Package 'radiant.data'

April 27, 2018

```
Title Data Menu for Radiant: Business Analytics using R and Shiny Version 0.9.3.1 Date 2018-4-27
```

Description The Radiant Data menu includes interfaces for loading, saving, viewing, visualizing, summarizing, transforming, and combining data. It also contains functionality to generate reproducible reports of the analyses conducted in the application.

```
Depends R (>= 3.4.0),
      magrittr (>= 1.5),
      ggplot2 (>= 2.2.1),
      lubridate (>= 1.7.4),
      tidyr (>= 0.8.0),
      dplyr (>= 0.7.4)
Imports tibble (>= 1.4.2),
      rlang (>= 0.2.0),
      broom (>= 0.4.3),
      car (>= 3.0-0),
      grid (>= 3.3.1),
      gridExtra (>= 2.0.0),
      knitr (>= 1.20),
      markdown (>= 0.8),
      rmarkdown(>= 1.9),
      pryr (>= 0.1.2),
      shiny (>= 1.0.5),
      jsonlite (>= 1.0),
      shinyAce (>= 0.3.0.1),
      psych (>= 1.8.3.3),
      DT (>= 0.4),
      readr (>= 1.1.1),
      readxl (>= 1.0.0),
      scales (>= 0.4.0),
      curl (>= 2.5),
      rstudioapi (>= 0.7),
      import (>= 1.1.0),
      plotly (>= 4.7.1),
      feather (>= 0.3.1),
      base64enc,
      methods
```

2 R topics documented:

```
Suggests DBI (>= 0.7),
   RSQLite (>= 2.0),
   odbc (>= 1.1.4),
   webshot (>= 0.5.0),
   testthat (>= 2.0.0)

URL https://github.com/radiant-rstats/radiant.data,
   https://radiant-rstats.github.io/docs

BugReports https://github.com/radiant-rstats/radiant.data/issues
License AGPL-3 | file LICENSE

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Encoding UTF-8

RoxygenNote 6.0.1
```

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add_class

Convenience function to add a class

Description

Convenience function to add a class

Usage

```
add_class(x, cl)
```

Arguments

x Object

cl Vector of class labels to add

Examples

```
foo <- "some text" %>% add_class("text")
foo <- "some text" %>% add_class(c("text", "another class"))
```

as_character

Wrapper for as.character

Description

Wrapper for as.character

Usage

```
as_character(x)
```

Arguments

Χ

Input vector

6 as_dmy

as_distance	Distance in kilometers or miles between two locations based on
	<pre>lat-long Function based on http://www.movable-type.co.uk/</pre>
	scripts/latlong.html. <i>Uses the haversine formula</i>

Description

Distance in kilometers or miles between two locations based on lat-long Function based on http://www.movable-type.co.uk/scripts/latlong.html. Uses the haversine formula

Usage

```
as_distance(lat1, long1, lat2, long2, unit = "km", R = c(km = 6371, miles =
   3959)[[unit]])
```

Arguments

lat1	Latitude of location 1
long1	Longitude of location 1
lat2	Latitude of location 2
long2	Longitude of location 2
unit	Measure kilometers ("km", default) or miles ("miles")

R Radius of the earth

Value

Distance bewteen two points

Examples

```
as\_distance(32.8245525,-117.0951632,\ 40.7033127,-73.979681,\ unit="km")\\ as\_distance(32.8245525,-117.0951632,\ 40.7033127,-73.979681,\ unit="miles")
```

as_dmy

Convert input in day-month-year format to date

Description

Convert input in day-month-year format to date

Usage

```
as_dmy(x)
```

Arguments

Х

Input variable

as_dmy_hm 7

Value

Date variable of class Date

Examples

```
as_dmy("1-2-2014")
```

as_dmy_hm

Convert input in day-month-year-hour-minute format to date-time

Description

Convert input in day-month-year-hour-minute format to date-time

Usage

```
as_dmy_hm(x)
```

Arguments

Х

Input variable

Value

Date-time variable of class Date

Examples

```
as_mdy_hm("1-1-2014 12:15")
```

as_dmy_hms

Convert input in day-month-year-hour-minute-second format to datetime

Description

Convert input in day-month-year-hour-minute-second format to date-time

Usage

```
as_dmy_hms(x)
```

Arguments

Х

Input variable

Value

Date-time variable of class Date

8 as_factor

Examples

```
as_mdy_hms("1-1-2014 12:15:01")
```

as_duration

Wrapper for lubridate's as.duration function. Result converted to numeric

Description

Wrapper for lubridate's as.duration function. Result converted to numeric

Usage

```
as_duration(x)
```

Arguments

Χ

Time difference

as_factor

Wrapper for factor with ordered = FALSE

Description

Wrapper for factor with ordered = FALSE

Usage

```
as_factor(x, ordered = FALSE)
```

Arguments

x Input vector

ordered Order factor levels (TRUE, FALSE)

as_hm

as_hm

Convert input in hour-minute format to time

Description

Convert input in hour-minute format to time

Usage

```
as_hm(x)
```

Arguments

Х

Input variable

Value

Time variable of class Period

Examples

```
as_hm("12:45")
## Not run:
as_hm("12:45") %>% minute()
## End(Not run)
```

as_hms

Convert input in hour-minute-second format to time

Description

Convert input in hour-minute-second format to time

Usage

```
as_hms(x)
```

Arguments

Х

Input variable

Value

Time variable of class Period

10 as_mdy

Examples

```
as_hms("12:45:00")
## Not run:
as_hms("12:45:00") %>% hour
as_hms("12:45:00") %>% second
## End(Not run)
```

as_integer

Convert variable to integer avoiding potential issues with factors

Description

Convert variable to integer avoiding potential issues with factors

Usage

```
as_integer(x)
```

Arguments

Χ

Input variable

Value

Integer

Examples

```
as_integer(rnorm(10))
as_integer(letters)
as_integer(as.factor(5:10))
as.integer(as.factor(5:10))
as_integer(c("a","b"))
```

as_mdy

Convert input in month-day-year format to date

Description

Convert input in month-day-year format to date

Usage

```
as_mdy(x)
```

Arguments

Х

Input variable

as_mdy_hm 11

Details

Use as.character if x is a factor

Value

Date variable of class Date

Examples

```
as_mdy("2-1-2014")
## Not run:
as_mdy("2-1-2014") %>% month(label = TRUE)
as_mdy("2-1-2014") %>% week()
as_mdy("2-1-2014") %>% wday(label = TRUE)
## End(Not run)
```

as_mdy_hm

Convert input in month-day-year-hour-minute format to date-time

Description

Convert input in month-day-year-hour-minute format to date-time

Usage

```
as_mdy_hm(x)
```

Arguments

Χ

Input variable

Value

Date-time variable of class Date

```
as_mdy_hm("1-1-2014 12:15")
```

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as_mdy_hms

Convert input in month-day-year-hour-minute-second format to datetime

Description

Convert input in month-day-year-hour-minute-second format to date-time

Usage

```
as_mdy_hms(x)
```

Arguments

Х

Input variable

Value

Date-time variable of class Date

Examples

```
as_mdy_hms("1-1-2014 12:15:01")
```

as_numeric

Convert variable to numeric avoiding potential issues with factors

Description

Convert variable to numeric avoiding potential issues with factors

Usage

```
as_numeric(x)
```

Arguments

Х

Input variable

Value

Numeric

```
as_numeric(rnorm(10))
as_numeric(letters)
as_numeric(as.factor(5:10))
as.numeric(as.factor(5:10))
as_numeric(c("a","b"))
as_numeric(c("3","4"))
```

as_tibble 13

as_tibble

Exporting as_tibble

Description

Exporting as_tibble

as_ymd

Convert input in year-month-day format to date

Description

Convert input in year-month-day format to date

Usage

```
as_ymd(x)
```

Arguments

Х

Input variable

Value

Date variable of class Date

Examples

```
as_ymd("2013-1-1")
```

as_ymd_hm

Convert input in year-month-day-hour-minute format to date-time

Description

Convert input in year-month-day-hour-minute format to date-time

Usage

```
as\_ymd\_hm(x)
```

Arguments

Х

Input variable

Value

Date-time variable of class Date

14 avengers

Examples

```
as_ymd_hm("2014-1-1 12:15")
```

as_ymd_hms

Convert input in year-month-day-hour-minute-second format to datetime

Description

Convert input in year-month-day-hour-minute-second format to date-time

Usage

```
as_ymd_hms(x)
```

Arguments

Χ

Input variable

Value

Date-time variable of class Date

Examples

```
as_ymd_hms("2014-1-1 12:15:01")
## Not run:
as_ymd_hms("2014-1-1 12:15:01") %>% as.Date
as_ymd_hms("2014-1-1 12:15:01") %>% month
as_ymd_hms("2014-1-1 12:15:01") %>% hour
## End(Not run)
```

avengers

Avengers

Description

Avengers

Usage

```
data(avengers)
```

Format

A data frame with 7 rows and 4 variables

Details

List of avengers. The dataset is used to illustrate data merging / joining. Description provided in attr(avengers, "description")

center 15

center

Center

Description

Center

Usage

```
center(x, na.rm = TRUE)
```

Arguments

x Input variable

na.rm If TRUE missing values are removed before calculation

Value

If x is a numberic variable return x - mean(x)

choose_dir

Select a directory. Uses JavaScript on Mac, utils::choose.dir on Windows, and dirname(file.choose()) on Linux

Description

Select a directory. Uses JavaScript on Mac, utils::choose.dir on Windows, and dirname(file.choose()) on Linux

Usage

```
choose_dir(...)
```

Arguments

... Arguments passed to utils::choose.dir on Windows

Value

Path to the directory selected by the user

```
if (interactive()) {
choose_dir()
}
```

16 ci_label

Description

Select files. Uses JavaScript on Mac, utils::choose.files on Windows, and file.choose() on Linux

Usage

```
choose_files(...)
```

Arguments

... Strings used to determine which file types are available for selection (e.g., "csv" or "pdf")

Value

Vector of paths to files selected by the user

Examples

```
if (interactive()) {
choose_files("pdf", "csv")
}
```

ci_label

Labels for confidence intervals

Description

Labels for confidence intervals

Usage

```
ci_label(alt = "two.sided", cl = 0.95, dec = 3)
```

Arguments

alt	Type of hypothesis ("two.sided","less","greater")
cl	Confidence level
dec	Number of decimals to show

Value

A character vector with labels for a confidence interval

ci_perc 17

Examples

```
ci_label("less",.95)
ci_label("two.sided",.95)
ci_label("greater",.9)
```

ci_perc

Values at confidence levels

Description

Values at confidence levels

Usage

```
ci_perc(dat, alt = "two.sided", cl = 0.95)
```

Arguments

dat Data

alt Type of hypothesis ("two.sided", "less", "greater")

cl Confidence level

Value

A vector with values at a confidence level

Examples

```
ci_perc(0:100, "less",.95)
ci_perc(0:100, "greater",.95)
ci_perc(0:100, "two.sided",.80)
```

combinedata

Combine datasets using dplyr's bind and join functions

Description

Combine datasets using dplyr's bind and join functions

Usage

```
combinedata(x, y, by = "", add = "", type = "inner_join",
  data_filter = "", ...)
```

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Arguments

x Dataset

y Dataset to combine with x

by Variables used to combine 'x' and 'y'

add Variables to add from 'y'

type The main bind and join types from the dplyr package are provided. inner_join

returns all rows from x with matching values in y, and all columns from x and y. If there are multiple matches between x and y, all match combinations are returned. **left_join** returns all rows from x, and all columns from x and y. If there are multiple matches between x and y, all match combinations are returned. **right_join** is equivalent to a left join for datasets y and x. **full_join** combines two datasets, keeping rows and columns that appear in either. **semi_join** returns all rows from x with matching values in y, keeping just columns from x. A semi join differs from an inner join because an inner join will return one row of x for each matching row of y, whereas a semi join will never duplicate rows of x. **anti_join** returns all rows from x without matching values in y, keeping only columns from x. **bind_rows** and **bind_cols** are also included, as are **intersect**, **union**, and **setdiff**. See https://radiant-rstats.github.io/docs/data/

combine.html for further details

10000")

... further arguments passed to or from other methods

Details

See https://radiant-rstats.github.io/docs/data/combine.html for an example in Radiant

Value

If list 'r_data' exists the combined dataset is added as 'name'. Else the combined dataset will be returned as 'name'

Examples

```
avengers %>% combinedata(superheroes, type = "bind_cols")
combinedata(avengers, superheroes, type = "bind_cols")
avengers %>% combinedata(superheroes, type = "bind_rows")
avengers %>% combinedata(superheroes, add = "publisher", type = "bind_rows")
```

copy_all

Source all package functions

Description

Source all package functions

Usage

```
copy_all(.from)
```

copy_attr 19

Arguments

.from

The package to pull the function from

Details

Equivalent of source with local=TRUE for all package functions. Adapted from functions by smbache, author of the import package. See https://github.com/smbache/import/issues/4 for a discussion. This function will be depracated when (if) it is included in https://github.com/smbache/import

Examples

```
copy_all(radiant.data)
```

copy_attr

Copy attributes from on object to another

Description

Copy attributes from on object to another

Usage

```
copy_attr(to, from, attr)
```

Arguments

to Object to copy attributes to from Object to copy attributes from

attr Vector of attributes. If missing all attributes will be copied

copy_from

Source for package functions

Description

Source for package functions

Usage

```
copy_from(.from, ...)
```

Arguments

. from The package to pull the function from

... Functions to pull

20 describe

Details

Equivalent of source with local=TRUE for package functions. Written by smbache, author of the import package. See https://github.com/smbache/import/issues/4 for a discussion. This function will be depracated when (if) it is included in https://github.com/smbache/import

Examples

```
copy_from(radiant.data, getdata)
```

С٧

Coefficient of variation

Description

Coefficient of variation

Usage

```
cv(x, na.rm = TRUE)
```

Arguments

x Input variable

na.rm If TRUE missing values are removed before calculation

Value

Coefficient of variation

Examples

```
cv(runif (100))
```

describe

Show dataset description, if available, in html form in Rstudio viewer or default browser

Description

Show dataset desription, if available, in html form in Rstudio viewer or default browser

Usage

```
describe(dataset)
```

Arguments

dataset Dataset

diamonds 21

diamonds

Diamond prices

Description

Diamond prices

Usage

```
data(diamonds)
```

Format

A data frame with 3000 rows and 10 variables

Details

A sample of 3,000 from the diamonds dataset bundeled with ggplot2. Description provided in attr(diamonds,"description")

does_vary

Does a vector have non-zero variability?

Description

Does a vector have non-zero variability?

Usage

```
does_vary(x, na.rm = TRUE)
```

Arguments

x Input variable

na.rm If TRUE missing values are removed before calculation

Value

Logical. TRUE is there is variability

```
summarise_all(diamonds, funs(does_vary)) %>% as.logical
```

22 dtab.character

dtab

Method to create datatables

Description

Method to create datatables

Usage

```
dtab(object, ...)
```

Arguments

. . .

Object of relevant class to render object Additional arguments

See Also

See dtab. explore to create the an interactive table from an explore object See dtab.pivotr to create the an interactive table from a pivotr object See dtab. data. frame to create an interactive table from a data.frame

dtab.character

Create a DT table with bootstrap theme

Description

Create a DT table with bootstrap theme

Usage

```
## S3 method for class 'character'
dtab(...)
```

Arguments

Arguments to pass on to dtab.data.frame . . .

Details

View, search, sort, etc. your data. For styling options see http://rstudio.github.io/DT/ functions.html

```
dtab(mtcars)
```

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dtab.data.frame	Create a DT table with bootstrap theme
-----------------	--

Description

Create a DT table with bootstrap theme

Usage

```
## S3 method for class 'data.frame'
dtab(object, vars = "", filt = "", rows = NULL,
    nr = NULL, na.rm = FALSE, dec = 3, filter = "top", pageLength = 10,
    dom = "", style = "bootstrap", rownames = FALSE, ...)
```

Arguments

object	Data.frame to display
vars	Variables to show (default is all)
filt	Filter to apply to the specified dataset. For example "price > 10000 " if dataset is "diamonds" (default is "")
rows	Select rows in the specified dataset. For example "1:10" for the first 10 rows or " $n()$ - $10:n()$ " for the last 10 rows (default is NULL)
nr	Number of rows of data to include in the table
na.rm	Remove rows with missing values (default is FALSE)
dec	Number of decimal places to show. Default is no rounding (NULL)
filter	Show filter in DT table. Options are "none", "top", "bottom"
pageLength	Number of rows to show in table
dom	Table control elements to show on the page. See https://datatables.net/reference/option/dom
style	Table formatting style ("bootstrap" or "default")
rownames	Show data.frame rownames. Default is FALSE
	Additional arguments

Details

View, search, sort, etc. your data. For styling options see http://rstudio.github.io/DT/functions.html

```
dtab(mtcars)
```

24 dtab.explore

dtab.explore Make	a tabel of summary statistics in DT
-------------------	-------------------------------------

Description

Make a tabel of summary statistics in DT

Usage

```
## $3 method for class 'explore'
dtab(object, dec = 3, searchCols = NULL, order = NULL,
    pageLength = NULL, ...)
```

Arguments

object Return value from explore

dec Number of decimals to show

searchCols Column search and filter. Used to save and restore state

order Column sorting. Used to save and restore state

pageLength Page length. Used to save and restore state

... further arguments passed to or from other methods

Details

See https://radiant-rstats.github.io/docs/data/explore.html for an example in Radiant

See Also

```
pivotr to create the pivot-table using dplyr
summary.pivotr to print a plain text table
```

```
tab <- explore(diamonds, "price:x") %>% dtab()
tab <- explore(diamonds, "price", byvar = "cut", fun = c("n_obs", "skew"), top = "byvar") %>%
    dtab()
```

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dtab.pivotr	Make a p	nivot	tahel	in DT
dtab.pivoti	mune a p	rivoi	iuvei	III DI

Description

Make a pivot tabel in DT

Usage

```
## $3 method for class 'pivotr'
dtab(object, format = "none", perc = FALSE, dec = 3,
    searchCols = NULL, order = NULL, pageLength = NULL, ...)
```

Arguments

object	Return value from pivotr
format	Show Color bar ("color_bar"), Heat map ("heat"), or None ("none")
perc	Display numbers as percentages (TRUE or FALSE)
dec	Number of decimals to show
searchCols	Column search and filter. Used to save and restore state
order	Column sorting. Used to save and restore state
pageLength	Page length. Used to save and restore state
	further arguments passed to or from other methods

Details

See https://radiant-rstats.github.io/docs/data/pivotr.html for an example in Radiant

See Also

```
pivotr to create the pivot-table using dplyr summary. pivotr to print a plain text table
```

```
pivotr(diamonds, cvars = "cut") %>% dtab()
pivotr(diamonds, cvars = c("cut","clarity")) %>% dtab(format = "color_bar")
ret <- pivotr(diamonds, cvars = c("cut","clarity"), normalize = "total") %>%
    dtab(format = "color_bar", perc = TRUE)
```

26 explore

empty_level	Convert categorical variables to factors and deal with empty/missing values (used in pivotr and explore)

Description

Convert categorical variables to factors and deal with empty/missing values (used in pivotr and explore)

Usage

```
empty_level(x)
```

Arguments

Х

Categorical variable used in table

Value

Variable with updated levels

explore

Explore data

Description

Explore data

Usage

```
explore(dataset, vars = "", byvar = "", fun = c("mean", "sd"),
  top = "fun", tabfilt = "", tabsort = "", nr = NULL,
  data_filter = "", shiny = FALSE)
```

Arguments

(dataset	Dataset to explore
,	vars	(Numerical) variables to summaries
ı	byvar	Variable(s) to group data by before summarizing
	fun	Functions to use for summarizing
	top	The variable (type) to display at the top of the table
	tabfilt	Expression used to filter the table. This should be a string (e.g., "Total > 10000 ")
	tabsort	Expression used to sort the table (e.g., "-Total")
1	nr	Number of rows to display
(data_filter	Expression entered in, e.g., Data $>$ View to filter the dataset in Radiant. The expression should be a string (e.g., "price $>$ 10000")
:	shiny	Logical (TRUE, FALSE) to indicate if the function call originate inside a shiny app

factorizer 27

Details

See https://radiant-rstats.github.io/docs/data/explore.html for an example in Radiant

Value

A list of all variables defined in the function as an object of class explore

See Also

See summary.explore to show summaries

Examples

```
result <- explore(diamonds, "price:x")
summary(result)
result <- explore(diamonds, c("price", "carat"), byvar = "cut", fun = c("n_missing", "skew"))
summary(result)
diamonds %>% explore("price", byvar = "cut", fun = c("n_obs", "n_distinct"))
```

factorizer

Convert character to factors as needed

Description

Convert character to factors as needed

Usage

```
factorizer(dataset, safx = 30)
```

Arguments

dataset Data frame

safx Values to levels ratio

Value

Data frame with factors

28 find_dropbox

filterdata

Filter data with user-specified expression

Description

Filter data with user-specified expression

Usage

```
filterdata(dataset, filt = "", drop = TRUE)
```

Arguments

dataset Data frame to filter

filt Filter expression to apply to the specified dataset (e.g., "price > 10000" if dataset

is "diamonds")

drop Drop unused factor levels after filtering (default is TRUE)

Value

Filtered data frame

find_dropbox

Find a user's Dropbox folder

Description

Find a user's Dropbox folder

Usage

```
find_dropbox(account = 1)
```

Arguments

account If multiple accounts exist specifies the one to use. By default, the first account

listed is used

Value

Path to Dropbox account

find_gdrive 29

find_gdrive

Find a user's Google Drive folder

Description

Find a user's Google Drive folder

Usage

```
find_gdrive()
```

Value

Path to Google Drive folder

find_project

Find a rstudio project directory

Description

Find a rstudio project directory

Usage

```
find_project(mess = TRUE)
```

Arguments

mess

Show or hide messages (default mess = TRUE)

Value

Path to rstudio project directory

fixMS

Replace Windows smart quotes etc.

Description

Replace Windows smart quotes etc.

Usage

```
fixMS(text, all = FALSE)
```

Arguments

text Text to be parsed

all Should all non-ascii characters be removed (default = FALSE)

30 formatdf

flip

Flip the DT table to put Function, Variable, or Group by on top

Description

Flip the DT table to put Function, Variable, or Group by on top

Usage

```
flip(expl, top = "fun")
```

Arguments

expl Return value from explore

top The variable (type) to display at the top of the table ("fun" for Function, "var"

for Variable, and "byvar" for Group by. "fun" is the default

Details

See https://radiant-rstats.github.io/docs/data/explore.html for an example in Radiant

See Also

```
explore to generate summaries dtab. explore to create the DT table
```

Examples

```
result <- explore(diamonds, "price:x", top = "var")
result <- explore(diamonds, "price", byvar = "cut", fun = c("n_obs", "skew"), top = "byvar")</pre>
```

formatdf

Format a data.frame with a specified number of decimal places

Description

Format a data.frame with a specified number of decimal places

Usage

```
formatdf(tbl, dec = NULL, perc = FALSE, mark = "", ...)
```

Arguments

tbl	Data.frame
dec	Number of decimals to show
perc	Display numbers as percentages (TRUE or FALSE)
mark	Thousand separator
	Additional arguments for formator

formatnr 31

Value

Data.frame for printing

Examples

```
data.frame(x = c("a", "b"), y = c(1L, 2L), z = c(-0.0005, 3)) %>% formatdf(dec = 4) data.frame(x = c(1L, 2L), y = c(0.05, 0.8)) %>% formatdf(dec = 2, perc = TRUE)
```

formatnr

Format a number with a specified number of decimal places, thousand sep, and a symbol

Description

Format a number with a specified number of decimal places, thousand sep, and a symbol

Usage

```
formatnr(x, sym = "", dec = 2, perc = FALSE, mark = ",", ...)
```

Arguments

X	Number or vector
sym	Symbol to use
dec	Number of decimals to show
perc	Display number as a percentage
mark	Thousand separator
	Additional arguments

Value

Character (vector) in the desired format

```
formatnr(2000, "$")
formatnr(2000, dec = 4)
formatnr(.05, perc = TRUE)
formatnr(c(.1, .99), perc = TRUE)
formatnr(data.frame(a = c(.1, .99)), perc = TRUE)
formatnr(data.frame(a = 1000), sym = "$", dec = 0)
```

32 getdata

getclass

Get variable class

Description

Get variable class

Usage

```
getclass(dat)
```

Arguments

dat

Dataset to evaluate

Details

Get variable class information for each column in a data.frame

Value

Vector with class information for each variable

Examples

```
getclass(mtcars)
```

getdata

Get data for analysis functions

Description

Get data for analysis functions

Usage

```
getdata(dataset, vars = "", filt = "", rows = NULL, na.rm = TRUE)
```

Arguments

dataset	Dataset or name of the data.frame
vars	Variables to extract from the data.frame
filt	Filter to apply to the specified dataset. For example "price > 10000" if dataset is "diamonds" (default is "")
rows	Select rows in the specified dataset. For example "1:10" for the first 10 rows or " $n()-10:n()$ " for the last 10 rows (default is NULL)
na.rm	Remove rows with missing values (default is TRUE)

Value

Data.frame with specified columns and rows

getsummary 33

getsummary

Create data.frame summary

Description

Create data.frame summary

Usage

```
getsummary(dataset, dc = getclass(dataset))
```

Arguments

dataset

Data.frame

dc

Class for each variable

Details

Used in Radiant's Data > Transform tab

ggplotly

Workaround to avoid messages from ggplotly

Description

Workaround to avoid messages from ggplotly

Usage

```
ggplotly(...)
```

Arguments

...

Arguments to pass to plotly::ggplotlyy

See Also

See the ggplotly in the plotly package for details (?plotly::ggplotly)

glance

Exporting glance from broom

Description

Exporting glance from broom

34 inverse

indexr

Find index corrected for missing values and filters

Description

Find index corrected for missing values and filters

Usage

```
indexr(dataset, vars = "", filt = "", cmd = "")
```

Arguments

dataset Dataset

vars Variables to select

filt Data filter

cmd A command used to customize the data

 $install_webshot$

Install webshot and phantomjs

Description

Install webshot and phantomjs

Usage

```
install_webshot()
```

inverse

Calculate inverse of a variable

Description

Calculate inverse of a variable

Usage

```
inverse(x)
```

Arguments

Χ

Input variable

Value

1/x

is_empty 35

is_empty

Is a character variable defined

Description

Is a character variable defined

Usage

```
is\_empty(x, empty = "\s*")
```

Arguments

```
x Character value to evaluate
empty Indicate what 'empty' means. Default is empty string (i.e., "")
```

Details

Is a variable NULL or an empty string

Value

TRUE if empty, else FALSE

Examples

```
is_empty("")
is_empty(NULL)
is_empty(NA)
is_empty(c())
is_empty("none", empty = "none")
is_empty("")
is_empty(" ")
is_empty(" something ")
is_empty(c("", "something"))
is_empty(c(NA, 1:100))
is_empty(mtcars)
```

 ${\tt is_not}$

Convenience function for is.null or is.na

Description

Convenience function for is.null or is.na

Usage

```
is_not(x)
```

is_string

Arguments

x Input

Examples

```
is_not(NA)
is_not(NULL)
is_not(c())
is_not(list())
is_not(data.frame())
```

is_numeric

Is input numeric (and not a date type)?

Description

Is input numeric (and not a date type)?

Usage

```
is_numeric(x)
```

Arguments

Χ

Input

Value

TRUE if double and not a type of date, else FALSE

is_string

Is input a string?

Description

Is input a string?

Usage

is_string(x)

Arguments

Χ

Input

Value

TRUE if string, else FALSE

iterms 37

Examples

```
is_string(" ")
is_string("data")
is_string(c("data", ""))
is_string(NULL)
is_string(NA)
```

iterms

Create a vector of interaction terms

Description

Create a vector of interaction terms

Usage

```
iterms(vars, nway, sep = ":")
```

Arguments

vars Variables lables to use

nway 2-way (2) or 3-way (3) interactions labels to create sep Separator between variable names (default is:)

Value

Character vector of interaction term labels

Examples

```
paste0("var", 1:3) %>% iterms(2)
paste0("var", 1:3) %>% iterms(3)
paste0("var", 1:3) %>% iterms(2, sep = ".")
```

knit_print

Exporting knit_print from knitr

Description

Exporting knit_print from knitr

kurtosi

Exporting the kurtosi function from the psych package

Description

Exporting the kurtosi function from the psych package

38 level_list

launch

Launch radiant apps in default browser or Rstudio viewer

Description

Launch radiant apps in default browser or Rstudio viewer

Usage

```
launch(package = "radiant.data", run = "browser")
```

Arguments

package Radiant package to start. One of "radiant.data", "radiant.design", "radiant.basics",

"radiant.model", "radiant.multivariate", "radiant"

run Run radiant app in an external browser ("browser"), an Rstudio window ("win-

dow"), or in the Rstudio viewer ("viewer")

Details

See https://radiant-rstats.github.io/docs for documentation and tutorials

Examples

```
## Not run:
launch()
launch(run = "viewer")
launch(run = "window")
launch(run = "browser")
## End(Not run)
```

level_list

Generate list of levels and unique values

Description

Generate list of levels and unique values

Usage

```
level_list(dataset, ...)
```

Arguments

dataset A data.frame

... Unquoted variable names to evaluate

In 39

Examples

```
data.frame(a = c(rep("a",5),rep("b",5)), b = c(rep(1,5),6:10)) %>% level_list level_list(mtcars, mpg, cyl)
```

ln

Natural log

Description

Natural log

Usage

```
ln(x, na.rm = TRUE)
```

Arguments

Input variable

na.rm Remove missing values (default is TRUE)

Value

Natural log of vector

Examples

```
ln(runif(10,1,2))
```

load_csv

Load a csv file

Description

Load a csv file

Usage

```
load_csv(fn, header = TRUE, sep = ",", dec = ".", n_max = Inf,
  saf = TRUE, safx = 20)
```

Arguments

fn	File name string
header	Header in file (TRUE, FALSE)
sep	Use, (default) or; or \t
dec	Decimal symbol. Use . (default) or ,
n_max	Maximum number of rows to read
saf	Convert character variables to factors if (1) there are less than 100 distinct values and (2) there are X (see safx) more values than levels
safx	Values-to-levels ratio to use when converting strings to factors

40 month

Value

Data frame with (some) variables converted to factors

make_train

Generate a variable used to selected a training sample

Description

Generate a variable used to selected a training sample

Usage

```
make_train(n = 0.7, nr = 100, seed = 1234)
```

Arguments

n Number (or fraction) of observations to label as training

nr Number of rows in the dataset

seed Random seed

Value

0/1 variables for filtering

Examples

```
make_train(.5, 10)
```

month

Add ordered argument to lubridate::month

Description

Add ordered argument to lubridate::month

Usage

```
month(x, label = FALSE, abbr = TRUE, ordered = FALSE)
```

Arguments

x Input date vector

labelMonth as label (TRUE, FALSE)abbrAbbreviate label (TRUE, FALSE)orderedOrder factor (TRUE, FALSE)

See Also

See the month function in the lubridate package for additional details

mutate_ext 41

mutate_ext

Add tranformed variables to a data frame (NSE)

Description

Add tranformed variables to a data frame (NSE)

Usage

```
mutate_ext(.tbl, .funs, ..., .ext = "", .vars = c())
```

Arguments

.tbl	Data frame to add transformed variables to
.funs	Function(s) to apply (e.g., funs(log))
	Variables to transform
.ext	Extension to add for each variable
.vars	A list of columns generated by dplyr::vars(), or a character vector of column
	names, or a numeric vector of column positions.

Details

Wrapper for dplyr::mutate_at that allows custom variable name extensions

Examples

```
mutate_ext(mtcars, funs(log), mpg, cyl, .ext = "_ln")
mutate_ext(mtcars, funs(log), .ext = "_ln")
mutate_ext(mtcars, funs(log))
mutate_ext(mtcars, funs(log), .ext = "_ln", .vars = vars(mpg, cyl))
```

normalize

Normalize a variable x by a variable y

Description

Normalize a variable x by a variable y

Usage

```
normalize(x, y)
```

Arguments

```
x Input variabley Normalizing variable
```

Value

x/y

n_obs

n_missing

Number of missing values

Description

Number of missing values

Usage

```
n_missing(x, ...)
```

Arguments

x Input variable

... Additional arguments

Value

number of missing values

Examples

```
n_missing(c("a", "b", NA))
```

n_obs

Number of observations

Description

Number of observations

Usage

```
n_obs(x, ...)
```

Arguments

x Input variable

... Additional arguments

Value

number of observations

```
n_obs(c("a", "b", NA))
```

p025 43

p025

2.5th percentile

Description

2.5th percentile

Usage

```
p025(x, na.rm = TRUE)
```

Arguments

Χ

Input variable

na.rm

If TRUE missing values are removed before calculation

Value

2.5th percentile

Examples

```
p025(rnorm(100))
```

p05

5th percentile

Description

5th percentile

Usage

```
p05(x, na.rm = TRUE)
```

Arguments

Χ

Input variable

na.rm

If TRUE missing values are removed before calculation

Value

5th percentile

```
p05(rnorm(100))
```

p25

p10

10th percentile

Description

10th percentile

Usage

```
p10(x, na.rm = TRUE)
```

Arguments

Χ

Input variable

na.rm

If TRUE missing values are removed before calculation

Value

10th percentile

Examples

```
p10(rnorm(100))
```

p25

25th percentile

Description

25th percentile

Usage

```
p25(x, na.rm = TRUE)
```

Arguments

Χ

Input variable

na.rm

If TRUE missing values are removed before calculation

Value

25th percentile

```
p25(rnorm(100))
```

p75 45

p75

75th percentile

Description

75th percentile

Usage

```
p75(x, na.rm = TRUE)
```

Arguments

Χ

Input variable

na.rm

If TRUE missing values are removed before calculation

Value

75th percentile

Examples

```
p75(rnorm(100))
```

p90

90th percentile

Description

90th percentile

Usage

```
p90(x, na.rm = TRUE)
```

Arguments

Х

Input variable

na.rm

If TRUE missing values are removed before calculation

Value

90th percentile

```
p90(rnorm(100))
```

p975

p95

95th percentile

Description

95th percentile

Usage

```
p95(x, na.rm = TRUE)
```

Arguments

Χ

Input variable

na.rm

If TRUE missing values are removed before calculation

Value

95th percentile

Examples

```
p95(rnorm(100))
```

p975

97.5th percentile

Description

97.5th percentile

Usage

```
p975(x, na.rm = TRUE)
```

Arguments

х

Input variable

na.rm

If TRUE missing values are removed before calculation

Value

97.5th percentile

```
p975(rnorm(100))
```

parse_path 47

parse_path	Parse path into useful components (used by read_files function)

Description

Parse path into useful components (used by read_files function)

Usage

```
parse_path(path, chr = "\"", pdir = getOption("radiant.project_dir", ""))
```

Arguments

path Path to be parsed

chr Character to wrap around path for display

pdir Project directory if available

pivotr Create a pivot table using dplyr

Dataset to tabulate

Description

Create a pivot table using dplyr

Usage

```
pivotr(dataset, cvars = "", nvar = "None", fun = "mean",
  normalize = "None", tabfilt = "", tabsort = "", nr = NULL,
  data_filter = "", shiny = FALSE)
```

Arguments

dataset

shiny

dataset	Dataset to tabalate
cvars	Categorical variables
nvar	Numerical variable
fun	Function to apply to numerical variable
normalize	Normalize the table by "row" total, "column" totals, or overall "total"
tabfilt	Expression used to filter the table. This should be a string (e.g., "Total > 10000")
tabsort	Expression used to sort the table (e.g., "-Total")
nr	Number of rows to display
data_filter	Expression used to filter the dataset. This should be a string (e.g., "price > 10000 ")

Logical (TRUE, FALSE) to indicate if the function call originate inside a shiny

app

48 plot.pivotr

Details

Create a pivot-table. See https://radiant-rstats.github.io/docs/data/pivotr.html for an example in Radiant

Examples

```
pivotr(diamonds, cvars = "cut")$tab
pivotr(diamonds, cvars = c("cut","clarity","color"))$tab
pivotr(diamonds, cvars = "cut:clarity", nvar = "price")$tab
pivotr(diamonds, cvars = "cut", nvar = "price")$tab
pivotr(diamonds, cvars = "cut", normalize = "total")$tab
```

plot.character

Don't try to plot strings

Description

Don't try to plot strings

Usage

```
## S3 method for class 'character' plot(x, ...)
```

Arguments

x A character returned from a function

... Any additional arguments

plot.pivotr

Plot method for the pivotr function

Description

Plot method for the pivotr function

Usage

```
## S3 method for class 'pivotr'
plot(x, type = "dodge", perc = FALSE, flip = FALSE,
  fillcol = "blue", opacity = 0.5, ...)
```

print.gtable 49

Arguments

X	Return value from pivotr
type	Plot type to use ("fill" or "dodge" (default))
perc	Use percentage on the y-axis
flip	Flip the axes in a plot (FALSE or TRUE)
fillcol	Fill color for bar-plot when only one categorical variable has been selected (default is "blue")
opacity	Opacity for plot elements (0 to 1)
	further arguments passed to or from other methods

Details

See https://radiant-rstats.github.io/docs/data/pivotr for an example in Radiant

See Also

```
pivotr to generate summaries summary.pivotr to show summaries
```

Examples

```
pivotr(diamonds, cvars = "cut") %>% plot
pivotr(diamonds, cvars = c("cut","clarity")) %>% plot
pivotr(diamonds, cvars = c("cut","clarity","color")) %>% plot
```

print.gtable

Print/draw method for grobs produced by gridExtra

Description

Print/draw method for grobs produced by gridExtra

Usage

```
## S3 method for class 'gtable' print(x, ...)
```

Arguments

x a gtable object

... further arguments passed to or from other methods

Details

Print method for ggplot grobs created using grid.arrange. Code is based on https://github.com/baptiste/gridextra/blob/master/inst/testing/shiny.R

Value

A plot

50 publishers

prop

Calculate proportion

Description

Calculate proportion

Usage

```
prop(x, na.rm = TRUE)
```

Arguments

x Input variable

na.rm If TRUE missing values are removed before calculation

Value

Proportion of first level for a factor and of the maximum value for numeric

Examples

```
prop(c(rep(1L, 10), rep(0L, 10)))
prop(c(rep(4, 10), rep(2, 10)))
prop(rep(0, 10))
prop(factor(c(rep("a", 20), rep("b", 10))))
```

publishers

Comic publishers

Description

Comic publishers

Usage

```
data(publishers)
```

Format

A data frame with 3 rows and 2 variables

Details

```
List of comic publishers from <a href="http://stat545-ubc.github.io/bit001_dplyr-cheatsheet">http://stat545-ubc.github.io/bit001_dplyr-cheatsheet</a>.

<a href="http://stat545-ubc.github.io/bit001_dplyr-cheatsheet">httml</a>. The dataset is used to illustrate data merging / joining. Description provided in attr(publishers, "description")</a>
```

radiant.data-deprecated

radiant.data

radiant.data

Description

radiant.data

Launch radiant.data in default browser

Usage

```
radiant.data()
```

Details

See https://radiant-rstats.github.io/docs for documentation and tutorials

Examples

```
## Not run:
radiant.data()
radiant.data("viewer")
## End(Not run)
```

radiant.data-deprecated

Deprecated function(s) in the radiant.data package

Description

These functions are provided for compatibility with previous versions of radiant but will be removed

Usage

```
mean_rm(...)
```

Arguments

... Parameters to be passed to the updated functions

Details

```
Replace mean_rm by mean
Replace median_rm by median
Replace min_rm by min
Replace max_rm by max
Replace sd_rm by sd
Replace var_rm by var
Replace sum_rm by sum
```

52 radiant.data_window

radiant.data_viewer

Launch radiant.data in the Rstudio viewer

Description

Launch radiant.data in the Rstudio viewer

Usage

```
radiant.data_viewer()
```

Details

See https://radiant-rstats.github.io/docs for documentation and tutorials

Examples

```
## Not run:
radiant.data_viewer()
## End(Not run)
```

radiant.data_window

Launch radiant.data in the Rstudio window

Description

Launch radiant.data in the Rstudio window

Usage

```
radiant.data_window()
```

Details

See https://radiant-rstats.github.io/docs for documentation and tutorials

```
## Not run:
radiant.data_window()
## End(Not run)
```

read_files 53

read_files Return code to read file at specified path. Will open a file browser of no path is provided		read_files		Vill open a file browser of	
--	--	------------	--	-----------------------------	--

Description

Return code to read file at specified path. Will open a file browser of no path is provided

Usage

```
read_files(path, type = "rmd", to = "", clipboard = TRUE,
  radiant = FALSE)
```

Arguments

path	Path to file. If empty, a file browser will be opened
type	Code for "rmd" or "r"
to	Object name to use for object. If empty, will use file name to derive an appropriate object name
clipboard	Return code to clipboard (not available on Linux)
radiant	Should returned code be formatted for use with other code generated by Radiant

refactor	Remove/reorder levels

Description

Remove/reorder levels

Usage

```
refactor(x, levs = levels(x), repl = NA)
```

Arguments

X	Character or Factor
levs	Set of levels to use
repl	String (or NA) used to replace missing levels

Details

Keep only a specific set of levels in a factor. By removing levels the base for comparison in, e.g., regression analysis, becomes the first level. To relable the base use, for example, repl = 'other'

```
refactor(diamonds$cut, c("Premium","Ideal")) %>% head()
refactor(diamonds$cut, c("Premium","Ideal"), "Other") %>% head()
```

54 render.character

register

Register a data.frame or list in Radiant

Description

Register a data.frame or list in Radiant

Usage

```
register(new, org = "", descr = "", env)
```

Arguments

new	String containing the name of the data.frame to register
org	Name of the original data.frame if a (working) copy is being made

descr Data description in markdown format

env Environment to assign data to

render

Method to render objects (i.e., htmlwidgets and rmarkdown files)

Description

Method to render objects (i.e., htmlwidgets and rmarkdown files)

Usage

```
render(object, ...)
```

Arguments

object Object of relevant class to render
... Additional arguments

render.character

Method to render rmarkdown documents

Description

Method to render rmarkdown documents

Usage

```
## S3 method for class 'character'
render(object, ...)
```

Arguments

object File path to an R-markdown file

... Additional arguments passed on to rmarkdown::render

render.datatables 55

render.datatables

Method to render DT tabels

Description

Method to render DT tabels

Usage

```
## S3 method for class 'datatables'
render(object, ...)
```

Arguments

object DT table

... Additional arguments

render.plotly

Method to render plotly plots

Description

Method to render plotly plots

Usage

```
## S3 method for class 'plotly'
render(object, ...)
```

Arguments

object plotly object

... Additional arguments

```
render.shiny.render.function
```

Method to avoid re-rendering a shiny.render.function

Description

Method to avoid re-rendering a shiny.render.function

Usage

```
## S3 method for class 'shiny.render.function'
render(object, ...)
```

Arguments

```
object Shiny render function
... Additional arguments
```

56 sdpop

rounddf

Round double in a data frame to a specified number of decimal places

Description

Round double in a data.frame to a specified number of decimal places

Usage

```
rounddf(tbl, dec = 3)
```

Arguments

tbl Data frame

dec Number of decimals to show

Value

Data frame with rounded doubles

Examples

```
data.frame(x = as.factor(c("a", "b")), y = c(1L, 2L), z = c(-0.0005, 3.1)) %>% rounddf(dec = 2)
```

rownames_to_column

Exporting rownames_to_column from tibble

Description

Exporting rownames_to_column from tibble

sdpop

Standard deviation for the population

Description

Standard deviation for the population

Usage

```
sdpop(x, na.rm = TRUE)
```

Arguments

x Input variable

na.rm If TRUE missing values are removed before calculation

sdprop 57

Value

Standard deviation for the population

Examples

```
sdpop(rnorm(100))
```

sdprop

Standard deviation for proportion

Description

Standard deviation for proportion

Usage

```
sdprop(x, na.rm = TRUE)
```

Arguments

x Input variable

na.rm If TRUE missing values are removed before calculation

Value

Standard deviation for proportion

Examples

```
sdprop(c(rep(1L, 10), rep(0L, 10)))
```

se

Standard error

Description

Standard error

Usage

```
se(x, na.rm = TRUE)
```

Arguments

Input variable

na.rm If TRUE missing values are removed before calculation

58 seprop

Value

Standard error

Examples

```
se(rnorm(100))
```

Search

Search for a string in all columns of a data.frame

Description

Search for a string in all columns of a data.frame

Usage

```
Search(pattern, dataset, ignore.case = TRUE, fixed = FALSE)
```

Arguments

pattern String to match dataset Data.frame to search

ignore.case Should search be case sensitive or not (default is FALSE) fixed Allow regular expersions or not (default is FALSE)

Details

See https://radiant-rstats.github.io/docs/data/view.html for an example in Radiant

See Also

See grep1 for a more detailed description of the function arguments

seprop

Standard error for proportion

Description

Standard error for proportion

Usage

```
seprop(x, na.rm = TRUE)
```

Arguments

x Input variable

na.rm If TRUE missing values are removed before calculation

set_attr 59

Value

Standard error for proportion

Examples

```
seprop(c(rep(1L, 10), rep(0L, 10)))
```

set_attr

Alias used to add an attribute

Description

Alias used to add an attribute

Usage

```
set_attr(x, which, value)
```

Arguments

x Object

which Attribute name value Value to set

Examples

```
foo <- data.frame(price = 1:5) %>% set_attr("desc", "price set in experiment ...")
```

 $\verb|show_duplicated|$

Show all rows with duplicated values (not just the first or last)

Description

Show all rows with duplicated values (not just the first or last)

Usage

```
show_duplicated(.tbl, ...)
```

Arguments

.tbl Data frame to add transformed variables to... Variables used to evaluate row uniqueness

Details

If an entire row is duplicated use "duplicated" to show only one of the duplicated rows. When using a subset of variables to establish uniqueness it may be of interest to show all rows that have (some) duplicate elements

60 skew

Examples

```
bind_rows(mtcars, mtcars[c(1,5,7),]) %>%
    show_duplicated(mpg, cyl)
bind_rows(mtcars, mtcars[c(1,5,7),]) %>%
    show_duplicated
```

sig_stars

Add stars '***' to a data.frame (from broom's 'tidy' function) based on p.values

Description

Add stars '***' to a data.frame (from broom's 'tidy' function) based on p.values

Usage

```
sig_stars(pval)
```

Arguments

pval

Vector of p-values

Details

Add stars to output from broom's 'tidy' function

Value

A vector of stars

Examples

```
sig_stars(c(.0009, .049, .009, .4, .09))
```

skew

Exporting the skew function from the psych package

Description

Exporting the skew function from the psych package

square 61

square

Calculate square of a variable

Description

Calculate square of a variable

Usage

```
square(x)
```

Arguments

Χ

Input variable

Value

x^2

sshh

Hide warnings and messages and return invisible

Description

Hide warnings and messages and return invisible

Usage

```
sshh(...)
```

Arguments

... Inputs to keep quite

Details

Adapted from http://www.onthelambda.com/2014/09/17/fun-with-rprofile-and-customizing-r-startup/

```
sshh(library(dplyr))
```

62 standardize

sshhr

Hide warnings and messages and return result

Description

Hide warnings and messages and return result

Usage

```
sshhr(...)
```

Arguments

... Inputs to keep quite

Details

Adapted from http://www.onthelambda.com/2014/09/17/fun-with-rprofile-and-customizing-r-startup/

Examples

```
sshhr(library(dplyr))
```

standardize

Standardize

Description

Standardize

Usage

```
standardize(x, na.rm = TRUE)
```

Arguments

x Input variable

na.rm If TRUE missing values are removed before calculation

Value

If x is a numberic variable return center(x) / mean(x)

store 63

store	Method to store variables in a dataset in Radiant
000.0	

Description

Method to store variables in a dataset in Radiant

Usage

```
store(dataset, object = "deprecated", ...)
```

Arguments

dataset Dataset

object Object of relevant class that has information to be stored

... Additional arguments

store.character Method for error messages that a user tries to store

Description

Method for error messages that a user tries to store

Usage

```
## S3 method for class 'character'
store(dataset = NULL, object, ...)
```

Arguments

dataset Dataset
object Object of type character

... Additional arguments

64 store.pivotr

store.explore

Deprecated: Store method for the explore function

Description

Deprecated: Store method for the explore function

Usage

```
## S3 method for class 'explore'
store(dataset, object, name, ...)
```

Arguments

dataset Dataset

object Return value from explore name Name to assign to the dataset

... further arguments passed to or from other methods

Details

Return the summarized data. See https://radiant-rstats.github.io/docs/data/explore. httml for an example in Radiant

See Also

explore to generate summaries

store.pivotr

Deprecated: Store method for the pivotr function

Description

Deprecated: Store method for the pivotr function

Usage

```
## S3 method for class 'pivotr'
store(dataset, object, name, ...)
```

Arguments

dataset Dataset

object Return value from pivotr
name Name to assign to the dataset

... further arguments passed to or from other methods

subplot 65

Details

Return the summarized data. See https://radiant-rstats.github.io/docs/data/pivotr.html for an example in Radiant

See Also

pivotr to generate summaries

subplot

Workaround to avoid messages from subplot

Description

Workaround to avoid messages from subplot

Usage

```
subplot(..., margin = 0.04)
```

Arguments

... Arguments to pass to plotly::subplot margin Default margin to use between plots

See Also

See the subplot in the plotly package for details (?plotly::subplot)

summary.explore

Summary method for the explore function

Description

Summary method for the explore function

Usage

```
## S3 method for class 'explore'
summary(object, dec = 3, ...)
```

Arguments

object Return value from explore dec Number of decimals to show

... further arguments passed to or from other methods

Details

 $See \ https://radiant-rstats.github.io/docs/data/explore.html \ for \ an \ example \ in \ Radiant$

66 summary.pivotr

See Also

```
explore to generate summaries
```

Examples

```
result <- explore(diamonds, "price:x")
summary(result)
result <- explore(diamonds, "price", byvar = "cut", fun = c("n_obs", "skew"))
summary(result)
diamonds %>% explore("price:x") %>% summary()
diamonds %>% explore("price", byvar = "cut", fun = c("n_obs", "skew")) %>% summary()
```

summary.pivotr

Summary method for pivotr

Description

Summary method for pivotr

Usage

```
## S3 method for class 'pivotr'
summary(object, perc = FALSE, dec = 3, chi2 = FALSE,
    shiny = FALSE, ...)
```

Arguments

object	Return value from pivotr
perc	Display numbers as percentages (TRUE or FALSE)
dec	Number of decimals to show
chi2	If TRUE calculate the chi-square statistic for the (pivot) table
shiny	Did the function call originate inside a shiny app
	further arguments passed to or from other methods

Details

See https://radiant-rstats.github.io/docs/data/pivotr.html for an example in Radiant

See Also

pivotr to create the pivot-table using dplyr

```
pivotr(diamonds, cvars = "cut") %>% summary(chi2 = TRUE)
pivotr(diamonds, cvars = "cut", tabsort = "-n_obs") %>% summary()
pivotr(diamonds, cvars = "cut", tabsort = "desc(n_obs)") %>% summary()
pivotr(diamonds, cvars = "cut", tabfilt = "n_obs > 700") %>% summary()
pivotr(diamonds, cvars = "cut:clarity", nvar = "price") %>% summary()
```

superheroes 67

superheroes

Super heroes

Description

Super heroes

Usage

data(superheroes)

Format

A data frame with 7 rows and 4 variables

Details

List of super heroes from http://stat545-ubc.github.io/bit001_dplyr-cheatsheet.html. The dataset is used to illustrate data merging / joining. Description provided in attr(superheroes, "description")

table2data

Create data.frame from a table

Description

Create data.frame from a table

Usage

```
table2data(dataset, freq = tail(colnames(dataset), 1))
```

Arguments

dataset

Data.frame

freq

Column name with frequency information

Examples

```
data.frame(price = c("$200","$300"), sale = c(10, 2)) %>% table2data()
```

tibble

Exporting tibble

Description

Exporting tibble

68 varpop

tidy

Exporting tidy from broom

Description

Exporting tidy from broom

titanic

Survival data for the Titanic

Description

Survival data for the Titanic

Usage

```
data(titanic)
```

Format

A data frame with 1043 rows and 10 variables

Details

Survival data for the Titanic. Description provided in attr(titanic, "description")

varpop

Variance for the population

Description

Variance for the population

Usage

```
varpop(x, na.rm = TRUE)
```

Arguments

x Input variable

na.rm If TRUE missing values are removed before calculation

Value

Variance for the population

```
varpop(rnorm(100))
```

varprop 69

varprop	Variance for proportion

Description

Variance for proportion

Usage

```
varprop(x, na.rm = TRUE)
```

Arguments

x Input variablena.rm If TRUE missing values are removed before calculation

Value

Variance for proportion

Examples

```
varprop(c(rep(1L, 10), rep(0L, 10)))
```

viewdata

View data in a shiny-app

Description

View data in a shiny-app

Usage

```
viewdata(dataset, vars = "", filt = "", rows = NULL, na.rm = FALSE,
  dec = 3)
```

Arguments

dataset	Data.frame or name of the dataframe to view
vars	Variables to show (default is all)
filt	Filter to apply to the specified dataset. For example "price > 10000 " if dataset is "diamonds" (default is "")
rows	Select rows in the specified dataset. For example "1:10" for the first 10 rows or "n()-10:n()" for the last 10 rows (default is NULL)
na.rm	Remove rows with missing values (default is FALSE)
dec	Number of decimals to show

70 visualize

Details

View, search, sort, etc. your data

Examples

```
if (interactive()) {
  viewdata(mtcars)
  mtcars %>% viewdata()
}
```

visualize

Visualize data using ggplot2 http://ggplot2.tidyverse.org

Description

Visualize data using ggplot2 http://ggplot2.tidyverse.org

Usage

```
visualize(dataset, xvar, yvar = "", comby = FALSE, combx = FALSE,
  type = ifelse(is_empty(yvar), "dist", "scatter"), nrobs = -1,
  facet_row = ".", facet_col = ".", color = "none", fill = "none",
  size = "none", fillcol = "blue", linecol = "black",
  pointcol = "black", bins = 10, smooth = 1, fun = "mean", check = "",
  axes = "", alpha = 0.5, xlim = NULL, ylim = NULL, data_filter = "",
  shiny = FALSE, custom = FALSE)
```

Arguments

dataset	Data to plot (data.frame or tibble)
xvar	One or more variables to display along the X-axis of the plot
yvar	Variable to display along the Y-axis of the plot (default = "none")
comby	Combine yvars in plot (TRUE or FALSE, FALSE is the default)
combx	Combine xvars in plot (TRUE or FALSE, FALSE is the default)
type	Type of plot to create. One of Distribution ('dist'), Density ('density'), Scatter ('scatter'), Surface ('surface'), Line ('line'), Bar ('bar'), or Box-plot ('box')
nrobs	Number of data points to show in scatter plots (-1 for all)
facet_row	Create vertically arranged subplots for each level of the selected factor variable
facet_col	Create horizontally arranged subplots for each level of the selected factor variable
color	Adds color to a scatter plot to generate a 'heat map'. For a line plot one line is created for each group and each is assigned a different color
fill	Display bar, distribution, and density plots by group, each with a different color. Also applied to surface plots to generate a 'heat map'
size	Numeric variable used to scale the size of scatter-plot points
fillcol	Color used for bars, boxes, etc. when no color or fill variable is specified

visualize 71

linecol	Color for lines when no color variable is specified	
pointcol	Color for points when no color variable is specified	
bins	Number of bins used for a histogram (1 - 50)	
smooth	Adjust the flexibility of the loess line for scatter plots	
fun	Set the summary measure for line and bar plots when the X-variable is a factor (default is "mean"). Also used to plot an error bar in a scatter plot when the X-variable is a factor. Options are "mean" and/or "median"	
check	Add a regression line ("line"), a loess line ("loess"), or jitter ("jitter") to a scatter plot $$	
axes	Flip the axes in a plot ("flip") or apply a log transformation (base e) to the y-axis ("log_y") or the x-axis ("log_x")	
alpha	Opacity for plot elements (0 to 1)	
xlim	Set limit for y-axis (e.g., $c(0, 1)$)	
ylim	Set limit for y-axis (e.g., $c(0, 1)$)	
data_filter	Expression used to filter the dataset. This should be a string (e.g., "price > 10000 ")	
shiny	Logical (TRUE, FALSE) to indicate if the function call originate inside a shiny app	
custom	Logical (TRUE, FALSE) to indicate if ggplot object (or list of ggplot objects) should be returned. This opion can be used to customize plots (e.g., add a title, change x and y labels, etc.). See examples and http://docs.ggplot2.org/for options.	

Details

See https://radiant-rstats.github.io/docs/data/visualize.html for an example in Radiant

Value

Generated plots

72 weighted.sd

wday

Add ordered argument to lubridate::wday

Description

Add ordered argument to lubridate::wday

Usage

```
wday(x, label = FALSE, abbr = TRUE, ordered = FALSE)
```

Arguments

x Input date vector

label Weekday as label (TRUE, FALSE)
abbr Abbreviate label (TRUE, FALSE)
ordered Order factor (TRUE, FALSE)

See Also

See the lubridate::wday() function in the lubridate package for additional details

weighted.sd

Weighted standard deviation

Description

Weighted standard deviation

Usage

```
weighted.sd(x, wt, na.rm = TRUE)
```

Arguments

x Numeric vector

wt Numeric vector of weights

na.rm Remove missing values (default is TRUE)

Details

Calculated a weighted standard deviation

which.pmax 73

which.pmax

Returns the index of the (parallel) maxima of the input values

Description

Returns the index of the (parallel) maxima of the input values

Usage

```
which.pmax(...)
```

Arguments

... Numeric or character vectors of the same length

Value

Vector of rankings

Examples

```
which.pmax(1:10, 10:1)
which.pmax(2, 10:1)
which.pmax(mtcars)
```

which.pmin

Returns the index of the (parallel) minima of the input values

Description

Returns the index of the (parallel) minima of the input values

Usage

```
which.pmin(...)
```

Arguments

... Numeric or character vectors of the same length

Value

Vector of rankings

```
which.pmin(1:10, 10:1)
which.pmin(2, 10:1)
which.pmin(mtcars)
```

74 xtile

write_feather

Workaround to add description using feather::write_feather

Description

Workaround to add description using feather::write_feather

Usage

```
write_feather(x, path, description = attr(x, "description"))
```

Arguments

x A data frame to write to disk

path Path to feather file description Data description

xtile

Create quantiles

Description

Create quantiles

Usage

```
xtile(x, n = 5, rev = FALSE)
```

Arguments

x Numeric variablen number of bins to createrev Reverse the order of the xtiles

Details

Approach used produces results most similar to Stata

```
xtile(1:10,5)
xtile(1:10,5, rev = TRUE)
```

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