Task Report v0.4

Geraldo Xexéo

Tuesday 1st June, 2021 - 12:29

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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.

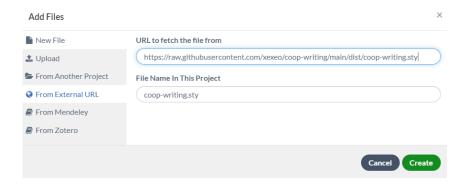


Figure 1: How to link a task-report sty file in your project folder in Overleaf to the official distribution.

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 v0.4.

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

\printtaskreportversion

will result in:

task-report v. v0.4

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} $$ \operatorname{Inday}{Geraldo Xexéo}_{}^{please do the coffe strong} $$ \operatorname{Inday}_{Cong}_{Drink a coffe}_{June, 1st 2021}_{The Boss}_{The Worker}_{}^{please}_{Cong}_$

%\trtask{}{}{}{}{}{}}{}

%\trtask[done]{}{}{}{}{}{}

 $\label{lem:condition} $$ \t transk{Grab a hot-dog}{3}{4}{5}{6}{7}{A hot dog must be done with bread and sausage} %$

generates:

Make coffe

 $\mathbf{Status} \colon \operatorname{todo}$

Assigned in: Tuesday 1st June, 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

Done in: Tuesday 1st June, 2021

Rare, plese

Drink another beer

Status: checking

Assigned in: June, 1st 2021

From: The Boss To: The Worker

Done in: Tuesday 1st June, 2021

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

juice.

Drink a beer

Status: done

Assigned in: Tuesday 1st June, 2021

From: The Boss To: The Worker

Rationale: Because I want Done in: Tuesday 1st June, 2021

Task without a name

Task without a name

Status: done

arg 2

Status: arg 1 Assigned in: arg 3

From: arg 4 To: arg 5

Rationale: arg 6
Done in: arg 7

 ${\rm arg}~8$

5.1 Configuration Options

5.1.1 Configuring Colors

\trsetboxcolors

Set the colors for the 6 types of standard states Black otherwise.

 $\trsetboxcolors{\doing-color}{\doing-color$

The example:

%\trsetboxcolors{magenta}{purple}{orange}{pink}{lime}{pink}
%
%\trtask[todo]{Drink a coffe}{\today}{The Boss}{The Worker}%
%\{To keep awake}{\today}{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}
%\trtask{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}
%\trtask{Drink a coffe}{\today}{Coffe must be strong and add 1 spoon of sugar}
%

generates:

Drink a coffe

 $\mathbf{Status} \colon \operatorname{todo}$

Assigned in: Tuesday 1st June, 2021

From: The Boss To: The Worker

Rationale: To keep awake

Done in: Tuesday 1st June, 2021

Coffe must be strong and add 1 spoon of sugar

Drink a coffe

Status: doing

Assigned in: Tuesday 1st June, 2021

From: The Boss
To: The Worker

Rationale: To keep awake Done in: Tuesday 1st June, 2021

Coffe must be strong and add 1 spoon of sugar

Drink a coffe

Status: tocheck

Assigned in: Tuesday 1st June, 2021

From: The Boss To: The Worker

Rationale: To keep awake Done in: Tuesday 1st June, 2021

Coffe must be strong and add 1 spoon of sugar

Drink a coffe

Status: checking

Assigned in: Tuesday 1st June, 2021

From: The Boss
To: The Worker

 ${\bf Rationale} :$ To keep awake

Done in: Tuesday 1st June, 2021

Coffe must be strong and add 1 spoon of sugar $\,$

Drink a coffe

Status: done

Assigned in: Tuesday 1st June, 2021

From: The Boss
To: The Worker

Rationale: To keep awake Done in: Tuesday 1st June, 2021

Coffe must be strong and add 1 spoon of sugar

Drink a coffe

Assigned in: Tuesday 1st June, 2021

From: The Boss To: The Worker

Rationale: To keep awake Done in: Tuesday 1st June, 2021

Coffe must be strong and add 1 spoon of sugar

5.2 Changing Field Names

\trsetfieldsnames

You can change all field names with command .

 $\trsetfieldsnames {\langle status \rangle} {\langle assigned \rangle} {\langle from \rangle} {\langle to \rangle} {\langle done \rangle} {\langle why \rangle}$

For example:

%\trsetfieldsnames{Stage}{Demand date}{Who asked for}{To who}{Ready in}{Reasons} %\trtask[done]{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

Stage: done

Demand date: Tuesday 1st June, 2021

Who asked for: The Boss To who: The Worker Reasons: To keep awake

Ready in: Tuesday 1^{st} June, 2021

Coffe must be strong and add 1 spoon of sugar

This command can be used to internationalization.

5.3 Creating New States

\traddstatecolor

Users can create their own state using

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

For example:

%\traddstatecolor{waiting}{teal}
%\trtask[waiting]{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: waiting

Assigned in: Tuesday 1st June, 2021

From: The Boss
To: The Worker

Rationale: To keep awake

Done in: Tuesday 1st June, 2021

Coffe must be strong and add 1 spoon of sugar

6 The List of Tasks

\listoftasks

A list of tasks can be generated with the command:

\listoftasks

Its title can be changed with the command:

The command:

\setlength{\cfttasksnumwidth}{25pt}

from package tocloft can be used to set the space used by the section indicator.

7 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.

8 Implementation

8.1 Required Packages

- mdframed makes the frame aroung tasks
- etoolbox command ifstringempty
- tocloft create the list of tasks
- 1 \RequirePackage{tcolorbox}%
- 2 \RequirePackage{etoolbox}%
- 3 \RequirePackage{tocloft}

8.2 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

8.3 Color Management for States

8.4 Defining States Through a Simulated List

```
Inserts states and their colors in a simulated list and uses them
\traddstatecolor
  \usestatecolor
                     6 \newcommand{\traddstatecolor}[2]{%
                            \@ifundefined{\string\color@#2}%
                                 \message{#2 not defined}%
                     9
                     10
                                 \expandafter\ERROR%
                            }%
                     11
                            {%
                     12
                                \expandafter\gdef\csname tr@astate@\detokenize{#1}\endcsname{#2}%
                     13
                     14 }%
                     15 }%
                     16 %
                     17 \def\tr@usestatecolor#1{%
                            \ifcsname tr@astate@\detokenize{#1}\endcsname%
                     18
                     19
                            \csname tr@astate@\detokenize{#1}\expandafter\endcsname%
                     20
                            \else%
                     21 \tr@astate@other%
                            \fi%
                     23 }%
                    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\text{-}color \rangle\}\{\langle other\text{-}color \rangle\}
                     24 \newcommand{\trsetboxcolors}[6]{%
                     25 \traddstatecolor{todo}{#1}
                     26 \traddstatecolor{doing}{#2}
                     27 \traddstatecolor{tocheck}{#3}
                     28 \traddstatecolor{checking}{#4}
                     29 \traddstatecolor{done}{#5}
                     30 \traddstatecolor{other}{#6}
                     31 }%
```

8.5 Standard Colors

Sets the standard colors for the standard states

```
32 \trsetboxcolors{red}{yellow}{cyan}{blue}{green}{black}
```

8.6 Managing The Fields Names

```
Define field names - does not create a new field
    \traddfieldname
  \tr@usesfieldname
                       33 \newcommand{\traddfieldname}[2]{%
                              \expandafter\gdef\csname tr@fieldnames@\detokenize{#1}\endcsname{#2}%
                       35 }%
                       36 %
                       37 \def\tr@usesfieldname#1{%
                       38
                              \ifcsname tr@fieldnames@\detokenize{#1}\endcsname%
                              \csname tr@fieldnames@\detokenize{#1}\expandafter\endcsname%
                       39
                              \else%
                       41 Missing Field Name%
                       42
                              \fi%
                       43 }%
    \trsetboxcolors
                      Set the colors for the 6 types of standard states Black otherwise.
                           \trsetfieldsnames {\langle status \rangle} {\langle assigned \rangle} \ {\langle from \rangle} {\langle to \rangle} \ {\langle done \rangle} {\langle why \rangle}
                       44 \newcommand{\trsetfieldsnames}[6]{%
                       45
                              \traddfieldname{status}{#1}
                       46
                              \traddfieldname{assigned}{#2}
                              \traddfieldname{from}{#3}
                       47
                              \traddfieldname{to}{#4}
                       48
                              \traddfieldname{done}{#5}
                       49
                              \traddfieldname{why}{#6}
                       50
                       51 }%
                       8.7
                              Standard Field Names
                           Sets the standard text for the fields
                       52 \trsetfieldsnames{Status}{Assigned in}{From}{To}{Done in}{Rationale}
                       The dirt trick of using a global variable to store a value
\tr@currentboxcolor
                       53 \ensuremath{\mbox{\color}{\tr@usestatecolor}}\%
     \trstatuscolor Select the color based on the state
                           \t statuscolor{\langle state \rangle}
                       54 \newcommand{\trstatuscolor}[1]%
                       55 {%
                       56 \ifblank{#1}%
                       58 \def\tr@currentboxcolor{\tr@usestatecolor{other}}%
                       59 }%
```

```
60 {%
61 \def\tr@currentboxcolor{\tr@usestatecolor{#1}}%
62 }%
63 }%
```

9 List of Tasks

```
64 \newcommand{\trsettasklisttitle}[1]{%
65 \def\trlisttasks{#1}%
66 }%
67 \trsettasklisttitle{List of Tasks}%
68 %% cria a lista, depende do pacoto tcloft
69 \@ifundefined{chapter}%
70 {\newlistof[section]{tasks}{trt}{\trlisttasks}}%
71 {\newlistof[chapter]{tasks}{trt}{\trlisttasks}}%
```

9.1 Declaring Tasks

9.1.1 Helpers

```
\trstatus Helpers to build the task
 \trwhen
           72 \newcommand{\trstatus}[2][\tr@usesfieldname{status}]{%
  \trwhy
                 \textbf{#1}: #2%
          73
  \trwho
           74 }%
           75 \newcommand{\trwhen}[2][\tr@usesfieldname{assigned}]{%
                 \textbf{#1}: #2%
           77 }%
           78 \newcommand{\trwho}[2][\tr@usesfieldname{to}]{\%
                 \textbf{#1}: #2%
           79
           80 }%
           81 \newcommand{\trwhy}[2][\tr@usesfieldname{why}]{%
                 \textbf{#1}: #2%
           82
           83 }%
           84 %
```

9.1.2 Main task macro

```
\trtask Describes a task
```

```
\true { \langle status \rangle } {\langle when-assigned \rangle } {\langle who-assigned \rangle } {\langle who-assigned \rangle } {\langle why \rangle } {\langle when-assigned \rangle } {\langle who-assigned \rangle } {\langle who-ass
```

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

generates:

```
Prepare a Late X 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
```

```
85\,\% [status] , what, when-assigned, from-who, to-who, why, when-done, extra
 86 \newcommand{\trtask}[8][]{%
 87
        \par%
        \left\{ \frac{\#2}{4} \right\}
 88
        \def\trtask@temp{Task without a name}%
 89
        }%
 90
        {%
 91
 92
        \def\trtask@temp{#2}%
 93
        \refstepcounter{tasks}%
 94
 95
        \addcontentsline{trt}{tasks}{\protect\numberline{\thetasks}{\trtask@temp}}%
        \trstatuscolor{#1}%
 96
        \begin{tcolorbox}[title=\textbf{\trtask@temp},%
 97
             colback=\tr@currentboxcolor!5!white,%
 98
             colframe=\tr@currentboxcolor!75!black%
 99
100
            ]%
101
            \left\{ 1\right\} 
102
            {%
                 \trstatus{#1}\newline%
103
104
            }%
105
            \left\{ \frac{43}{3} \right\}
106
107
                 \trwhen{#3}\newline%
108
            }%
            \left\{ 4\right\} 
109
            {%
110
                 \trwho[\tr@usesfieldname{from}]{#4}\newline%
111
112
            }%
            \left\{ \frac{\#5}{}\right\} 
113
114
            {%
                 \trwho{#5}\newline%
115
            }%
116
```

```
\left\{ 46\right\} 
117
118
              {%
119
                   \trwhy{\#6}\newline%
             }%
120
              \left\{ 1, \frac{47}{3} \right\}
121
              {%
122
                   \verb|\trwhen[\tr@usesfieldname{done}]{#7}\newline%| \\
123
             }%
124
125
              \left\{ 18\right\} 
              \{\verb|\tcblower||
126
              #8%
127
             }%
128
         \end{tcolorbox}%
129
130 }%
```

End of Code

Change History

v0.1		v0.3	
General: First version	1	General: List of Tasks $\dots \dots \dots$	1
v0.2		General: Allows redefining field	
General: User can create own states	1	names	1

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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.

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\@ifundefined \dots 7, 69	N	33, 72,
$$\bf A$$ \addcontentsline 95	\newline . 103, 107, 111, 115, 119, 123	75, 78, 81, 111, 123 \tr@usestatecolor 17, 53, 58, 61
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