %
19  %                               __/|__
20  %                              /_/_/_/
21  %            www.dlr.de/sy/en      |/ DLR
22  %
23  % Copyright (C) 2019-... DLR Lightweight Systems
24  %
25  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
26  % Content                         %
27  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
28
29  % Declare that this style file requires at least LaTeX version 2e.
30  \NeedsTeXFormat{LaTeX2e}
31
32  % Provide the name of your page, the date it was last updated, and a
       comment about what it's used for
33  \ProvidesPackage{stmlistingsenvironments}[2023/02/12 STMs custom LaTeX
       listings definitions]
34
35  % --------------------------
36  % Package
37  % --------------------------
38
39  \@ifpackageloaded{listings}{%
40  %
```

```
41  }{%
42    \RequirePackage{listings}
43  }%
44
45  \@ifpackageloaded{stmcolors}{%
46  %
47  }{%
48    \RequirePackage{stmcolors}
49  }%
50
51  % --------------------------
52  % Styles
53  % --------------------------
54
55  \@ifpackageloaded{stmlistingsstyles}{%
56  %
57  }{%
58    \RequirePackage{stmlistingsstyles}
59  }%
60
61  % --------------------------
62  % Environments
63  % --------------------------
64
65  \lstnewenvironment{code}{%
66    \lstset{style=scriptstyle}
67  }{}
68
69  \lstnewenvironment{texcode}{%
70    \lstset{style=texcodestyle}
71  }{}
72
73  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
74  % That's it                   %
75  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
76
77  % Finally, we'll use \endinput to indicate that LaTeX can stop reading
        this file. LaTeX will ignore anything after this line.
78  \endinput
```

A.4. stmlistingsstyles.sty

```
 1  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
 2  % Header                          %
 3  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
 4  %
 5  % This file includes listings definitions.
 6  % Based upon the listings package:
 7  %    https://ctan.org/pkg/listings
 8  %
 9  % Usage
10  %  - Preamble:
11  %    - \usepackage{stmlistingsstyles}
12  %
13  % Revisions: 2019-10-27 Martin Raedel <martin.raedel@dlr.de>
14  %                       Initial draft
15  %
16  % Contact:   Martin Raedel,  martin.raedel@dlr.de
17  %            DLR Lightweight Systems
18  %
19  %                                __/|__
20  %                               /_/_/_/
21  %            www.dlr.de/sy/en       |/ DLR
22  %
23  % Copyright (C) 2019-... DLR Lightweight Systems
24  %
25  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
26  % Content                         %
27  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
28
29  % Declare that this style file requires at least LaTeX version 2e.
30  \NeedsTeXFormat{LaTeX2e}
31
32  % Provide the name of your page, the date it was last updated, and a
        comment about what it's used for
33  \ProvidesPackage{stmlistingsstyles}[2023/02/12 STMs custom LaTeX listings
         style definitions]
34
35  % --------------------------
36  % Package
37  % --------------------------
38
39  \@ifpackageloaded{listings}{}{\RequirePackage{listings}}%
40  \@ifpackageloaded{stmcolors}{}{\RequirePackage{stmcolors}}%
```

```latex
41
42  % -------------------------
43  % Styles
44  % -------------------------
45
46  \lstdefinestyle{basestyle}{
47    backgroundcolor=\color{boxgraycolor},
48    basicstyle=\ttfamily,
49    columns=fullflexible,
50  }
51
52  \lstdefinestyle{inlinecodestyle}{
53    backgroundcolor=\color{boxgraycolor},
54    basicstyle=\ttfamily,
55  }
56
57  \lstdefinestyle{scriptstyle}{
58    style=basestyle,
59    escapechar=\%,% char to escape out of listings and back to LaTeX
60  }
61
62  \lstdefinestyle{texcodestyle}{
63    language=[LaTeX]TeX,
64    style=basestyle,
65    breaklines=true,
66    commentstyle=\color{codecommentgraycolor},
67  }
68
69  \lstdefinestyle{inlinetexcodestyle}{
70    language=[LaTeX]TeX,
71    style=basestyle,
72    upquote=true,% Important for copy-paste
73  }
74
75  \lstdefinestyle{texpackagedocstyle}{
76    style=texcodestyle,%
77    numbers=left,%
78    keepspaces=true,%
79  }
80
81  \lstdefinestyle{javacodestyle}{
82    style=basestyle,
83    basicstyle=\linespread{0.8}\ttfamily,
84    language=Java,
```

```
85  }
86
87  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
88  % That's it                     %
89  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
90
91  % Finally, we'll use \endinput to indicate that LaTeX can stop reading
        this file. LaTeX will ignore anything after this line.
92  \endinput
```