

Package ‘rosr’

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Title Create Reproducible Research Projects

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Depends R (>= 3.1.0)

Imports rmarkdown, bookdown, blogdown, tinytex, mindr, bookdownplus,
rstudioapi, htmlwidgets, shiny, devtools, clipr, knitr

Suggests

Description Creates reproducible academic projects with integrated academic elements, including datasets, references, codes, images, manuscripts, dissertations, slides and so on. These elements are well connected so that they can be easily synchronized and updated.

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URL <https://github.com/pzhaonet/rosr>

BugReports <https://github.com/pzhaonet/rosr/issues>

SystemRequirements pandoc (>= 2.0; <https://pandoc.org>)

RoxygenNote 7.1.0

NeedsCompilation no

LazyData true

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Repository CRAN

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copy_rmd	<i>Copy the existing .Rmd file from the rosr package to the destination directory.</i>
----------	--

Description

Copy the existing .Rmd file from the rosr package to the destination directory.

Usage

```
copy_rmd(package, template, sub_project, rmd_dir)
```

Arguments

package	Package name of the source template.
template	Template name of the source template.
sub_project	Sub-project name
rmd_dir	Destination directory

Value

copied file and the path of the new .Rmd file

create_bib	<i>Create a demo .bib file</i>
------------	--------------------------------

Description

Create a demo .bib file

Usage

```
create_bib(to = getwd())
```

Arguments

to the destination directory

Value

a demo .bib file

Examples

```
create_bib(tempdir())
```

create_book	<i>Create a demo bookdown project</i>
-------------	---------------------------------------

Description

Create a demo bookdown project

Usage

```
create_book(  
  to = getwd(),  
  template = "demo",  
  if_render = TRUE,  
  package = "bookdownplus",  
  bdp_output = NULL  
)
```

Arguments

to	the destination directory.
template	the name of the r markdown template. It is the folder name in 'package/rmarkdown/templates/'.
if_render	whether render it.
package	the package name where the template comes from.
bdp_output	the type of bookdownplus output. Only valid when package = 'bookdownplus'.

Value

copied file.

Examples

```
create_book(tempdir(), if_render = FALSE)
```

create_data	<i>Create a demo data file</i>
-------------	--------------------------------

Description

Create a demo data file

Usage

```
create_data(to = getwd())
```

Arguments

to	the destination directory
----	---------------------------

Value

a demo data file

Examples

```
create_data(tempdir())
```

create_dir	<i>Create an empty directory</i>
------------	----------------------------------

Description

Create an empty directory

Usage

```
create_dir(to = getwd())
```

Arguments

to the destination directory

Value

an empty directory

Examples

```
create_dir()
```

create_eq	<i>Create a demo equation sheet</i>
-----------	-------------------------------------

Description

Create a demo equation sheet

Usage

```
create_eq(to = getwd(), if_render = TRUE)
```

Arguments

to the destination directory
if_render Logical. Whether render the templates.

Value

a demo equation sheet

Examples

```
create_eq(tempdir())
```

create_mindmap	<i>Create a demo mind map</i>
----------------	-------------------------------

Description

Create a demo mind map

Usage

```
create_mindmap(to = getwd(), if_save = FALSE)
```

Arguments

to	the destination directory
if_save	Logical. Whether save the mindmap.

Value

a demo mind map

Examples

```
# create_mindmap(tempdir())
```

create_r	<i>Create a demo .R script</i>
----------	--------------------------------

Description

Create a demo .R script

Usage

```
create_r(to = getwd())
```

Arguments

to	the destination directory
----	---------------------------

Value

a demo .R script

Examples

```
create_r(tempdir())
```

create_rmd	<i>Create a demo markdown project</i>
------------	---------------------------------------

Description

Create a demo markdown project

Usage

```
create_rmd(  
  to = "manuscript",  
  template = "copernicus_article",  
  if_render = TRUE,  
  package = "rticles"  
)
```

Arguments

to	the destination directory
template	the name of the r markdown template. It is the folder name in 'package/rmarkdown/templates/'.
if_render	whether render it.
package	the package name where the template comes from.

Value

copied file.

Examples

```
create_rmd(tempdir(), if_render = FALSE)
```

create_rosr	<i>Create a new project or a new sub-project</i>
-------------	--

Description

Create a new project or a new sub-project

Usage

```
create_rosr(  
  project = "test",  
  if_render = TRUE,  
  dest_dir = NA,  
  overwrite = FALSE,  
  sub_project = sub_projects()  
)
```

Arguments

project	Project name.
if_render	Logical. Whether render the templates.
dest_dir	Character. The destination directory of the new project.
overwrite	Logical. Whether overwrite existing files.
sub_project	Character. The type of the sub-project to create.

Value

a project folder

Examples

```
# create_rosr(dest_dir = tempdir(), sub_project = 'Rproj')
```

create_rpkg

Create a demo R package

Description

Create a demo R package

Usage

```
create_rpkg(to = getwd())
```

Arguments

to	the destination directory
----	---------------------------

Value

a demo R package

Examples

```
create_rpkg(tempdir())
```

create_rproj	<i>Create a .Rproj file</i>
--------------	-----------------------------

Description

Create a .Rproj file

Usage

```
create_rproj(project)
```

Arguments

project the name of the .Rproj file

Value

a .Rproj file

Examples

```
oldwd <- getwd()
setwd(tempdir())
create_rproj("test")
setwd(oldwd)
```

create_ui	<i>A shiny app for creating a rosr project</i>
-----------	--

Description

A shiny app for creating a rosr project

Usage

```
create_ui()
```

Value

a shinyapp which can be displayed in a web browser.

Examples

```
## Not run:
create_ui()

## End(Not run)
```

create_website	<i>Create a demo blogdown website</i>
----------------	---------------------------------------

Description

Create a demo blogdown website

Usage

```
create_website(to = getwd(), theme = "yihui/hugo-lithium", oldwd = getwd())
```

Arguments

to	the destination directory
theme	the name of the r blogdown theme.
oldwd	set the working directory after rendering the book

Value

copied file.

Examples

```
# create_website(tempdir())
```

eq	<i>Insert an equation.</i>
----	----------------------------

Description

Insert an equation.

Usage

```
eq(  
  eqs = NULL,  
  label = NULL,  
  number = NULL,  
  style = c("numbered", "display", "inline", "none"),  
  skip = 6,  
  if_copy = TRUE  
)
```

Arguments

eqs	Character. The path to the equation text file, or a data frame of the equations.
label	Character. The label of the equation.
number	integer. The number of the equation.
style	character. The style of the equation.
skip	integer. the number of lines of the data file to skip before beginning to read data.
if_copy	logical. Whether copy the equation into the clipboard.

Value

A string of the equation.

Examples

```
eq()
```

```
eqw
```

Convert a MathML equation for Microsoft Word

Description

Convert a MathML equation for Microsoft Word

Usage

```
eqw(connection = "clipboard")
```

Arguments

connection	a connection object or a character string.
------------	--

Details

Copy the MathML codes of an equation into your clipboard, and run `eq_word()`, then paste from your clipboard to MS Word.

Value

a Word equation

Examples

```
# Copy the MathML codes of an equation into your clipboard.
eqw("test")
# Now paste to MS Word.
```

fig	<i>Insert an image in the 'image/' directory.</i>
-----	---

Description

Insert an image in the 'image/' directory.

Usage

```
fig(filename)
```

Arguments

filename	The file name of the image.
----------	-----------------------------

Value

Insert an image.

get_yaml	<i>Get the yaml header of a string vector from a markdown file</i>
----------	--

Description

Get the yaml header of a string vector from a markdown file

Usage

```
get_yaml(txt)
```

Arguments

txt	a string vector vector from a markdown file
-----	---

Value

a string vector of the yaml header

install_packages	<i>Install dependencies</i>
------------------	-----------------------------

Description

Install dependencies

Usage

```
install_packages(server = c("cran", "github"))
```

Arguments

server character. The server from where to install the dependencies.

Value

install packages

Examples

```
install_packages()
```

read_eq	<i>Read equations from a file</i>
---------	-----------------------------------

Description

Read equations from a file

Usage

```
read_eq(eqs, skip = 6)
```

Arguments

eqs character. The path of the equation file.
skip integer. the number of lines of the data file to skip before beginning to read data.

Value

a data frame with equations

Examples

```
eq_file <- file.path(system.file(package = "rosr"), "skeleton/equation/rosr-eq.Rmd")  
eqs <- read_eq(eq_file)
```

render_revised	<i>Render a revised .rmd into pdf</i>
----------------	---------------------------------------

Description

Render a revised .rmd into pdf

Usage

```
render_revised(file, clear = TRUE)
```

Arguments

file	the path of the .rmd file
clear	logical. clear the intermediate files

Value

a pdf file in revision mode.

Examples

```
# rosr::create_rmd(template = 'statement_svm', package = 'rosr')
# rosr::render_revised('manuscript/statement_svm/statement_svm.Rmd')
```

rmd_template	<i>rosr Rmd template</i>
--------------	--------------------------

Description

rosr Rmd template

Usage

```
rmd_template(
  ...,
  template_name,
  keep_tex = TRUE,
  citation_package = "natbib",
  md_extensions = c("-autolink_bare_uris", "-auto_identifiers")
)

statement_svm(...)

article_svm(...)
```

```

cv_svm(...)
syllabus_svm(...)
manuscript_svm(...)
letter_moderncv(...)
beamer(...)

```

Arguments

..., keep_tex, citation_package, md_extensions Arguments passed to rmarkdown::pdf_document().

template_name the template name.

keep_tex Keep the intermediate tex file used in the conversion to PDF

citation_package The LaTeX package to process citations, natbib or biblatex. Use none if neither package is to be used.

md_extensions Markdown extensions to be added or removed from the default definition or R Markdown. See the [rmarkdown_format](#) for additional details.

Details

statement_svm, article_svm, cv_svm, syllabus_svm, manuscript_svm are adapted from <https://github.com/svmiller/svm-r-markdown-templates>.

Value

An R Markdown output format.

rm_space	<i>remove the spaces before and after a string.</i>
----------	---

Description

remove the spaces before and after a string.

Usage

```
rm_space(string)
```

Arguments

string a string.

Value

a new string.

rosr_server	<i>Server for the Shiny app create_ui</i>
-------------	---

Description

Server for the Shiny app create_ui

Usage

```
rosr_server(input, output, session)
```

Arguments

input	The input of the server.
output	The output of the server.
session	The session of the server.

rosr_ui	<i>UI for the Shiny app create_ui</i>
---------	---------------------------------------

Description

UI for the Shiny app create_ui

Usage

```
rosr_ui()
```

Value

A UI function

sub_projects	<i>Display available sub projects</i>
--------------	---------------------------------------

Description

Display available sub projects

Usage

sub_projects()

Value

character of the project names

Examples

sub_projects()

templates	<i>Display available templates in a data frame</i>
-----------	--

Description

Display available templates in a data frame

Usage

templates()

Value

a data frame of templates

Examples

templates()

template_ls	<i>Display available templates in a list</i>
-------------	--

Description

Display available templates in a list

Usage

```
template_ls()
```

Value

a list of templates

Examples

```
template_ls()
```

template_of_sub_project	<i>Get the template name of the given sub-project name</i>
-------------------------	--

Description

Get the template name of the given sub-project name

Usage

```
template_of_sub_project(sub_project)
```

Arguments

sub_project the name of the sub-project

Value

the name of the template

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