Package 'repana'

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Type Package

Title Repeatable Analysis in R

Version 1.23.2

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URL <https://github.com/johnaponte/repana>

Description Set of utilities to facilitate the reproduction of analysis in R.
It allow to make_structure(), clean_structure(), and run and log programs in a
predefined order to allow secondary files, analysis and reports be constructed in
an ordered form.

License GPL (>= 3)

Encoding UTF-8

RoxygenNote 7.1.1

Depends DBI (>= 1.0)

Suggests spelling, testthat, knitr, RSQLite, RPostgres, pacman

Imports config, dplyr, magrittr, lubridate, rmarkdown, processx,
readr, rstudioapi, pool, openxlsx

Language en-US

VignetteBuilder knitr

NeedsCompilation no

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Repository CRAN

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R topics documented:

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addDataTable   *A wrap to* writeDataTable

Description

Include a data.frame into a workbook applying a tableStyle and an auto width to the column. For better results you could setup options("openxlsx.minWidth" = 6)

Usage

```
addDataTable(
  wb,
  df,
  sheet,
  tableName,
  tableStyle = "TableStyleMedium1",
  withFilter = TRUE,
  firstActiveCol = NULL,
  ...
)
```

Arguments

wb	a workbook object
df	a data.frame
sheet	the sheet name. If missing the name of the data.frame
tableName	a name for the table in the excel document. If missing the name of the data.frame
tableStyle	a tableStyle name
withFilter	if TRUE the filter is included
firstActiveCol	First column active on the the freeze panel
...	other parameters for the writeDataTable

Value

silently the wb

Examples

```
## Not run:
library(openxlxs)
options("openxlsx.minWidth" = 6)
wb <- createWorkbook(title = "Test addDataTable")
addDataTable(wb,iris)
saveWorkbook(wb, "test_addDataTable.xlsx")

## End(Not run)
```

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clean_database	*Helper function to drop all tables from a database*

Description

Helper function to drop all tables from a database

Usage

```
clean_database(con)
```

Arguments

con   DBI connection

Value

invisible, a lit with result from [DBI](DBI)

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clean_structure	*Clean the secondary files of the project*

Description

Delete and make new `database`, `logs` and `reports` directory

Usage

```
clean_structure()
```

Value

Invisible, the directories defined by the clean_before_new_analysis entry in the config.yml file.

Author(s)

John J. Aponte

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get_con *Get a DBI connection reading a configuration file*

Description

This function get a DBI connection to a database reading the parameters from a `config.yml` file using the get function. See the vignette for details.

Usage

```
get_con(configname = "defaultdb", file = "config.yml")
```

Arguments

`configname`	a string with the name of the configuration
`file`	name of the configuration to read from.

Value

a DBI connection

Author(s)

John J. Aponte

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get_dirs *Get the* dirs *section of the* config.yml *file*

Description

It is a wrap of `config::get("dirs")`.

Usage

```
get_dirs(file = "config.yml")
```

Arguments

`file`	by default the `config.yml` file

Value

a list with the directory entries

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get_pool *Get a pool connection reading a configuration file*

Description

This function get a pool connection to a database reading the parameters from a `config.yml` file using the [get](#) function. See the vignette for details.

Usage

```
get_pool(configname = "defaultdb", file = "config.yml")
```

Arguments

configname	a string with the name of the value
file	name of the configuration to read from.

Value

a [dbPool](#) connection object

Author(s)

John J. Aponte

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insert_template *RStudio addin app to insert a template to the heading part of a snip code*

Description

RStudio addin app to insert a template to the heading part of a snip code

Usage

```
insert_template()
```

Value

The template to insert

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make_structure   *Make the structure for a new project*

Description

Make the following directories

- data to keep the data necessary for the project
- database to keep the secondary, modified dataset and objects
- handmade to keep reports and dataset modified by hand or not make by the automatic stream
- logs to keep logs of the automatic stream
- reports to keep the automatic reports

The data, handmade are not clean. The rest are clean as they should be reproduced by the automatic stream. Do not forget to include them in .gitignore if you use git

Usage

```
make_structure()
```

Value

the dir structure

Author(s)

John J. Aponte

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master   *Runs the programs*

Description

Run the programs specified by the pattern, in the order as the pattern select the files. Keep a log of the results. By default the pattern starting with two numbers and ending with .R is selected. They are run in order

Usage

```
master(
  pattern = "^[0-9][0-9].*\\.R$",
  start = 1,
  stop = Inf,
  logdir = config::get("dirs")$logs,
  rscript_path
)
```

Arguments

`pattern`	Regular expression to select the files to run
`start`	index of the program to start
`stop`	index of the program to stop
`logdir`	directory to keep the logs of the files. By default
`rscript_path`	path to the `Rscript` file the entry on the `config.yml dirs:logs`

Details

The program add (or create if not exists) the files run, time of execution and exit status in the file master.log of the directory logs.

Value

a data.frame with the files run, running time and exit status

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master_spin	*Render all programs as spin code*

Description

Render the programs specified by the pattern as SPIN reports

Usage

```
master_spin(
  pattern = "^[0-9][0-9].*\\.R$",
  start = 1,
  stop = Inf,
  logdir = config::get("dirs")$logs,
  format = "html"
)
```

Arguments

`pattern`	Regular expression to select the files to run
`start`	index of the program to start
`stop`	index of the program to stop
`logdir`	directory to keep the logs of the files. By default the entry on the `config.yml` `dirs:logs`
`format`	Format to render the report. values accepted are "pdf", "html" and "word"

Value

a data.frame with the files run, running time and exit status

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render_report   *A wrap to render a markdown report*

Description

Render the report and copy it to the 'outputdir' directory. More formats are available but only three are included here '

Usage

```
render_report(report, format = "pdf", outputdir = get_dirs()$reports, ...)
```

Arguments

report	filename of the report
format	output format. "pdf","html","word" are valid entries
outputdir	directory to save the report
...	other parameters for render function

Value

No return value, called for side effects to render the reports

See Also

render

Examples

```
## Not run:
render_report(myreport.rmd,"pdf")

## End(Not run)
```

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repana   *repana: R reproducible Analysis.*

Description

Set of utilities to make easy the reproduction of analysis in R. It allow to make_structure, clean_structure, and run and log programs in a predefined order to allow secondary files, analysis and reports be constructed in and ordered form.

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update_table	*Helper function to include a data.frame in the database and update the log*

Description

Helper function to include a data.frame in the database and update the log

Usage

```
update_table(con, table, source, tablename)
```

Arguments

con	DBI connection
table	the data.frame to be included in the database
source	a manual comment to identify the source of the table
tablename	if present, the data frame will be saved with this name.

Value

the result from [DBI](#) otherwise the name of the data.frame

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write_log	*Make a log of the updates on the database*

Description

Make a log of the database updates. If the log table does not exists it creates it Make a new entry with the timestamp of the update

Usage

```
write_log(con, tablename, source)
```

Arguments

con	DBI connection
tablename	the name of the table
source	a manual comment to identify the source of the table

Value

the result from [DBI](#)

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