Package 'radiant.data'

December 7, 2017

```
Title Data Menu for Radiant: Business Analytics using R and Shiny
Version 0.8.8.1
Date 2017-11-29
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 (>= 3.3.0),
      magrittr (>= 1.5),
      ggplot2 (>= 2.2.1),
      lubridate (>= 1.7.1),
      tidyr (>= 0.7.2),
      dplyr (>= 0.7.4)
Imports tibble (>= 1.3.4),
      rlang (>= 0.1.4),
      broom (>= 0.4.2),
      car (>= 2.1.3),
      grid (>= 3.3.1),
      gridExtra (\geq 2.0.0),
      knitr (>= 1.15.1),
      rmarkdown(>= 1.4),
      markdown (>= 0.7.7),
      pryr (>= 0.1.2),
      shiny (>= 1.0.5),
      jsonlite (>= 1.0),
      shinyAce (>= 0.2.1),
      psych (>= 1.6.6),
      DT (>= 0.2),
      readr (>= 1.1.0),
      scales (>= 0.4.0),
      curl (>= 2.5),
      rstudioapi (>= 0.7),
      import (>= 1.1.0),
      plotly (>= 4.5.6),
      base64enc,
      methods
Suggests RSQLite (>= 1.1.2),
      DBI (>= 0.6.1),
```

2 R topics documented:

```
webshot (>= 0.4.0),
  feather (>= 0.3.1),
  testthat (>= 1.0.0)

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
LazyData true
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

x 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"))
```

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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)

changedata

Change data

Description

Change data

Usage

```
changedata(dataset, vars = c(), var_names = names(vars))
```

Arguments

dataset Name of the dataframe to change

vars New variables to add to the data.frame

var_names Names for the new variables to add to the data.frame

Value

None

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choose.dir	Select a directory. Uses JavaScript on Mac, utils::choose.dir on Win-
	dows, 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

Examples

```
if (interactive()) {
choose.dir()
}
```

choose.files

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

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

ci_label 17

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 decimal places

Value

A character vector with labels for a confidence interval

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

18 combinedata

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(dataset, cmb_dataset, by = "", add = "", type = "inner_join",
  name = "", data_filter = "")
```

Arguments

dataset Dataset name (string). This can be a dataframe in the global environment or an

element in an r_data list from Radiant

cmb_dataset Dataset name (string) to combine with 'dataset'. This can be a dataframe in the

global environment or an element in an r_data list from Radiant

by Variables used to combine 'dataset' and 'cmb_dataset'

add Variables to add from 'cmb_dataset'

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

name Name for the combined dataset

10000")

copy_all 19

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)
```

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

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

copy_from

conv	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

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

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

cv 21

cv

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(name)
```

Arguments

name

Dataset name or a dataframe

does_vary

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
```

dtab 23

dtab

Method to create datatables

Description

Method to create datatables

Usage

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

Arguments

object Object of relevant class to render
... 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,
    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)
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)
```

dtab.explore 25

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

Description

Make a tabel of summary statistics in DT

Usage

```
## S3 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("length", "skew"), top = "byvar") %>%
    dtab
```

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dt ah	pivotr	
utab.	DIAOTL	

Make a pivot tabel in DT

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)
```

empty_level 27

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_rm", "sd_rm"),
  top = "fun", tabfilt = "", tabsort = "", nr = NULL,
  data_filter = "", shiny = FALSE)
```

Arguments

dataset	Dataset name (string). This can be a dataframe in the global environment or an element in an r_data list from Radiant
vars	(Numerical) variables to summaries
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")
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

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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("length", "n_distinct"))
```

factorizer

Convert character to factors as needed

Description

Convert character to factors as needed

Usage

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

Arguments

dat Data frame

safx Values to levels ratio

Value

Data frame with factors

filterdata 29

filterdata

Filter data with user-specified expression

Description

Filter data with user-specified expression

Usage

```
filterdata(dat, filt = "")
```

Arguments

dat Data frame to filter

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

is "diamonds")

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

30 flip

 $find_gdrive$

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()
```

Value

Path to rstudio project directory

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

formatdf 31

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("length", "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 = 3, perc = FALSE, mark = "")
```

Arguments

tbl Data.frame

dec Number of decimal places

perc Display numbers as percentages (TRUE or FALSE)

mark Thousand separator

Value

Data.frame for printing

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

32 getclass

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 decimal places
perc	Display number as a percentage
mark	Thousand separator

Value

Character (vector) in the desired format

Examples

```
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)
```

getclass

Get variable class

Description

Get variable class

Usage

```
getclass(dat)
```

Arguments

dat

Dataset to evaluate

getdata 33

Details

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

Value

Vector with class information for each variable

Examples

```
getclass(mtcars)
```

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ge.	tda	ıta

Get data for analysis functions

Description

Get data for analysis functions

Usage

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

Arguments

dataset	Name of the dataframe
vars	Variables to extract from the dataframe
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

34 glance

getsummary

Create data.frame summary

Description

Create data.frame summary

Usage

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

Arguments

dat Data.frame

dc Class for each variable

Details

Used in Radiant's Data > Transform tab

ggplotly

Exporting the ggplotly function from the plotly package

Description

Exporting the ggplotly function from the plotly package

glance

Exporting glance from broom

Description

Exporting glance from broom

indexr 35

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 name
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_not

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_not

Convenience function for is.null or is.na

Description

Convenience function for is.null or is.na

Usage

```
is_not(x)
```

Arguments

Х

Input

is_string 37

Examples

```
is_not(NA)
is_not(NULL)
is_not(c())
```

is_string

Is input a string?

Description

Is input a string?

Usage

```
is_string(x)
```

Arguments

Х

Input

Details

Is input a string

Value

TRUE if string, else FALSE

Examples

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

iterms

Create a vector of interaction terms

Description

Create a vector of interaction terms

Usage

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

38 level_list

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

level_list

Generate list of levels and unique values

Description

Generate list of levels and unique values

Usage

```
level_list(dat, ...)
```

Arguments

dat A data.frame

... Unquoted variable names to evaluate

```
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 39

In Natural log

Description

Natural log

Usage

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

Arguments

x Input variable

na.rm Remove missing values (default is TRUE)

Value

Natural log of vector

Examples

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

loadcsv

Load a csv file with read.csv and read_csv

Description

Load a csv file with read.csv and read_csv

Usage

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

Arguments

fn	File name string
.csv	Use read.csv instead of read_csv to load file (default is FALSE)
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 (2) there are X (see safx) more values than levels
safx	Values to levels ratio

40 loadr

Value

Data frame with (some) variables converted to factors

loadcsv_url Load a c	sv file with from a url
----------------------	-------------------------

Description

Load a csv file with from a url

Usage

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

Arguments

csv_url	URL for the csv file
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 (2) there are X (see safx) more values than levels
safx	Values to levels ratio

Value

Data frame with (some) variables converted to factors

loadr	Load an rds, rda, or csv file and add it to the radiant data list (r_data)
	if available

Description

Load an rds, rda, or csv file and add it to the radiant data list (r_data) if available

Usage

```
loadr(file, objname = "", rlist = TRUE)
```

Arguments

file	File name and path as a string. Extension must be either rds, rda, or csv	
objname	Name to use for the data frame. Defaults to the file name	
rlist	If TRUE, uses "r_data" list to store the data.frame. If FALSE, loads data.frame	
	into calling environment	

loadrda_url 41

Value

Data frame in r_data or in the calling environment

loadrda_url

Load an rda file from a url

Description

Load an rda file from a url

Usage

```
loadrda_url(rda_url)
```

Arguments

rda_url

URL for the rda file

Value

Data frame

 ${\sf make_funs}$

Make a list of functions-as-formulas to pass to dplyr

Description

Make a list of functions-as-formulas to pass to dplyr

Usage

```
make_funs(x)
```

Arguments

Х

List of functions as strings

Value

List of functions to pass to dplyr in formula form

```
make_funs(c("mean", "sum_rm"))
```

42 max_rm

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)
```

max_rm

 $Max\ with\ na.rm = TRUE$

Description

Max with na.rm = TRUE

Usage

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

Arguments

x Input variable

na.rm If TRUE missing values are removed before calculation

Value

Maximum value

```
max_rm(runif (100))
```

mean_rm 43

mean_rm

 $Mean \ with \ na.rm = TRUE$

Description

Mean with na.rm = TRUE

Usage

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

Arguments

x Input variable

na.rm If TRUE missing values are removed before calculation

Value

Mean value

Examples

```
mean_rm(runif (100))
```

median_rm

 $Median \ with \ na.rm = TRUE$

Description

Median with na.rm = TRUE

Usage

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

Arguments

x Input variable

na.rm If TRUE missing values are removed before calculation

Value

Median value

```
median_rm(runif (100))
```

mode_rm

min_rm

 $Min\ with\ na.rm = TRUE$

Description

Min with na.rm = TRUE

Usage

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

Arguments

x Input variable

na.rm If TRUE missing values are removed before calculation

Value

Minimum value

Examples

```
min_rm(runif (100))
```

 $mode_rm$

 $Mode\ with\ na.rm = TRUE$

Description

Mode with na.rm = TRUE

Usage

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

Arguments

x Input variable

na.rm If TRUE missing values are removed before calculation

Value

Mode value

```
mode_rm(diamonds$cut)
```

month 45

month	Add ordered argument to lubridate::month

Description

Add ordered argument to lubridate::month

Usage

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

Arguments

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

See Also

See the month function in the lubridate package for additional details

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

46 n_missing

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 variable

y Normalizing variable

Value

x/y

n_missing

Number of missing values

Description

Number of missing values

Usage

```
n_missing(x)
```

Arguments

Х

Input variable

Value

number of missing values

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

p025 47

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

Х

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

Х

Input variable

na.rm

If TRUE missing values are removed before calculation

Value

25th percentile

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

p75

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))
```

50 p975

p95

95th percentile

Description

95th percentile

Usage

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

Arguments

Х

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))
```

pivotr 51

pivotr	Create a pivot table using dplyr
	• • • • • • • • • • • • • • • • • • • •

Description

Create a pivot table using dplyr

Usage

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

Arguments

dataset	Name of the dataframe to change
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 ")
shiny	Logical (TRUE, FALSE) to indicate if the function call originate inside a shiny app

Details

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

```
result <- pivotr("diamonds", cvars = "cut")$tab
result <- pivotr("diamonds", cvars = c("cut","clarity","color"))$tab
result <- pivotr("diamonds", cvars = "cut:clarity", nvar = "price")$tab
result <- pivotr("diamonds", cvars = "cut", nvar = "price")$tab
result <- pivotr("diamonds", cvars = "cut", normalize = "total")$tab</pre>
```

52 plot.pivotr

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", ...)
```

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")

Details

. . .

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

further arguments passed to or from other methods

See Also

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

print.gtable 53

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

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

54 radiant.data

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 http://stat545-ubc.github.io/bit001_dplyr-cheatsheet.

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

radiant.data

radiant.data

Description

radiant.data

Launch Radiant in the default browser

Usage

```
radiant.data()
```

Details

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

refactor 55

radiant.data-deprecated

Deprecated function(s) in the radiant.data package

Description

These functions are provided for compatibility with previous versions of radiant. They will eventually be removed.

Usage

```
mutate_each(...)
```

Arguments

Parameters to be passed to the updated functions

Details

```
mutate_each is now a synonym for mutate_ext, mutate_at, or mutate_all

dfprint is now a synonym for formatdf

nrprint is now a synonym for formatnr

varp_rm is now a synonym for varpop

sdp_rm is now a synonym for sdpop
```

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'

56 render

Examples

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

register

Register a data.frame in the datasetlist in Radiant

Description

Register a data.frame in the datasetlist in Radiant

Usage

```
register(new = "", org = "", descr = "", envir = parent.frame(), ...)
```

Arguments

new	Name of the new dataset
org	Name of the original data
descr	Dataset description
envir	Environment to assign 'new' dataset (optional). Used if 'new' is specified but an $r_{\rm data}$ list is not available
	further arguments passed to or from other methods

Details

Store data frame in Radiant r_data list if available

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 57

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

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 ggplotly object
... Additional arguments
```

58 rounddf

```
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

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 decimal places

Value

Data frame with rounded doubles

```
data.frame(x = as.factor(c("a","b")), y = c(1L, 2L), z = c(-0.0005, 3.1)) %>% rounddf(dec = 3)
```

rownames_to_column 59

rownames_to_column

Exporting rownames_to_column from tibble

Description

Exporting rownames_to_column from tibble

saver

Save data.frame as an rda or rds file from Radiant

Description

Save data.frame as an rda or rds file from Radiant

Usage

```
saver(objname, file)
```

Arguments

objname Name of a data.frame or a data.frame

file File name and path as a string. Extension must be either rda or rds

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

Value

Standard deviation for the population

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

60 sd_rm

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)))
```

sd_rm

 $Standard\ deviation\ with\ na.rm = TRUE$

Description

Standard deviation with na.rm = TRUE

Usage

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

Arguments

x Input variable

na.rm If TRUE missing values are removed before calculation

Value

Standard deviation

```
sd_rm(rnorm(100))
```

se 61

se

Standard error

Description

Standard error

Usage

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

Arguments

x Input variable

na.rm If TRUE missing values are removed before calculation

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, df, ignore.case = TRUE, fixed = FALSE)
```

Arguments

pattern String to match df 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

set_attr

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

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

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

show_duplicated 63

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

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

Calculate square of a variable

Description

Calculate square of a variable

Usage

square(x)

Arguments

Х

Input variable

Value

x^2

sshh 65

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/

Examples

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

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/

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

store store

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

Method to store variables in a dataset in Radiant

Description

Method to store variables in a dataset in Radiant

Usage

```
store(object, ...)
```

Arguments

object Object of relevant class that has required information to store

... Additional arguments

store.character 67

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(object, ...)
```

Arguments

object Object of type character
... Additional arguments

store.data.frame

Store method for the Data > View tab

Description

Store method for the Data > View tab

Usage

```
## S3 method for class 'data.frame'
store(object, new = "", org = "",
    envir = parent.frame(), ...)
```

Arguments

new Name of the new dataset

org Name of the original data

envir Environment to assign 'new' dataset (optional). Used if 'new' is specified but an r_data list is not available

. further arguments passed to or from other methods

Details

Store data frame in Radiant r_data list if available

68 store.pivotr

store.explore

Store method for the explore function

Description

Store method for the explore function

Usage

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

Arguments

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

... further arguments passed to or from other methods

Details

Add the summarized data to the r_data list in Radiant or return it. See https://radiant-rstats.github.io/docs/data/explore.html for an example in Radiant

See Also

explore to generate summaries

store.pivotr

Store method for the pivort function

Description

Store method for the pivort function

Usage

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

Arguments

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

... further arguments passed to or from other methods

Details

Add the summarized data to the r_data list in Radiant or return it. See https://radiant-rstats.github.io/docs/data/pivotr.html for an example in Radiant

subplot 69

See Also

pivotr to generate summaries

subplot

Exporting the subplot function from the plotly package

Description

Exporting the subplot function from the plotly package

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

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

See Also

explore to generate summaries

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

70 summary.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") %>% summary
pivotr("diamonds", cvars = "cut", tabsort = "desc(n)") %>% summary
pivotr("diamonds", cvars = "cut", tabfilt = "n > 700") %>% summary
pivotr("diamonds", cvars = "cut:clarity", nvar = "price") %>% summary
```

sum_rm 71

sum_rm

 $Sum\ with\ na.rm = TRUE$

Description

Sum with na.rm = TRUE

Usage

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

Arguments

x Input variable

na.rm If TRUE missing values are removed before calculation

Value

Sum of input values

Examples

sum_rm(1:200)

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")

72 tidy

table2data

Create data.frame from a table

Description

Create data.frame from a table

Usage

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

Arguments

dat 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

tidy

Exporting tidy from broom

Description

Exporting tidy from broom

titanic 73

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))
```

74 var_rm

varprop

Variance for proportion

Description

Variance for proportion

Usage

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

Arguments

Χ

Input variable

na.rm

If TRUE missing values are removed before calculation

Value

Variance for proportion

Examples

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

var_rm

 $Variance\ with\ na.rm = TRUE$

Description

Variance with na.rm = TRUE

Usage

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

Arguments

Х

Input variable

na.rm

If TRUE missing values are removed before calculation

Value

Variance

```
var_rm(rnorm(100))
```

viewdata 75

viewdata

View data in a shiny-app

Description

View data in a shiny-app

Usage

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

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)

Details

View, search, sort, etc. your data

Examples

```
if (interactive()) {
viewdata(mtcars)
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 = "dist", 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, ylim = "none", data_filter = "",
  shiny = FALSE, custom = FALSE)
```

76 visualize

Arguments

dataset	Dataset name (string). This can be a dataframe in the global environment or an element in an r_data list from Radiant
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')
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
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)
ylim	Set limit for y-axis
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 $\verb|https://radiant-rstats.github.io/docs/data/visualize.html| for an example in Radiant \\$

wday 77

Value

Generated plots

Examples

wday

Add ordered argument to lubridate::wday

Description

Add ordered argument to lubridate::wday

Usage

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

Arguments

^	input date vector
label	Weekday as label (TRUE, FALSE)
abbr	Abbreviate label (TRUE, FALSE)
ordered	Order factor (TRUE, FALSE)

Input date vector

See Also

See the wday function in the lubridate package for additional details

78 which.pmax

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

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

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

which.pmin 79

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

Examples

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

xtile

Create quantiles

Description

Create quantiles

Usage

```
xtile(x, n, 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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