

Package: CTUtemplate (via r-universe)

September 10, 2024

Title Example RStudio Project Templates

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Version 0.5.1

Description Templates and functions for use in CTU Bern.

Depends R (>= 3.3.2)

License GPL (>= 2)

Encoding UTF-8

LazyData true

RoxygenNote 7.2.3

Imports bookdown, fs, glue, htmltools, pingr, rstudioapi, stringr,
svDialogs, whisker

Suggests knitr, testthat (>= 3.0.0)

Config/testthat/edition 3

Repository <https://ctu-bern.r-universe.dev>

RemoteUrl <https://github.com/CTU-Bern/CTUtemplate>

RemoteRef HEAD

RemoteSha 298f485c658f8df9c3b5bd76ddb8f470be99f772

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| | |
|----------------|---|
| add_ctu_header | <i>Insert CTU standard header to the active document This function is not intended to be used in any scripts.</i> |
|----------------|---|

Description

Insert CTU standard header to the active document This function is not intended to be used in any scripts.

Usage

```
add_ctu_header()
```

Value

adds CTU header to the active document

| | |
|---------------|--|
| coloured_text | <i>Colour specific text in a html document</i> |
|---------------|--|

Description

Colour specific text in a html document

Usage

```
coloured_text(colour, ...)
```

Arguments

| | |
|--------|-------------------------------|
| colour | colour to use for the content |
| ... | content to be coloured |

Details

In quarto/Rmarkdown documents, use the function in an inline R chunk (``r coloured_text(...)``) or in an R chunk with the result set to `asis`

Examples

```

coloured_text("red", "This text should be red")
# also works with multiple contents
coloured_text("red", "This text should be red", "this one too")
# For multiple colours, use multiple calls to the function:
coloured_text("red", "this is red,")
coloured_text("blue", "and this is blue!")

```

OneStageSS

OneStageSS

Description

Calculates sample size or power for single-stage trials with a binary endpoint according to: Ahern, R. P., Sample size tables for exact single-stage phase II designs. *Statistics in medicine* 20.6 (2001): 859-866.

Usage

```
OneStageSS(p0, p1, power = 0.8, n = NA, alpha = 0.05, nstart = 1)
```

Arguments

| | |
|--------|--|
| p0 | Proportion of events under H0 |
| p1 | Proportion of events under H1 |
| power | Power, default=0.8 |
| n | Sample size, calculated if NA, otherwise power is calculated |
| alpha | Alpha, default=0.05 |
| nstart | Number of patients to start iterations, default=1, can be increased to save time |

Value

List with number of patients with events for a significant trial (r), number of patients (n), alpha and power.

Examples

```

# Calculate sample size
OneStageSS(p0=0.5,p1=0.6,alpha=0.05,power=0.8)
# Calculate power
OneStageSS(p0=0.5,p1=0.6,alpha=0.05,n=100)

```

| | |
|------------|----------------------------|
| report_pdf | <i>Generate PDF report</i> |
|------------|----------------------------|

Description

This is not intended to be run manually... rather via knitting a document

Usage

```
report_pdf(  
  report_template = find_resource("report", "report.tex"),  
  latex_engine = "pdflatex",  
  ...  
)
```

Arguments

| | |
|-----------------|---|
| report_template | tex template to use |
| latex_engine | tex engine to use (pdflatex, lualatex, xelatex) |
| ... | options passed to bookdown |

| | |
|----------|---|
| unibeRed | <i>UNIBE red Get the official UNIBE red colour. Note that the unibeCols package has all of the UNIBE colours.</i> |
|----------|---|

Description

UNIBE red Get the official UNIBE red colour. Note that the unibeCols package has all of the UNIBE colours.

Usage

```
unibeRed(alpha = 1)
```

Arguments

| | |
|-------|---------------------------------|
| alpha | alpha for transparency (0 to 1) |
|-------|---------------------------------|

Value

hexidecimal colour code

See Also

[unibeCols::unibeRed()]

Examples

```
plot(1:5, col = unibeRed())
```

```
use_param_report_template
```

Template files for a parameterized report

Description

Parameterized reports allow to create reports in a loop. Examples might be site specific quality reports or recruitment reports.

Usage

```
use_param_report_template(save_as, open = TRUE, ...)
```

Arguments

| | |
|---------|--|
| save_as | filename to save the files as (do not include extension as multiple files are created) |
| open | logical indicating whether to open the file |
| ... | other arguments passed to use_template |

Details

This function creates 2 files as a barebones template for such parameterized reports. An Rmd file is created (based on the UNIBE template) and an R file containing a small loop. Currently, the you have to supervise this loop, as use_ubreportclo (which relies on usethis::use_template) will not overwrite files without being given explicit permission.

Value

saves two files, an Rmd and an R file

Examples

```
# use_param_report_template("param")
```

| | |
|--------------|---|
| use_qmd_html | <i>Use the CTU quarto html template This function will download and optionally open the quarto markdown (qmd) file and the other necessary files from github.</i> |
|--------------|---|

Description

Use the CTU quarto html template This function will download and optionally open the quarto markdown (qmd) file and the other necessary files from github.

Use the CTU quarto revealjs presentation template This function will download and optionally open the quarto markdown (qmd) file and the other necessary files from github.

Use the CTU quarto html recruitment report template This function will download and optionally open the quarto markdown (qmd) file and the other necessary files from github.

Use the CTU quarto html sample size report template This function will download and optionally open the quarto markdown (qmd) file and the other necessary files from github.

Usage

```
use_qmd_html(save_in = ".", open = TRUE)
use_qmd_pres(save_in = ".", open = TRUE)
use_qmd_htmlrecruitment(save_in = ".", open = TRUE)
use_qmd_htmlsampsi(save_in = ".", open = TRUE)
```

Arguments

| | |
|---------|---|
| save_in | directory to save the main qmd in |
| open | logical indicating whether to open the file |

Functions

- use_qmd_pres(): revealjs Presentation Template
- use_qmd_htmlrecruitment(): Recruitment Report Template
- use_qmd_htmlsampsi(): Sample Size Report Template

Examples

```
# dir <- tempdir()
# file <- file.path(dir, "filename.qmd")
# use_qmd_html(file, FALSE)
# in practice at CTU:
# use_qmd_html("08_Reports_xx/ReportName.qmd", TRUE)
# dir <- tempdir()
# file <- file.path(dir, "filename.qmd")
```

```
# use_qmd_pres(file, FALSE)
# in practice at CTU:
# use_qmd_pres("08_Reports_xx/ReportName.qmd", TRUE)
# dir <- tempdir()
# file <- file.path(dir, "filename.qmd")
# use_qmd_html(file, FALSE)
# in practice at CTU:
# use_qmd_htmlrecruitment("08_Reports_xx/ReportName.qmd", TRUE)
# dir <- tempdir()
# file <- file.path(dir, "filename.qmd")
# use_qmd_html(file, FALSE)
# in practice at CTU:
# use_qmd_htmlrecruitment("08_Reports_xx/ReportName.qmd", TRUE)
```

use_quarto

Get a quarto template from the CTU-Bern quarto repository

Description

Get a quarto template from the CTU-Bern quarto repository

Usage

```
use_quarto(x, dir, open = TRUE)
```

Arguments

| | |
|------|---|
| x | branch name of the template in question |
| dir | folder in which to save the template |
| open | logical, whether to open the file |

Value

a qmd file (and extension file)

Examples

```
#use_quarto("html", ".")
```

use_recreport_template

Open a new recruitment report

Description

Open a new recruitment report

Usage

```
use_recreport_template(save_as, open = TRUE, ...)
```

Arguments

| | |
|---------|---|
| save_as | filename to save the Rmd as |
| open | logical indicating whether to open the file |
| ... | other arguments passed to use_template |

Value

Creates an Rmd file in the save_as location

Examples

```
# use_recreport_template("rr.Rmd")
```

use_report_template *Open a new report*

Description

Open a new report

Usage

```
use_report_template(save_as, open = TRUE, ...)
```

Arguments

| | |
|---------|---|
| save_as | filename to save the Rmd as |
| open | logical indicating whether to open the file |
| ... | other arguments passed to use_template |

Value

Creates an Rmd file in the save_as location

Examples

```
# use_report_template("foo.Rmd")
```

use_ssreport_template *Open a new sample size report*

Description

Open a new sample size report

Usage

```
use_ssreport_template(save_as, open = TRUE, ...)
```

Arguments

| | |
|---------|---|
| save_as | filename to save the Rmd as |
| open | logical indicating whether to open the file |
| ... | other arguments passed to use_template |

Value

Creates an Rmd file in the save_as location

Examples

```
# use_ssreport_template("ss.Rmd")
```

use_ubreportclo *Generate the CLO file for use with the UNIBE tex template*

Description

The CLO file contains the information identifying the author, project and institution (although we do not modify that). It is used by the UNIBE CLS file to create the parts of the template.

Usage

```

use_ubreportclo(
  projnum = "xxx",
  projname = "Project YYY",
  reporttype = "Type of report",
  version = "Version",
  sign = "Author name",
  email = "author.name@ctu.unibe.ch",
  job = "Senior Statistician",
  open = FALSE,
  dir = ".",
  ...
)

```

Arguments

| | |
|------------|---------------------------------------|
| projnum | Project number to appear in report |
| projname | Project name to appear in report |
| reporttype | The main title of the report |
| version | Version number or similar |
| sign | Your name as it should appear |
| email | your email address |
| job | your job title |
| open | open the file or not |
| dir | directory in which to create the file |
| ... | other options passed to use_template |

Value

writes the UNIBE template clo file

Examples

```

# use_ubreportclo(# Personal info
#               sign = "Alan",
#               email = "alan.haynes@ctu.unibe.ch",
#               job = "Senior Statistician",
#               # Project info
#               projnum = "1234",
#               projname = "Project X",
#               # Report info
#               version = Sys.Date(),
#               reporttype = "Recruitment report"
#               )

```

use_ub_tex_template *Open a new tex template allowing customization*

Description

Open a new tex template allowing customization

Usage

```
use_ub_tex_template(save_as, open = TRUE, ...)
```

Arguments

| | |
|---------|--|
| save_as | filename to save the tex file as (should be the same as in the Rmd header) |
| open | logical indicating whether to open the file |
| ... | other arguments passed to use_template |

Value

Creates an tex file in the save_as location

Examples

```
# use_ub_tex_template("report.tex")
```

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