Task Report v0.1

Geraldo Xexéo

Monday 31^{st} May, 2021 - 21:32

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1 Introduction

This package supports the maintenance and report of a task list..

2 How to use task-report

task-report is available as open source at https://github.com/xexeo/task-report. The stable distribution is in the folder dist, while the lastest, and unstable, will be in the root folder.

The only file you really need, besides this manual, is task-report.sty. This should be in your LATEX path, such as in the same folder that your main .tex file.

You can make suggestions, complain about bugs, and request features using GitHub's "Issues" feature, in https://github.com/xexeo/task-report/issues (you must be signed in).

2.1 Using from Overleaf

The best way to use task-report inside Overleaf is to link the distributed style file through its URL. To do that, inside your project, select first "Upload". An "Add files" window will appear, then select "From Externa URL" and enter https://raw.githubusercontent.com/xexeo/task-report/main/dist/task-report.sty as "URL to fetch the file from" and "task-report" as "File Name in This Project", as in Figure 1.

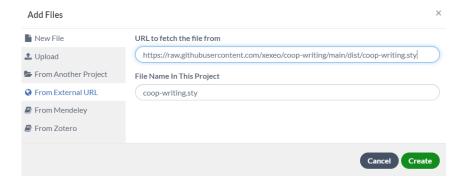


Figure 1: How to link a task-report.sty file in your project folder in Overleaf to the official distribution.

3 Package Options

There are no package options up to now

3.1 General behavior

4 Version

It is possible that the user wants to know the version being used. We provide two commands for it.

\taskreportversion

Provides the current version

\printtaskreportversion

Provides name and version

 $\$ taskreportversion was used in the title of this article. The current version is v0.1.

If needed, the second macro prints also the name of the package:

\printtaskreportversion

will result in:

task-report v. v0.1

Please state the version when reporting bugs.

5 Usage

\trtask

This is the main macro for the package. $\track[\langle status \rangle] {\langle when-assigned \rangle} {\langle who-assigned \rangle} {\langle who-assigned \rangle} {\langle who-assigned \rangle} {\langle why \rangle} {\langle when-done \rangle} {\langle extratext \rangle}$

Altough it has 7 mandatory parameters, all of them can be empty.

There are 5 possible states that are associated with a color (default color): todo (red), doing(yellow), tocheck (cyan), checking (blue), and done(green). There is a pseudo-state other (black) that will be the color of any other word used of a state. Colors belong to the xcolor package and are configurable, as explained in section 5.1.

The example:

 $\label{today}_{Geraldo Xexéo}_{}_{Please do the coffe strong}_{\trtask[doing]_{Drink a coffe}_{June, 1st 2021}_{The Boss}_{The Worker}_{}_{Roast the beef}_{June, 1st 2021}_{The Boss}_{The Worker}_{\today}_{Rare, $\trtask[checking]_{Drink another beer}_{June, 1st 2021}_{The Boss}_{The Worker}_{\today}_{Fk}_{\trtask[done]_{Drink a beer}_{\today}_{The Boss}_{The Worker}_{\today}_{}_{\trtask}_{\$

generates:

Mage coffe

Status: todo

Assigned in: Monday 31st May, 2021

From: Geraldo Xexéo

Please do the coffe strong

Drink a coffe

Status: doing

Assigned in: June, 1st 2021

From: The Boss
To: The Worker

Roast the beef

Status: tocheck

Assigned in: June, 1st 2021

From: The Boss
To: The Worker

Rationale: Monday 31st May, 2021

Rare, plese

Drink another beer

Status: checking

Assigned in: June, 1st 2021

From: The Boss To: The Worker

Rationale: Monday 31st May, 2021

Please check if you have age to drink in your country. If not, drink orange-

juice.

Drink a beer

Status: done

Assigned in: Monday 31st May, 2021

From: The Boss
To: The Worker

Rationale: Monday 31st May, 2021

Task not defined

Task not defined

 \mathbf{Status} : done

Grab a hot-dog

Assigned in: 3

From: 4 To: 5

Rationale: 6 Done in: 7

A hot dog must be done with bread and sausage

5.1 Configuration Options

\trsetboxcolors

Set the colors for the 4 types of standard states Black otherwise.

 $\verb|\trsetboxcolors|{\langle todo\text{-}color\rangle}|{\langle doing\text{-}color\rangle}|{\langle done\text{-}color\rangle}|{\langle done\text{-}$

The example:

%\trsetboxcolors{magenta}{purple}{orange}{pink}{lime}{pink}

%\trtask[todo]{Drink a coffe}{\today}{The Boss}{The Worker}%

 $\footnotemark{\coffe must be strong} and add 1 spoon of sugar}$

%\trtask[doing]{Drink a coffe}{\today}{The Boss}{The Worker}%

%{To keep awake}{\today}{Coffe must be strong and add 1 spoon of sugar}

%\trtask[tocheck]{Drink a coffe}{\today}{The Boss}{The Worker}%

%{To keep awake}{\today}{Coffe must be strong and add 1 spoon of sugar}

%\trtask[checking]{Drink a coffe}{\today}{The Boss}{The Worker}%

%{To keep awake}{\today}{Coffe must be strong and add 1 spoon of sugar}
%\trtask[done]{Drink a coffe}{\today}{The Boss}{The Worker}%
%{To keep awake}{\today}{Coffe must be strong and add 1 spoon of sugar}
%\trtask{Drink a coffe}{\today}{The Boss}{The Worker}%
%{To keep awake}{\today}{Coffe must be strong and add 1 spoon of sugar}
%

generates:

Drink a coffe

Status: todo

Assigned in: Monday 31st May, 2021

From: The BossTo: The Worker

Rationale: To keep awake

Done in: Monday 31st May, 2021

Coffe must be strong and add 1 spoon of sugar

Drink a coffe

Status: doing

Assigned in: Monday 31st May, 2021

From: The Boss **To**: The Worker

Rationale: To keep awake Done in: Monday 31st May, 2021

Coffe must be strong and add 1 spoon of sugar

Drink a coffe

Status: tocheck

Assigned in: Monday 31st May, 2021

From: The Boss To: The Worker

Rationale: To keep awake

Done in: Monday 31st May, 2021

Coffe must be strong and add 1 spoon of sugar

Drink a coffe

Status: checking

Assigned in: Monday 31st May, 2021

From: The Boss **To**: The Worker

Rationale: To keep awake Done in: Monday 31st May, 2021

Coffe must be strong and add 1 spoon of sugar

Drink a coffe

Status: done

Assigned in: Monday 31st May, 2021

From: The Boss To: The Worker

Rationale: To keep awake

Done in: Monday 31st May, 2021

Coffe must be strong and add 1 spoon of sugar

Drink a coffe

Assigned in: Monday 31st May, 2021

From: The Boss To: The Worker

Rationale: To keep awake

Done in: Monday 31^{st} May, 2021

Coffe must be strong and add 1 spoon of sugar

5.2 Creating New States

Users can create their own state using

 $\verb|\traddstatecolor{|} \langle state \rangle \} \{ \langle color \rangle \}$

Drink a coffe

Status: waiting

Assigned in: Monday 31st May, 2021

From: The Boss **To**: The Worker

Rationale: To keep awake

Done in: Monday 31st May, 2021

Coffe must be strong and add 1 spoon of sugar

6 Warnings

This package uses another package that changes LATEX's standard behavior for summary and lists. When you use it, you must explicitly change pages with \newpage before \tableofcontents or similar commands.

7 Implementation

This package was initially written in Portuguese. As it become more useful, it was translated to English. There are still some signs of this in the code.

7.1 Required Packages

- mdframed makes the frame aroung tasks
- etoolbox command ifstringempty
- 1 \RequirePackage{tcolorbox}%
- 2 \RequirePackage{etoolbox}%

7.2 Access to the current version

We provide some macros for the user to know the version being used.

\taskreportversion Provides current version of coop-writing

4 \newcommand{\taskreportversion}{\tr@version}%

\printtaskreportversion Provides package name and version

 $\label{lem:command} $$ \ensuremath{\mbox{\command{\mbox{\command{\mbox{\command{\mbox{\command{\mbox{\command{\mbox{\command{\mbox{\command{\mbox{\command{\mbox{\command{\mbox{\command{\comm$

7.3 Color Management for Standard States

```
Global variables for the box colors.
                    \tr@todoboxcolor
               \tr@doingboxcolor
                                                                                                                           6 \def\tr@todoboxcolor{red}%
                     \tr@doneboxcolor
                                                                                                                           7 \def\tr@doingboxcolor{yellow}%
      \tr@tocheckboxcolor
                                                                                                                           8 \def\tr@tocheckboxcolor{cyan}%
\tr@checkingboxcolor
                                                                                                                           9 \def\tr@checkingboxcolor{blue}%
           \tr@otherwisecolor
                                                                                                                      10 \def\tr@doneboxcolor{green}%
                                                                                                                       11 \def\tr@otherwisecolor{black}%
                                                                                                                     Set the colors for the 6 types of standard states Black otherwise.
                           \trsetboxcolors
                                                                                                                                         \trsetboxcolors{\langle todo-color \rangle}{\langle doing-color \rangle}{\langle tocheck-color \rangle}{\langle checking-color \rangle}{\langle done-color \rangle}{\langle do
                                                                                                                      color\}{\langle other-color \rangle}
                                                                                                                      12 \newcommand{\trsetboxcolors}[6]{%
                                                                                                                      13 \def\tr@todoboxcolor{#1}%
                                                                                                                      14 \def\tr@doingboxcolor{#2}%
                                                                                                                      15 \def\tr@tocheckboxcolor{#3}%
                                                                                                                      16 \def\tr@checkingcolor{#4}%
                                                                                                                      17 \def\tr@doneboxcolor{#5}%
                                                                                                                      18 \def\tr@otherwisecolor{#6}%
                                                                                                                      19 }%
      \tr@currentboxcolor The dirt trick of using a global variable to store a value
                                                                                                                      20 \def\tr@currentboxcolor{\tr@otherwisecolor}%
                                                                                                                      7.4 User-defined states
                      \traddstatecolor
                                \usestatecolor
                                                                                                                      21 \def\traddstatecolor#1#2{%
                                                                                                                      22 \@ifundefined{\string\color@#2}{%
                                                                                                                      23 \message{#2 not defined}%
                                                                                                                      24 \ERROR%
                                                                                                                      25 }%
                                                                                                                      26 {%
                                                                                                                      27 \expandafter\gdef\csname%
                                                                                                                      28 tr@astate@\detokenize{#1}\endcsname{#2}%
                                                                                                                      29 }}%
                                                                                                                      30 %
                                                                                                                      31 \def\tr@usestatecolor#1{%
                                                                                                                      32 \ifcsname tr@astate@\detokenize{#1}\endcsname%
                                                                                                                      33 \csname tr@astate@\detokenize{#1}\expandafter\endcsname%
                                                                                                                      34 \ensuremath{\mbox{\ensuremath{\mbox{\sc h}}}\xspace \ensuremath{\mbox{\sc h}}\xspace \ensurema
                                                                                                                      35 \tr@otherwisecolor%
```

36 \fi% 37 }%

\trstatuscolor Select the color based on the state

```
\t statuscolor{\langle state \rangle}
```

```
38 \newcommand{\trstatuscolor}[1]%
39 {%
      \def\tr@currentboxcolor{\tr@otherwisecolor}%
40
      \ifblank{#1}{}{%
41
42
      \IfStrEqCase{#1}{%
43
      {todo}{\def\tr@currentboxcolor{\tr@todoboxcolor}}%
      {doing}{\def\tr@currentboxcolor{\tr@doingboxcolor}}%
44
      {done}{\def\tr@currentboxcolor{\tr@doneboxcolor}}%
45
      {tocheck}{\def\tr@currentboxcolor{\tr@tocheckboxcolor}}%
46
      {checking}{\def\tr@currentboxcolor{\tr@checkingboxcolor}}%
47
48
49
      \def\tr@currentboxcolor{\tr@usestatecolor{#1}}
50 ]%
      }%
51
52 }%
```

7.5 Declaring Tasks

7.5.1 Helpers

```
\trstatus
                                                                      Helpers to build the task
            \trwhen
                                                                       53 \newcommand{\trstatus}[2][Status]{%
                  \trwhy
                                                                                                                 \textbf{#1}: #2%
             \trwhat
                                                                        55 }%
                  \trwho
                                                                        56 \newcommand{\trwhen}[2][Assigned in]{%
                                                                                                                 \textbf{#1}: #2%
                                                                        57
                                                                        58 }%
                                                                        59 \newcommand{\trwho}[2][To]{%
                                                                                                                  \textbf{#1}: #2%
                                                                        60
                                                                        61 }%
                                                                        62 \mbox{ } \mbox{ 
                                                                                                                  \textbf{#1}: #2%
                                                                       63
                                                                        64 }%
                                                                        65 \newcommand{\trwhy}[2][Rationale]{%
                                                                        66
                                                                                                                 \textbf{#1}: #2%
                                                                        67 }%
                                                                        68 %
```

7.5.2 Main task macro

\trtask Describes a task

 $\true{\colored} $$ \operatorname{conn}(\operatorname{status}) = (\operatorname{colored}) = (\operatorname{colore$

For example:

```
%\trtask[Help students organize]{doing}
% {Prepare a \LaTeX\ style to support task report}
% {2021-05-31}{Xexéo}{Geraldo Xexéo}{}
%
```

generates:

```
Prepare a LATEX style to support task report

Status: doing
Assigned in: 2021-05-31
From: Xexéo
To: Geraldo Xexéo
Rationale: Help students organize
Done in: not yet

This is an idea to help understanding the work being done
```

```
69 % [status] , what, when-assigned, from-who, to-who, why, when-done, extra
70 \newcommand{\trtask}[8][]{%
       \par%
71
72
       \left\{ \frac{\#2}{4} \right\}
73
       \def\trtask@temp{Task not defined}%
74
       }%
75
       {%
       \def\trtask@temp{#2}%
76
       }%
77
       \trstatuscolor{#1}%
78
       \begin{tcolorbox}[title=\textbf{\trtask@temp},%
79
80
             colback=\tr@currentboxcolor!5!white,%
             colframe=\tr@currentboxcolor!75!black%
81
           ]%
82
           \ifblank{#1}{}%
83
84
           {%
                \trstatus{#1}\newline%
85
           }%
86
            \left\{ \frac{\#3}{}\right\} 
87
88
           {%
                \trwhen{#3}\newline%
89
           }%
90
           \left\{ 4\right\} 
91
92
           {%
                \trwho[From]{#4}\newline%
           }%
94
           \left\{ \frac{45}{5} \right\}
95
```

```
{%
96
97
                \trwho{\#5}\newline%
98
            }%
            \left\{ 46\right\} 
99
            {%
100
            \t \%
101
102
            \verb| ifblank{#7}{}|
103
104
            {%
                \trwhen[Done in]{\#7}\newline%
105
            }%
106
            \left\{ 18\right\} 
107
            {\top} {\top} 
108
            #8%
109
110
            }%
111
        \verb|\end{tcolorbox}|%
112 }%
```

End of Code

Change History

v0.1					
General: First version					1

Index

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	${f N}$	\tr@doingboxcolor .								
$\$ Qifundefined 22	\newline 85,	$$ $\underline{6}$, 14, 44								
	89, 93, 97, 101, 105	\tr@doneboxcolor								
${f C}$	-	<u>6</u> , 17, 45								
\color@ 22	P	\tr@otherwisecolor .								
\csname 27, 33	\par 71	<u>6</u> , 18, 20, 35, 40								
	\printtaskreportversion	\tr@tocheckboxcolor								
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$\verb \detokenize 1. 28, 32, 33 $	R.	\tr@todoboxcolor								
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${f E}$	\nequirerackage 1-3	$\tr@usestatecolor$ 31, 49								
\else 34	${f S}$	$\tr@version \dots 4$								
\end 111	\string 22	\traddstatecolor 21								
\endcsname 28, 32, 33	J	\trsetboxcolors $\underline{12}$								
\ERROR 24	${f T}$	\trstatus $53, 85$								
\expandafter $27, 33$	\taskreportversion $\underline{4}, 5$	\trstatuscolor $38,78$								
	\tcblower 108	\trtask <u>69</u>								
\mathbf{F}	\textbf 54 ,	$\verb \trtask@temp . 73, 76, 79 $								
\fi 36	57, 60, 63, 66, 79	\trwhat 53								
	\tr@checkingboxcolor	\trwhen $53, 89, 105$								
I	$\dots \underline{6}, 47$	\trwho $53, 93, 97$								
\ifblank $41, 72, 83, 87,$	\tr@checkingcolor . 16	\trwhy 53 , 101								
91, 95, 99, 103, 107	\tr@currentboxcolor									
\ifcsname 32	$$ $\underline{20}$, 40,	${f U}$								
\IfStrEqCase 42	43–47, 49, 80, 81	\usestatecolor $\underline{21}$								