

Package ‘radiant’

May 13, 2015

Title Business Analytics using R and Shiny

Version 0.2.13

Date 2015-5-12

Description A platform-independent browser-based interface for business analytics in R, based on the Shiny package.

Depends R (>= 3.1.0),
magrittr (>= 1.5),
ggplot2 (>= 1.0.0),
tidyr (>= 0.2.0),
dplyr (>= 0.4.1)

Imports car (>= 2.0.22),
MASS (>= 7.3),
gridExtra (>= 0.9.1),
AlgDesign (>= 1.1.7.3),
GPArotation (>= 2014.11.1),
psych (>= 1.4.8.11),
wordcloud (>= 2.5),
markdown (>= 0.7.4),
knitr (>= 1.8),
ggdendro (>= 0.1.15),
broom (>= 0.3.6),
pryr (>= 0.1),
yaml (>= 2.1.13),
htmlwidgets (>= 0.3.3),
rpivotTable (>= 0.1.3.4),
shiny (>= 0.11.1.9004),
shinyAce (>= 0.2.1),
lubridate (>= 1.3.3),
DT (>= 0.0.41)

Suggests rmarkdown (>= 0.4.2),
ggvis (>= 0.4),
devtools (>= 1.7.0),
testthat (>= 0.9.1),
covr (>= 0.2.0.9002)

URL <https://github.com/vnijs/radiant>, <http://vnijs.github.io/radiant/>

BugReports <https://github.com/vnijs/radiant/issues>

License AGPL-3 | file LICENSE

LazyData true

R topics documented:

avengers	4
ca_the_table	4
changedata	5
city	6
clean_loadings	6
combinedata	7
compare_means	8
compare_props	9
computer	10
conjoint	10
conjoint_profiles	11
copy_all	12
copy_from	12
correlation	13
cross_tabs	14
cv	15
diamonds	15
explore	16
ff_design	17
full_factor	17
getclass	18
getdata	19
getsummary	19
glm_reg	20
hier_clus	21
is_empty	22
is_string	22
kmeans_clus	23
kurtosi	24
launcher	24
lin_launcher	25
mac_launcher	25
max_rm	26
mds	27
mean_rm	28
median_rm	28
min_rm	29
mp3	29
newspaper	30
nmissing	30
p25	31
p75	31
plot.compare_means	32
plot.compare_props	32
plot.conjoint	33
plot.correlation_	34
plot.cross_tabs	34
plot.explore	35

plot.full_factor	36
plot.glm_predict	37
plot.glm_reg	38
plot.hier_clus	39
plot.kmeans_clus	40
plot.mds	40
plot.pmap	41
plot.pre_factor	42
plot.regression	43
plot.reg_predict	44
plot.single_mean	45
plot.single_prop	46
pmap	46
predict.glm_reg	47
predict.regression	48
pre_factor	49
print.arrange	50
publishers	50
radiant	50
regression	51
rndnames	52
sample_size	52
sampling	53
save_factors	54
save_glm_resid	54
save_membership	55
save_reg_resid	56
sd_rm	56
serr	57
set_class	57
shopping	58
sig_stars	58
single_mean	59
single_prop	60
skew	60
sshh	61
sshhr	61
state_init	62
state_multiple	63
state_single	64
summary.compare_means	65
summary.compare_props	65
summary.conjoint	66
summary.conjoint_profiles	67
summary.correlation_	67
summary.cross_tabs	68
summary.explore	69
summary.full_factor	70
summary.glm_reg	70
summary.hier_clus	71
summary.kmeans_clus	72
summary.mds	73

summary.pmap	73
summary.pre_factor	74
summary.regression	75
summary.sample_size	76
summary.sampling	76
summary.single_mean	77
summary.single_prop	78
superheroes	78
test_specs	79
titanic	79
titanic_pred	80
toothpaste	80
var_check	81
viewdata	81
visualize	82
win_launcher	83

Index	84
--------------	-----------

avengers	<i>Avengers</i>
----------	-----------------

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")

ca_the_table	<i>Function to calculate the PW and IW table for conjoint</i>
--------------	---

Description

Function to calculate the PW and IW table for conjoint

Usage

ca_the_table(model, dat, ca_indep_var)

Arguments

model	Tidied model results (broom) output from conjoint passed on by summary.conjoint
dat	Conjoint data
ca_indep_var	Independent variables used in the conjoint regression

Details

See <http://vnijs.github.io/radiant/marketing/conjoint.html> for an example in Radiant

See Also

[conjoint](#) to generate results
[summary.conjoint](#) to summarize results
[plot.conjoint](#) to plot results

Examples

```
result <- conjoint(dataset = "mp3", ca_dep_var = "Rating", ca_indep_var = "Memory:Shape")
ca_the_table(result$model, result$dat, result$ca_indep_var)
```

changedata	<i>Change data</i>
------------	--------------------

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

Examples

```
r_data <- list()
r_data$dat <- data.frame(a = 1:20)
changedata("dat", 20:1, "b")
head(r_data$dat)
rm(r_data, envir = .GlobalEnv)
```

city	<i>City distances</i>
------	-----------------------

Description

City distances

Usage

```
data(city)
```

Format

A data frame with 45 rows and 3 variables

Details

Distance in miles between nine cities in the USA. The dataset is used to illustrate multi-dimensional scaling (MDS). Description provided in `attr(city,"description")`

clean_loadings	<i>Sort and clean loadings</i>
----------------	--------------------------------

Description

Sort and clean loadings

Usage

```
clean_loadings(ff_loadings, ff_cutoff = 0, ff_sort = FALSE, ff_round = 8)
```

Arguments

<code>ff_loadings</code>	Data.frame with loadings
<code>ff_cutoff</code>	Show only loadings with (absolute) values above <code>ff_cutoff</code> (default = 0)
<code>ff_sort</code>	Sort factor loadings
<code>ff_round</code>	Number of digits to show

Details

See http://vnijs.github.io/radiant/marketing/full_factor.html for an example in Radiant

Examples

```
result <- full_factor("diamonds",c("price","carat","table","x","y"))
clean_loadings(result$ff_loadings, TRUE, .5, 2)
```

combinedata

*Combine datasets using dplyr's bind and join functions***Description**

Combine datasets using dplyr's bind and join functions

Usage

```
combinedata(dataset, dataset2, cmb_vars = "", cmb_type = "inner_join",
  cmb_name = "")
```

Arguments

dataset	Dataset name (string). This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant
dataset2	Dataset name (string) to combine with 'dataset'. This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant
cmb_vars	Variables used to combine 'dataset' and 'dataset2'
cmb_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 http://vnijs.github.io/radiant/base/combine.html for further details
cmb_name	Name for the combined dataset

Details

See <http://vnijs.github.io/radiant/base/combine.html> for an example in Radiant

Value

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

Examples

```
combinedata("titanic", "titanic_pred", c("pclass", "sex", "age")) %>% head
titanic %>% combinedata("titanic_pred", c("pclass", "sex", "age")) %>% head
titanic %>% combinedata(titanic_pred, c("pclass", "sex", "age")) %>% head
avengers %>% combinedata(superheroes, cmb_type = "bind_cols")
combinedata("avengers", "superheroes", cmb_type = "bind_cols")
avengers %>% combinedata(superheroes, cmb_type = "bind_rows")
```

compare_means

*Compare means for two or more variables***Description**

Compare means for two or more variables

Usage

```
compare_means(dataset, cm_var1, cm_var2, data_filter = "",
  cm_paired = "independent", cm_alternative = "two.sided",
  cm_sig_level = 0.95, cm_adjust = "none")
```

Arguments

dataset	Dataset name (string). This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant
cm_var1	A numeric variable or factor selected for comparison
cm_var2	One or more numeric variables for comparison. If <code>cm_var1</code> is a factor only one variable can be selected and the mean of this variable is compared across (factor) levels of <code>cm_var1</code>
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")
cm_paired	Are samples indepent ("independent") or not ("paired")
cm_alternative	The alternative hypothesis ("two.sided", "greater" or "less")
cm_sig_level	Span of the confidence interval
cm_adjust	Adjustment for multiple comparisons ("none" or "bonf" for Bonferroni)

Details

See http://vnijs.github.io/radiant/quant/compare_means.html for an example in Radiant

Value

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

See Also

`summary.compare_means` to summarize results

`plot.compare_means` to plot results

Examples

```
result <- compare_means("diamonds", "cut", "price")
result <- diamonds %>% compare_means("cut", "price")
```


compare_props

*Compare proportions across groups***Description**

Compare proportions across groups

Usage

```
compare_props(dataset, cp_var1, cp_var2, data_filter = "", cp_levels = "",
  cp_alternative = "two.sided", cp_sig_level = 0.95, cp_adjust = "none")
```

Arguments

dataset	Dataset name (string). This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant
cp_var1	A grouping variable to split the data for comparisons
cp_var2	The variable to calculate proportions for
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")
cp_levels	The factor level selected for the proportion comparison
cp_alternative	The alternative hypothesis ("two.sided", "greater" or "less")
cp_sig_level	Span of the confidence interval
cp_adjust	Adjustment for multiple comparisons ("none" or "bonf" for Bonferroni)

Details

See http://vnijs.github.io/radiant/quant/compare_props.html for an example in Radiant

Value

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

See Also

[summary.compare_props](#) to summarize results

[plot.compare_props](#) to plot results

Examples

```
result <- compare_props("titanic", "pclass", "survived")
result <- titanic %>% compare_props("pclass", "survived")
```

computer	<i>Perceptions of computer (re)sellers</i>
----------	--

Description

Perceptions of computer (re)sellers

Usage

```
data(computer)
```

Format

A data frame with 5 rows and 8 variables

Details

Perceptions of computer (re)sellers. The dataset is used to illustrate perceptual maps. Description provided in `attr(computer,"description")`

conjoint	<i>Conjoint analysis</i>
----------	--------------------------

Description

Conjoint analysis

Usage

```
conjoint(dataset, ca_dep_var, ca_indep_var, data_filter = "",
  ca_rev = FALSE)
```

Arguments

dataset	Dataset name (string). This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant
ca_dep_var	The dependent variable (e.g., profile ratings)
ca_indep_var	Independent variables in the regression
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")
ca_rev	Reverse the values of the dependent variable ('ca_dep_var')

Details

See <http://vnijs.github.io/radiant/marketing/conjoint.html> for an example in Radiant

Value

A list with all variables defined in the function as an object of class `conjoint`

See Also

[summary.conjoint](#) to summarize results

[plot.conjoint](#) to plot results

Examples

```
result <- conjoint("mp3", ca_dep_var = "Rating", ca_indep_var = "Memory:Shape")
result <- mp3 %>% conjoint(ca_dep_var = "Rating", ca_indep_var = "Memory:Shape")
```

conjoint_profiles	<i>Create fractional factorial design for conjoint analysis</i>
-------------------	---

Description

Create fractional factorial design for conjoint analysis

Usage

```
conjoint_profiles(dataset)
```

Arguments

dataset	Dataset name (string). This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant
---------	--

Details

See http://vnijs.github.io/radiant/marketing/conjoint_profiles.html for an example in Radiant

Value

A list with all variables defined in the function as an object of class `conjoint_profiles`

See Also

[summary.conjoint_profiles](#) to summarize results

Examples

```
ca_prof <- readLines(system.file("examples/profiles-movie.txt", package='radiant'))
result <- conjoint_profiles("ca_prof")
rm(ca_prof, envir = .GlobalEnv)
result <- readLines(system.file("examples/profiles-movie.txt", package='radiant')) %>%
  conjoint_profiles
```

copy_all	<i>Source all package functions</i>
----------	-------------------------------------

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 deprecated when (if) it is included in <https://github.com/smbache/import>

Examples

```
copy_all(radiant)
```

copy_from	<i>Source for package functions</i>
-----------	-------------------------------------

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 deprecated when (if) it is included in <https://github.com/smbache/import>

Examples

```
copy_from(radiant, state_init)
```

correlation	<i>Calculate correlations for two or more variables</i>
-------------	---

Description

Calculate correlations for two or more variables

Usage

```
correlation(dataset, cor_var, data_filter = "", cor_type = "pearson")
```

Arguments

dataset	Dataset name (string). This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant
cor_var	Variables to include in the analysis
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")
cor_type	Type of correlations to calculate. Options are "pearson", "spearman", and "kendall". "pearson" is the default

Details

See <http://vnijs.github.io/radiant/quant/correlation.html> for an example in Radiant

Value

A list with all variables defined in the function as an object of class `compare_means`

See Also

[summary.correlation_](#) to summarize results

[plot.correlation_](#) to plot results

Examples

```
result <- correlation("diamonds", c("price", "carat", "clarity"))
result <- correlation("diamonds", "price:table")
result <- diamonds %>% correlation("price:table")
```

`cross_tabs`*Evaluate associations between categorical variables*

Description

Evaluate associations between categorical variables

Usage

```
cross_tabs(dataset, ct_var1, ct_var2, data_filter = "")
```

Arguments

<code>dataset</code>	Dataset name (string). This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant
<code>ct_var1</code>	A categorical variable
<code>ct_var2</code>	Another categorical variable
<code>data_filter</code>	Expression entered in, e.g., Data > View to filter the dataset in Radiant. The expression should be a string (e.g., "price > 10000")

Details

See http://vnijs.github.io/radiant/quant/cross_tabs.html for an example in Radiant

Value

A list of all variables used in `cross_tabs` as an object of class `cross_tabs`

See Also

[summary.cross_tabs](#) to summarize results

[plot.cross_tabs](#) to plot results

Examples

```
result <- cross_tabs("newspaper", "Income", "Newspaper")
result <- newspaper %>% cross_tabs("Income", "Newspaper")
```

cv	<i>Coefficient of variation</i>
----	---------------------------------

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))
```

diamonds	<i>Diamond prices</i>
----------	-----------------------

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 bundled with ggplot2. Description provided in `attr(diamonds,"description")`

explore	<i>Explore data</i>
---------	---------------------

Description

Explore data

Usage

```
explore(dataset, expl_vars = "", data_filter = "", expl_byvar = "",
  expl_fun = c("length", "mean_rm"))
```

Arguments

dataset	Dataset name (string). This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant
expl_vars	(Numerical) variables to summaries
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")
expl_byvar	Variable(s) to group data by before summarizing
expl_fun	Functions to use for summarizing

Details

See <http://vnijs.github.io/radiant/base/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

[summary.explore](#) to show summaries

[plot.explore](#) to plot summaries

Examples

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

ff_design	<i>Function to generate a fractional factorial design</i>
-----------	---

Description

Function to generate a fractional factorial design

Usage

```
ff_design(attr, trial = 0, rseed = 172110)
```

Arguments

attr	Attributes used to generate profiles
trial	Number of trials that have already been run
rseed	Random seed to use

Details

See http://vnijs.github.io/radiant/marketing/conjoint_profiles.html for an example in Radiant

See Also

[conjoint_profiles](#) to calculate results
[summary.conjoint_profiles](#) to summarize results

full_factor	<i>Factor analysis (PCA)</i>
-------------	------------------------------

Description

Factor analysis (PCA)

Usage

```
full_factor(dataset, ff_var, data_filter = "", ff_meth = "PCA",  
            ff_number = 2, ff_rotation = "varimax")
```

Arguments

dataset	Dataset name (string). This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant
ff_var	Variables to include in the analysis
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")
ff_meth	Factor extraction method to use
ff_number	Number of factors to extract
ff_rotation	Apply varimax rotation or no rotation ("varimax" or "none")

Details

See http://vnijs.github.io/radiant/marketing/full_factor.html for an example in Radiant

Value

A list with all variables defined in the function as an object of class `full_factor`

See Also

`summary.full_factor` to summarize results

`plot.full_factor` to plot results

Examples

```
result <- full_factor("diamonds",c("price","carat","table","x","y"))
result <- full_factor("diamonds",c("price","carat","table","x","y"), ff_meth = "maxlik")
result <- diamonds %>% full_factor(c("price","carat","table","x","y"), ff_meth = "maxlik")
```

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	<i>Get data for analysis functions</i>
---------	--

Description

Get data for analysis functions

Usage

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

Arguments

dataset	Name of the dataframe
vars	Variables to extract from the dataframe
na.rm	Remove rows with missing values (default is TRUE)
filt	Filter to apply to the specified dataset. For example "price > 10000" if dataset is "diamonds" (default is "")
slice	Select a slice of the specified dataset. For example "1:10" for the first 10 rows or "n()-10:n()" for the last 10 rows (default is ""). Not in Radiant GUI

Value

Data.frame with specified columns and rows

Examples

```
r_data <- list()
r_data$dat <- mtcars
getdata("dat", "mpg:vs", filt = "mpg > 20", slice = "1:5")
rm(r_data, envir = .GlobalEnv)
```

getsummary	<i>Create data.frame summary</i>
------------	----------------------------------

Description

Create data.frame summary

Usage

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

Arguments

dat	Data.frame
dc	Class for each variable

Details

Used by Explore and Transform

glm_reg	<i>Generalized linear models (GLM)</i>
---------	--

Description

Generalized linear models (GLM)

Usage

```
glm_reg(dataset, glm_dep_var, glm_indep_var, data_filter = "",
        glm_levels = "", glm_link = "logit", glm_int_var = "", glm_check = "")
```

Arguments

dataset	Dataset name (string). This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant
glm_dep_var	The dependent variable in the logit (probit) model
glm_indep_var	Independent variables in the model
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")
glm_levels	The level in the dependent variable defined as <code>_success_</code>
glm_link	Link function for <code>_glm_</code> ('logit' or 'probit'). 'logit' is the default
glm_int_var	Interaction term to include in the model (not implement)
glm_check	Optional output or estimation parameters. "vif" to show the multicollinearity diagnostics. "confint" to show coefficient confidence interval estimates. "odds" to show odds ratios and confidence interval estimates. "standardize" to output standardized coefficient estimates. "stepwise" to apply step-wise selection of variables

Details

See http://vnijs.github.io/radiant/quant/glm_reg.html for an example in Radiant

Value

A list with all variables defined in `glm_reg` as an object of class `glm_reg`

See Also

`summary.glm_reg` to summarize the results
`plot.glm_reg` to plot the results
`predict.glm_reg` to generate predictions
`plot.glm_predict` to plot prediction output

Examples

```
result <- glm_reg("titanic", "survived", c("pclass","sex"), glm_levels = "Yes")
result <- glm_reg("titanic", "survived", c("pclass","sex"))
```

hier_clus	<i>Hierarchical cluster analysis</i>
-----------	--------------------------------------

Description

Hierarchical cluster analysis

Usage

```
hier_clus(dataset, hc_vars, data_filter = "", hc_dist = "sq.euclidian",  
          hc_meth = "ward.D")
```

Arguments

dataset	Dataset name (string). This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant
hc_vars	Vector of variables to include in the analysis
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")
hc_dist	Distance
hc_meth	Method

Details

See http://vnijs.github.io/radiant/marketing/hier_clus.html for an example in Radiant

Value

A list of all variables used in `hier_clus` as an object of class `hier_clus`

See Also

`summary.hier_clus` to summarize results

`plot.hier_clus` to plot results

Examples

```
result <- hier_clus("shopping", hc_vars = c("v1:v6"))
```

is_empty	<i>Is a character variable defined</i>
----------	--

Description

Is a character variable defined

Usage

```
is_empty(x, empty = "")
```

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_string	<i>Is input a string?</i>
-----------	---------------------------

Description

Is input a string?

Usage

```
is_string(x)
```

Arguments

x	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)
```

kmeans_clus

*K-means cluster analysis***Description**

K-means cluster analysis

Usage

```
kmeans_clus(dataset, km_vars, data_filter = "", km_hc_init = TRUE,
  km_dist = "sq.euclidian", km_meth = "ward.D", km_seed = 1234,
  km_nr_clus = 2)
```

Arguments

dataset	Dataset name (string). This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant
km_vars	Vector of variables to include in the analysis
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")
km_hc_init	Use centers from hier_clus as the starting point
km_dist	Distance for hier_clus
km_meth	Method for hier_clus
km_seed	Random see to use for kmeans if km_hc_init is FALSE
km_nr_clus	Number of clusters to extract

Details

See http://vnijs.github.io/radiant/marketing/kmeans_clus.html for an example in Radiant

Value

A list of all variables used in kmeans_clus as an object of class kmeans_clus

See Also

[summary.kmeans_clus](#) to summarize results
[plot.kmeans_clus](#) to plot results
[save_membership](#) to add cluster membership to the selected dataset

Examples

```
result <- kmeans_clus("shopping", c("v1:v6"))
```

kurtosi	<i>Exporting the kurtosi function from the psych package</i>
---------	--

Description

Exporting the kurtosi function from the psych package

launcher	<i>Create a launcher on the desktop for Windows (.bat), Mac (.command), or Linux (.sh)</i>
----------	--

Description

Create a launcher on the desktop for Windows (.bat), Mac (.command), or Linux (.sh)

Usage

```
launcher(app = c("marketing", "quant", "base"))
```

Arguments

app	App to run when the desktop icon is double-clicked ("marketing", "quant", or "base"). Default is "marketing"
-----	--

Details

On Windows/Mac/Linux a file named radiant.bat/radiant.command/radiant.sh will be put on the desktop. Double-click the file to launch the specified Radiant app

See Also

[win_launcher](#) to create a shortcut on Windows

[mac_launcher](#) to create a shortcut on Mac

[lin_launcher](#) to create a shortcut on Linux

lin_launcher	Create a launcher for Linux (.sh)
--------------	-----------------------------------

Description

Create a launcher for Linux (.sh)

Usage

```
lin_launcher(app = c("marketing", "quant", "base"))
```

Arguments

app	App to run when the desktop icon is double-clicked ("marketing", "quant", or "base"). Default is "marketing"
-----	--

Details

On Linux a file named 'radiant.sh' will be put on the desktop. Double-click the file to launch the specified Radiant app

Examples

```
if (interactive()) {
  if (Sys.info()["sysname"] == "Linux") {
    lin_launcher()
    fn <- paste0("/home/", Sys.getenv("USER"), "/Desktop/radiant.sh")
    if (!file.exists(fn))
      stop("Linux launcher not created")
    else
      unlink(fn)
  }
}
```

mac_launcher	Create a launcher for Mac (.command)
--------------	--------------------------------------

Description

Create a launcher for Mac (.command)

Usage

```
mac_launcher(app = c("marketing", "quant", "base"))
```

Arguments

app	App to run when the desktop icon is double-clicked ("marketing", "quant", or "base"). Default is "marketing"
-----	--

Details

On Mac a file named 'radiant.command' will be put on the desktop. Double-click the file to launch the specified Radiant app

Examples

```
if (interactive()) {  
  if (Sys.info()["sysname"] == "Darwin") {  
    mac_launcher()  
    fn <- paste0("/Users/", Sys.getenv("USER"), "/Desktop/radiant.command")  
    if (!file.exists(fn))  
      stop("Mac launcher not created")  
    else  
      unlink(fn)  
  }  
}
```

max_rm

Max with na.rm = TRUE

Description

Max with na.rm = TRUE

Usage

```
max_rm(x)
```

Arguments

x Input variable

Value

Maximum value

Examples

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

mds	<i>(Dis)similarity based brand maps (MDS)</i>
-----	---

Description

(Dis)similarity based brand maps (MDS)

Usage

```
mds(dataset, mds_id1, mds_id2, mds_dis, data_filter = "",
     mds_method = "metric", mds_dim_number = 2)
```

Arguments

dataset	Dataset name (string). This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant
mds_id1	A character variable or factor with unique entries
mds_id2	A character variable or factor with unique entries
mds_dis	A numeric measure of brand dissimilarity
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")
mds_method	Apply metric or non-metric MDS
mds_dim_number	Number of dimensions

Details

See <http://vnijs.github.io/radiant/marketing/mds.html> for an example in Radiant

Value

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

See Also

[summary.mds](#) to summarize results

[plot.mds](#) to plot results

Examples

```
result <- mds("city", "from", "to", "distance")
summary(result)
result <- mds("diamonds", "clarity", "cut", "price")
summary(result)
```

mean_rm	<i>Mean with na.rm = TRUE</i>
---------	-------------------------------

Description

Mean with na.rm = TRUE

Usage

```
mean_rm(x)
```

Arguments

x	Input variable
---	----------------

Value

Mean value

Examples

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

median_rm	<i>Median with na.rm = TRUE</i>
-----------	---------------------------------

Description

Median with na.rm = TRUE

Usage

```
median_rm(x)
```

Arguments

x	Input variable
---	----------------

Value

Median value

Examples

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

min_rm	<i>Min with na.rm = TRUE</i>
--------	------------------------------

Description

Min with na.rm = TRUE

Usage

```
min_rm(x)
```

Arguments

x Input variable

Value

Minimum value

Examples

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

mp3	<i>Conjoint data for MP3 players</i>
-----	--------------------------------------

Description

Conjoint data for MP3 players

Usage

```
data(mp3)
```

Format

A data frame with 18 rows and 6 variables

Details

Conjoint data for MP3 players. Description provided in attr(mp3,"description")

newspaper	<i>Newspaper readership</i>
-----------	-----------------------------

Description

Newspaper readership

Usage

```
data(newspaper)
```

Format

A data frame with 580 rows and 2 variables

Details

Newspaper readership data for 580 consumers. Description provided in `attr(newspaper,"description")`

nmissing	<i>Number of missing values</i>
----------	---------------------------------

Description

Number of missing values

Usage

```
nmissing(x)
```

Arguments

x	Input variable
---	----------------

Value

number of missing values

Examples

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

p25	<i>25th percentile</i>
-----	------------------------

Description

25th percentile

Usage

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

Arguments

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

Value

25th percentile

Examples

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

p75	<i>75th percentile</i>
-----	------------------------

Description

75th percentile

Usage

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

Arguments

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

Value

75th percentile

Examples

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

plot.compare_means	<i>Plot method for the compare_means function</i>
--------------------	---

Description

Plot method for the compare_means function

Usage

```
## S3 method for class 'compare_means'
plot(x, cm_plots = "bar", shiny = FALSE, ...)
```

Arguments

x	Return value from compare_means
cm_plots	One or more plots ("bar", "box", or "density")
shiny	Did the function call originate inside a shiny app
...	further arguments passed to or from other methods

Details

See http://vnijs.github.io/radiant/quant/compare_means.html for an example in Radiant

See Also

[compare_means](#) to calculate results
[summary.compare_means](#) to summarize results

Examples

```
result <- compare_means("diamonds", "cut", "price")
plot(result, cm_plots = c("bar", "density"))
```

plot.compare_props	<i>Plot method for the compare_props function</i>
--------------------	---

Description

Plot method for the compare_props function

Usage

```
## S3 method for class 'compare_props'
plot(x, cp_plots = "props", shiny = FALSE, ...)
```


Arguments

x	Return value from compare_props
cp_plots	One or more plots of proportions or counts ("props" or "counts")
shiny	Did the function call originate inside a shiny app
...	further arguments passed to or from other methods

Details

See http://vnijs.github.io/radiant/quant/compare_props.html for an example in Radiant

See Also

[compare_props](#) to calculate results
[summary.compare_props](#) to summarize results

Examples

```
result <- compare_props("titanic", "pclass", "survived")
plot(result, cp_plots = c("props", "counts"))
```

plot.conjoint	<i>Plot method for the conjoint function</i>
---------------	--

Description

Plot method for the conjoint function

Usage

```
## S3 method for class 'conjoint'
plot(x, ca_plots = "pw", ca_scale_plot = FALSE,
     shiny = FALSE, ...)
```

Arguments

x	Return value from conjoint
ca_plots	Show either the part-worth ("pw") or importance-weights ("iw") plot
ca_scale_plot	Scale the axes of the part-worth plots to the same range
shiny	Did the function call originate inside a shiny app
...	further arguments passed to or from other methods

Details

See <http://vnijs.github.io/radiant/marketing/conjoint.html> for an example in Radiant

See Also

[conjoint](#) to generate results
[summary.conjoint](#) to summarize results

Examples

```
result <- conjoint(dataset = "mp3", ca_dep_var = "Rating", ca_indep_var = "Memory:Shape")
plot(result, ca_scale_plot = TRUE)
plot(result, ca_plots = "iw")
```

plot.correlation_	<i>Plot method for the correlation function</i>
-------------------	---

Description

Plot method for the correlation function

Usage

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

Arguments

x	Return value from correlation
...	further arguments passed to or from other methods.

Details

See <http://vnijs.github.io/radiant/quant/correlation.html> for an example in Radiant

See Also

[correlation](#) to calculate results
[summary.correlation_](#) to summarize results

Examples

```
result <- correlation("diamonds",c("price","carat","clarity"))
plot(result)
diamonds %>% correlation("price:clarity") %>% plot
```

plot.cross_tabs	<i>Plot method for the cross_tabs function</i>
-----------------	--

Description

Plot method for the cross_tabs function

Usage

```
## S3 method for class 'cross_tabs'
plot(x, ct_check = "", shiny = FALSE, ...)
```

Arguments

x	Return value from cross_tabs
ct_check	Show plots for variables ct_var1 and ct_var2. "observed" for the observed frequencies table, "expected" for the expected frequencies table (i.e., frequencies that would be expected if the null hypothesis holds), "chi_sq" for the contribution to the overall chi-squared statistic for each cell (i.e., $(o - e)^2 / e$), "dev_std" for the standardized differences between the observed and expected frequencies (i.e., $(o - e) / \sqrt{e}$), and "dev_perc" for the percentage difference between the observed and expected frequencies (i.e., $(o - e) / e$)
shiny	Did the function call originate inside a shiny app
...	further arguments passed to or from other methods

Details

See http://vnijs.github.io/radiant/quant/cross_tabs.html for an example in Radiant

See Also

[cross_tabs](#) to calculate results
[summary.cross_tabs](#) to summarize results

Examples

```
result <- cross_tabs("newspaper", "Income", "Newspaper")
plot(result, ct_check = c("observed", "expected", "chi_sq"))
newspaper %>% cross_tabs("Income", "Newspaper") %>% plot(c("observed", "expected"))
```

plot.explore

Plot method for the explore function

Description

Plot method for the explore function

Usage

```
## S3 method for class 'explore'
plot(x, shiny = FALSE, ...)
```

Arguments

x	Return value from explore
shiny	Did the function call originate inside a shiny app
...	further arguments passed to or from other methods

Details

See <http://vnijs.github.io/radiant/base/explore.html> for an example in Radiant. A plot will only be generated when a 'by' variable has been specified

See Also

[explore](#) to generate summaries

[summary.explore](#) to show summaries

Examples

```
result <- explore("diamonds", "price", expl_byvar = "cut", expl_fun = c("length", "skew"))
plot(result)
```

plot.full_factor	<i>Plot method for the full_factor function</i>
------------------	---

Description

Plot method for the full_factor function

Usage

```
## S3 method for class 'full_factor'
plot(x, shiny = FALSE, ...)
```

Arguments

x	Return value from full_factor
shiny	Did the function call originate inside a shiny app
...	further arguments passed to or from other methods

Details

See http://vnijs.github.io/radiant/marketing/full_factor.html for an example in Radiant

See Also

[full_factor](#) to calculate results

[plot.full_factor](#) to plot results

Examples

```
result <- full_factor("diamonds", c("price", "carat", "table"))
plot(result)
result <- full_factor("computer", "HighEnd:Business")
summary(result)
```

plot.glm_predict	<i>Plot method for the predict.glm_reg function</i>
------------------	---

Description

Plot method for the predict.glm_reg function

Usage

```
## S3 method for class 'glm_predict'
plot(x, glm_xvar = "", glm_facet_row = ".",
     glm_facet_col = ".", glm_color = "none", glm_conf_level = 0.95, ...)
```

Arguments

x	Return value from <code>predict.glm_reg</code> .
glm_xvar	Variable to display along the X-axis of the plot
glm_facet_row	Create vertically arranged subplots for each level of the selected factor variable
glm_facet_col	Create horizontally arranged subplots for each level of the selected factor variable
glm_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 colour
glm_conf_level	Confidence level to use for prediction intervals (.95 is the default). Note that the error bars for predictions are approximations at this point.
...	further arguments passed to or from other methods

Details

See http://vnijs.github.io/radiant/quant/glm_reg.html for an example in Radiant

See Also

`glm_reg` to generate the result
`summary.glm_reg` to summarize results
`plot.glm_reg` to plot results
`predict.glm_reg` to generate predictions

Examples

```
result <- glm_reg("titanic", "survived", c("pclass","sex","age"), glm_levels = "Yes")
pred <- predict(result, glm_predict_cmd = "pclass = levels(pclass)")
plot(pred, glm_xvar = "pclass")
pred <- predict(result, glm_predict_cmd = "age = 0:100")
plot(pred, glm_xvar = "age")
pred <- predict(result, glm_predict_cmd = "pclass = levels(pclass), sex = levels(sex)")
plot(pred, glm_xvar = "pclass", glm_color = "sex")
pred <- predict(result, glm_predict_cmd = "pclass = levels(pclass), age = seq(0,100,20)")
plot(pred, glm_xvar = "pclass", glm_color = "age")
plot(pred, glm_xvar = "age", glm_color = "pclass")
pred <- predict(result, glm_predict_cmd="pclass=levels(pclass), sex=levels(sex), age=seq(0,100,20)")
```

```

plot(pred, glm_xvar = "age", glm_color = "sex", glm_facet_col = "pclass")
plot(pred, glm_xvar = "age", glm_color = "pclass", glm_facet_col = "sex")
pred <- predict(result, glm_predict_cmd="pclass=levels(pclass), sex=levels(sex), age=seq(0,100,5)")
plot(pred, glm_xvar = "age", glm_color = "sex", glm_facet_col = "pclass")
plot(pred, glm_xvar = "age", glm_color = "pclass", glm_facet_col = "sex")

```

plot.glm_reg

Plot method for the glm_reg function

Description

Plot method for the glm_reg function

Usage

```

## S3 method for class 'glm_reg'
plot(x, glm_plots = "", glm_conf_level = 0.95,
     glm_coef_int = FALSE, shiny = FALSE, ...)

```

Arguments

x	Return value from glm_reg
glm_plots	Plots to produce for the specified GLM model. Use "" to avoid showing any plots (default). "hist" shows histograms of all variables in the model. "scatter" shows scatter plots (or box plots for factors) for the dependent variable with each independent variable. "dashboard" is a series of four plots used to visually evaluate model. "coef" provides a coefficient plot
glm_conf_level	Confidence level to use for coefficient and odds confidence intervals (.95 is the default)
glm_coef_int	Include the intercept in the coefficient plot (TRUE or FALSE). FALSE is the default
shiny	Did the function call originate inside a shiny app
...	further arguments passed to or from other methods

Details

See http://vnijs.github.io/radiant/quant/glm_reg.html for an example in Radiant

See Also

[glm_reg](#) to generate results
[plot.glm_reg](#) to plot results
[predict.glm_reg](#) to generate predictions
[plot.glm_predict](#) to plot prediction output

Examples

```

result <- glm_reg("titanic", "survived", c("pclass","sex"), glm_levels = "Yes")
plot(result, glm_plots = "coef")

```

plot.hier_clus	<i>Plot method for the hier_clus function</i>
----------------	---

Description

Plot method for the hier_clus function

Usage

```
## S3 method for class 'hier_clus'
plot(x, hc_plots = c("scree", "diff"), hc_cutoff = 0.02,
     shiny = TRUE, ...)
```

Arguments

x	Return value from hier_clus
hc_plots	Plots to return. "diff" shows the percentage change in within-cluster heterogeneity as respondents are group into different number of clusters, "dendro" shows the dendrogram, "scree" shows a scree plot of within-cluster heterogeneity
hc_cutoff	For large datasets plots can take time to render and become hard to interpret. By selection a cutoff point (e.g., 0.05 percent) the initial steps in hierachical cluster analysis are removed from the plot
shiny	Did the function call originate inside a shiny app
...	further arguments passed to or from other methods

Details

See http://vnijs.github.io/radiant/marketing/hier_clus.html for an example in Radiant

See Also

[summary.hier_clus](#) to summarize results
[plot.hier_clus](#) to plot results

Examples

```
result <- hier_clus("shopping", hc_vars = c("v1:v6"))
plot(result, hc_plots = c("diff", "scree"), hc_cutoff = .05)
plot(result, hc_plots = "dendro", hc_cutoff = 0)
shopping %>% hier_clus(hc_vars = c("v1:v6")) %>% plot
```

plot.kmeans_clus	<i>Plot method for kmeans_clus</i>
------------------	------------------------------------

Description

Plot method for kmeans_clus

Usage

```
## S3 method for class 'kmeans_clus'  
plot(x, shiny = FALSE, ...)
```

Arguments

x	Return value from kmeans_clus
shiny	Did the function call originate inside a shiny app
...	further arguments passed to or from other methods

Details

See http://vnijs.github.io/radiant/marketing/kmeans_clus.html for an example in Radiant

See Also

[kmeans_clus](#) to generate results
[summary.kmeans_clus](#) to summarize results
[save_membership](#) to add cluster membership to the selected dataset

Examples

```
result <- kmeans_clus("shopping", km_vars = c("v1:v6"))  
plot(result)
```

plot.mds	<i>Plot method for the mds function</i>
----------	---

Description

Plot method for the mds function

Usage

```
## S3 method for class 'mds'  
plot(x, mds_rev_dim = "", mds_fontsz = 1.3, ...)
```


Arguments

x	Return value from mds
mds_rev_dim	Flip the axes in plots
mds_fontsz	Font size to use in plots
...	further arguments passed to or from other methods

Details

See <http://vnijs.github.io/radiant/marketing/mds.html> for an example in Radiant

See Also

[mds](#) to calculate results

[summary.mds](#) to plot results

Examples

```
result <- mds("city", "from", "to", "distance")
plot(result)
plot(result, mds_rev_dim = 1:2)
plot(result, mds_rev_dim = 1:2, mds_fontsz = 2)
```

plot.pmap

Plot method for the pmap function

Description

Plot method for the pmap function

Usage

```
## S3 method for class 'pmap'
plot(x, pmap_plot = "", pmap_scaling = 2.1,
      pmap_fontsz = 1.3, ...)
```

Arguments

x	Return value from pmap
pmap_plot	Components to include in the plot ("brand", "attr"). If data on preferences is available use "pref" to add preference arrows to the plot
pmap_scaling	Arrow scaling in the brand map
pmap_fontsz	Font size to use in plots
...	further arguments passed to or from other methods

Details

See <http://vnijs.github.io/radiant/marketing/pmap.html> for an example in Radiant

See Also

[pmap](#) to calculate results

[summary.pmap](#) to plot results

Examples

```
result <- pmap("computer", "Brand", "HighEnd:Business")
plot(result, pmap_plot = "brand")
plot(result, pmap_plot = c("brand", "attr"))
plot(result, pmap_plot = c("brand", "attr"))
plot(result, pmap_scaling = 1, pmap_plot = c("brand", "attr"))
result <- pmap("computer", "Brand", "HighEnd:Dated",
               pmap_pref = c("Innovative", "Business"))
plot(result, pmap_plot = c("brand", "attr", "pref"))
```

plot.pre_factor

Plot method for the pre_factor function

Description

Plot method for the pre_factor function

Usage

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

Arguments

x	Return value from pre_factor
...	further arguments passed to or from other methods

Details

See http://vnijs.github.io/radiant/marketing/pre_factor.html for an example in Radiant

See Also

[pre_factor](#) to calculate results

[summary.pre_factor](#) to summarize results

Examples

```
result <- pre_factor("diamonds", c("price", "carat", "table"))
plot(result)
```

plot.regression	<i>Plot method for the regression function</i>
-----------------	--

Description

Plot method for the regression function

Usage

```
## S3 method for class 'regression'
plot(x, reg_plots = "", reg_lines = "",
     reg_conf_level = 0.95, reg_coef_int = FALSE, shiny = FALSE, ...)
```

Arguments

x	Return value from regression
reg_plots	Regression plots to produce for the specified regression model. Enter "" to avoid showing any plots (default). "hist" to show histograms of all variables in the model. "correlations" for a visual representation of the correlation matrix selected variables. "scatter" to show scatter plots (or box plots for factors) for the dependent variables with each independent variable. "dashboard" for a series of six plots that can be used to evaluate model fit visually. "resid_pred" to plot the independent variables against the model residuals. "coef" for a coefficient plot with adjustable confidence intervals. "leverage" to show leverage plots for each independent variable
reg_lines	Optional lines to include in the select plot. "line" to include a line through a scatter plot. "loess" to include a polynomial regression fit line. To include both use c("line","loess")
reg_conf_level	Confidence level used to estimate confidence intervals (.95 is the default)
reg_coef_int	Include the intercept in the coefficient plot (TRUE, FALSE). FALSE is the default
shiny	Did the function call originate inside a shiny app
...	further arguments passed to or from other methods

Details

See <http://vnijs.github.io/radiant/quant/regression.html> for an example in Radiant

See Also

[regression](#) to generate the results
[summary.regression](#) to summarize results
[predict.regression](#) to generate predictions

Examples

```
result <- regression("diamonds", "price", c("carat","clarity"))
plot(result, reg_plots = "dashboard")
plot(result, reg_plots = "dashboard", reg_lines = c("line","loess"))
plot(result, reg_plots = "coef", reg_coef_int = TRUE)
plot(result, reg_plots = "coef", reg_conf_level = .99, reg_coef_int = TRUE)
plot(result, reg_plots = "hist")
plot(result, reg_plots = "scatter", reg_lines = c("line","loess"))
plot(result, reg_plots = "correlations")
plot(result, reg_plots = "leverage")
plot(result, reg_plots = "resid_pred", reg_lines = "line")
```

plot.reg_predict	<i>Plot method for the predict.regression function</i>
------------------	--

Description

Plot method for the predict.regression function

Usage

```
## S3 method for class 'reg_predict'
plot(x, reg_xvar = "", reg_facet_row = ".",
     reg_facet_col = ".", reg_color = "none", reg_conf_level = 0.95, ...)
```

Arguments

x	Return value from predict.regression .
reg_xvar	Variable to display along the X-axis of the plot
reg_facet_row	Create vertically arranged subplots for each level of the selected factor variable
reg_facet_col	Create horizontally arranged subplots for each level of the selected factor variable
reg_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 colour
reg_conf_level	Confidence level to use for prediction intervals (.95 is the default). Note that the error bars for predictions are approximations at this point.
...	further arguments passed to or from other methods

Details

See <http://vnijs.github.io/radiant/quant/regression.html> for an example in Radiant

See Also

[regression](#) to generate the result
[summary.regression](#) to summarize results
[plot.regression](#) to plot results
[predict.regression](#) to generate predictions

Examples

```

result <- regression("diamonds", "price", c("carat","clarity"))
pred <- predict(result, reg_predict_cmd = "carat = 1:10")
plot(pred, reg_xvar = "carat")
result <- regression("diamonds", "price", c("carat","clarity"), reg_int_var = "carat:clarity")
dpred <- getdata("diamonds") %>% slice(1:100)
pred <- predict(result, reg_predict_data = "dpred")
plot(pred, reg_xvar = "carat", reg_color = "clarity")
rm(dpred, envir = .GlobalEnv)

```

plot.single_mean	<i>Plot method for the single_mean function</i>
------------------	---

Description

Plot method for the single_mean function

Usage

```

## S3 method for class 'single_mean'
plot(x, sm_plots = "hist", shiny = FALSE, ...)

```

Arguments

x	Return value from single_mean
sm_plots	Plots to generate. "hist" shows a histogram of the data along with vertical lines that indicate the sample mean and the confidence interval. "simulate" shows the location of the sample mean and the comparison value (sm_comp_value). Simulation is used to demonstrate the sampling variability in the data under the null-hypothesis
shiny	Did the function call originate inside a shiny app
...	further arguments passed to or from other methods

Details

See http://vnijs.github.io/radiant/quant/single_mean.html for an example in Radiant

See Also

[single_mean](#) to generate the result
[summary.single_mean](#) to summarize results

Examples

```

result <- single_mean("diamonds","price", sm_comp_value = 3500)
plot(result, sm_plots = c("hist", "simulate"))

```

plot.single_prop	<i>Plot method for the single_prop function</i>
------------------	---

Description

Plot method for the single_prop function

Usage

```
## S3 method for class 'single_prop'
plot(x, sp_plots = "hist", shiny = FALSE, ...)
```

Arguments

x	Return value from single_prop
sp_plots	Plots to generate. "hist" shows a histogram of the data along with vertical lines that indicate the sample proportion and the confidence interval. "simulate" shows the location of the sample proportion and the comparison value (sp_comp_value). Simulation is used to demonstrate the sampling variability in the data under the null-hypothesis
shiny	Did the function call originate inside a shiny app
...	further arguments passed to or from other methods

Details

See http://vnijs.github.io/radiant/quant/single_prop.html for an example in Radiant

See Also

[single_prop](#) to generate the result
[summary.single_prop](#) to summarize the results

Examples

```
result <- single_prop("diamonds","clarity", sp_levels = "IF", sp_comp_value = 0.05)
plot(result, sp_plots = c("hist", "simulate"))
result <- single_prop("titanic","pclass", sp_levels = "1st")
plot(result, sp_plots = c("hist","simulate"))
```

pmap	<i>Attribute based brand maps</i>
------	-----------------------------------

Description

Attribute based brand maps

Usage

```
pmap(dataset, pmap_brand, pmap_attr, data_filter = "", pmap_pref = "",
      pmap_dim_number = 2)
```

Arguments

dataset	Dataset name (string). This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant
pmap_brand	A character variable with brand names
pmap_attr	Names of numeric variables
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")
pmap_pref	Names of numeric brand preference measures
pmap_dim_number	Number of dimensions

Details

See <http://vnijs.github.io/radiant/marketing/pmap.html> for an example in Radiant

Value

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

See Also

[summary.pmap](#) to summarize results

[plot.pmap](#) to plot results

Examples

```
result <- pmap("computer", "Brand", "HighEnd:Business")
```

predict.glm_reg	<i>Predict method for the glm_reg function</i>
-----------------	--

Description

Predict method for the `glm_reg` function

Usage

```
## S3 method for class 'glm_reg'
predict(object, glm_predict_cmd = "",
        glm_predict_data = "", ...)
```

Arguments

object	Return value from glm_reg
glm_predict_cmd	Generate predictions using a command. For example, 'pclass = levels(pclass)' would produce predictions for the different levels of factor 'pclass'. To add another variable use a ',' (e.g., 'pclass = levels(pclass), age = seq(0,100,20)')
glm_predict_data	Provide the name of a dataframe to generate predictions (e.g., "titanic"). The dataset must contain all columns used in the estimation
...	further arguments passed to or from other methods

Details

See http://vnijs.github.io/radiant/quant/glm_reg.html for an example in Radiant

See Also

[glm_reg](#) to generate the result
[summary.glm_reg](#) to summarize results
[plot.glm_reg](#) to plot results
[plot.glm_predict](#) to plot prediction output

Examples

```
result <- glm_reg("titanic", "survived", c("pclass","sex"), glm_levels = "Yes")
predict(result, glm_predict_cmd = "pclass = levels(pclass)")
glm_reg("titanic", "survived", c("pclass","sex"), glm_levels = "Yes") %>%
  predict(glm_predict_cmd = "sex = c('male','female')")
```

predict.regression	<i>Predict method for the regression function</i>
--------------------	---

Description

Predict method for the regression function

Usage

```
## S3 method for class 'regression'
predict(object, reg_predict_cmd = "",
        reg_predict_data = "", reg_conf_level = 0.95, ...)
```

Arguments

object	Return value from regression
reg_predict_cmd	Command used to generate data for prediction
reg_predict_data	Name of the dataset to use for prediction
reg_conf_level	Confidence level used to estimate confidence intervals (.95 is the default)
...	further arguments passed to or from other methods

Details

See <http://vnijs.github.io/radiant/quant/regression.html> for an example in Radiant

See Also

[regression](#) to generate the result
[summary.regression](#) to summarize results
[plot.regression](#) to plot results

Examples

```

result <- regression("diamonds", "price", c("carat","clarity"))
predict(result, reg_predict_cmd = "carat = 1:10")
predict(result, reg_predict_cmd = "clarity = levels(clarity)")
result <- regression("diamonds", "price", c("carat","clarity"), reg_int_var = c("carat:clarity"))
dpred <- getdata("diamonds") %>% slice(1:10)
predict(result, reg_predict_data = "dpred")
rm(dpred, envir = .GlobalEnv)

```

pre_factor

*Evaluate if data are appropriate for PCA / Factor analysis***Description**

Evaluate if data are appropriate for PCA / Factor analysis

Usage

```
pre_factor(dataset, pf_var, data_filter = "")
```

Arguments

dataset	Dataset name (string). This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant
pf_var	Variables to include in the analysis
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")

Details

See http://vnijs.github.io/radiant/marketing/pre_factor.html for an example in Radiant

Value

A list with all variables defined in the function as an object of class `pre_factor`

See Also

[summary.pre_factor](#) to summarize results

[plot.pre_factor](#) to plot results

Examples

```
result <- pre_factor("diamonds",c("price","carat","table"))
```

<code>print.arrange</code>	<i>Exporting the <code>print.arrange</code> method from the <code>gridExtra</code> package</i>
----------------------------	--

Description

Exporting the `print.arrange` method from the `gridExtra` package

Details

Used to print plots generated using `arrangeGrob`

<code>publishers</code>	<i>Comic publishers</i>
-------------------------	-------------------------

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

<code>radiant</code>	<i><code>radiant</code></i>
----------------------	-----------------------------

Description

`radiant`

Launch Radiant in the default browser

Usage

```
radiant(app = c("marketing", "quant", "base"))
```

Arguments

<code>app</code>	Choose the app to run. Either "base", "quant", or "marketing". "marketing" is the default
------------------	---

Details

See <http://vnijs.github.io/radiant> for documentation and tutorials

Examples

```
if (interactive()) {
  radiant("base")
  radiant("quant")
  radiant("marketing")
}
```

regression	<i>Linear regression using OLS</i>
------------	------------------------------------

Description

Linear regression using OLS

Usage

```
regression(dataset, reg_dep_var, reg_indep_var, data_filter = "",
  reg_int_var = "", reg_check = "")
```

Arguments

dataset	Dataset name (string). This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant
reg_dep_var	The dependent variable in the regression
reg_indep_var	Independent variables in the regression
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")
reg_int_var	Interaction terms to include in the model
reg_check	"standardize" to see standardized coefficient estimates. "stepwise" to apply step-wise selection of variables in estimation

Details

See <http://vnijs.github.io/radiant/quant/regression.html> for an example in Radiant

Value

A list of all variables used in regression as an object of class regression

See Also

`summary.regression` to summarize results
`plot.regression` to plot results
`predict.regression` to generate predictions

Examples

```
result <- regression("diamonds", "price", c("carat","clarity"))
result <- regression("diamonds", "price", c("carat","clarity"), reg_check = "standardize")
```

rndnames	<i>100 random names</i>
----------	-------------------------

Description

100 random names

Usage

```
data(rndnames)
```

Format

A data frame with 100 rows and 2 variables

Details

A list of 100 random names generated by listofrandomnames.com. Description provided in `attr(rndnames,"description")`

sample_size	<i>Sample size calculation</i>
-------------	--------------------------------

Description

Sample size calculation

Usage

```
sample_size(ss_type = "mean", ss_mean_err = 2, ss_mean_s = 10,
  ss_prop_err = 0.1, ss_prop_p = 0.5, ss_z = 1.96, ss_incidence = 1,
  ss_response = 1, ss_pop_correction = "no", ss_pop_size = 1000000)
```

Arguments

ss_type	Choose "mean" or "proportion"
ss_mean_err	Acceptable Error for Mean
ss_mean_s	Standard deviation for Mean
ss_prop_err	Acceptable Error for Proportion
ss_prop_p	Initial proportion estimate for Proportion
ss_z	Z-value
ss_incidence	Incidence rate (i.e., fraction of valid respondents)
ss_response	Response rate
ss_pop_correction	Apply correction for population size ("yes","no")
ss_pop_size	Population size

Details

See http://vnijs.github.io/radiant/quant/sample_size.html for an example in Radiant

Value

A list of variables defined in `sample_size` as an object of class `sample_size`

See Also

[summary.sample_size](#) to summarize results

Examples

```
result <- sample_size(ss_type = "mean", ss_mean_err = 2, ss_mean_s = 10)
```

sampling	<i>Simple random sampling</i>
----------	-------------------------------

Description

Simple random sampling

Usage

```
sampling(dataset, smp_var, smp_sample_size, data_filter = "",
  smp_print_full = TRUE)
```

Arguments

<code>dataset</code>	Dataset name (string). This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant
<code>smp_var</code>	The variable to sample from
<code>smp_sample_size</code>	Number of units to select
<code>data_filter</code>	Expression entered in, e.g., Data > View to filter the dataset in Radiant. The expression should be a string (e.g., "price > 10000")
<code>smp_print_full</code>	Print full sampling frame. Default is TRUE

Details

See <http://vnijs.github.io/radiant/quant/sampling.html> for an example in Radiant

Value

A list of variables defined in `sampling` as an object of class `sampling`

See Also

[summary.sampling](#) to summarize results

Examples

```
result <- sampling("rndnames", "Names", 10)
```

save_factors	Save factor scores to active dataset
--------------	--------------------------------------

Description

Save factor scores to active dataset

Usage

```
save_factors(object)
```

Arguments

object	Return value from full_factor
--------	---

Details

See http://vnijs.github.io/radiant/marketing/full_factor.html for an example in Radiant

Examples

```
result <- full_factor("diamonds",c("price","carat","table"))
save_factors(result)
head(diamonds)
```

save_glm_resid	Save residuals generated in the glm_reg function
----------------	--

Description

Save residuals generated in the glm_reg function

Usage

```
save_glm_resid(object)
```

Arguments

object	Return value from glm_reg
--------	---

Details

See http://vnijs.github.io/radiant/quant/glm_reg.html for an example in Radiant

Examples

```
result <- glm_reg("titanic", "survived", "pclass", glm_levels = "Yes")
save_glm_resid(result)
head(titanic)
```

save_membership	<i>Add a cluster membership variable to the active dataset</i>
-----------------	--

Description

Add a cluster membership variable to the active dataset

Usage

```
save_membership(object)
```

Arguments

object	Return value from kmeans_clus
--------	---

Details

See http://vnijs.github.io/radiant/marketing/kmeans_clus.html for an example in Radiant

See Also

[kmeans_clus](#) to generate results

[summary.kmeans_clus](#) to summarize results

[plot.kmeans_clus](#) to plot results

Examples

```
result <- kmeans_clus("shopping", km_vars = c("v1:v6"))
save_membership(result)
head(shopping)
```

save_reg_resid	<i>Save regression residuals</i>
----------------	----------------------------------

Description

Save regression residuals

Usage

```
save_reg_resid(object)
```

Arguments

object	Return value from regression
--------	--

Details

See <http://vnijs.github.io/radiant/quant/regression.html> for an example in Radiant

Examples

```
result <- regression("diamonds", "price", c("carat","clarity"))
save_reg_resid(result)
head(diamonds)
```

sd_rm	<i>Standard deviation with na.rm = TRUE</i>
-------	---

Description

Standard deviation with na.rm = TRUE

Usage

```
sd_rm(x)
```

Arguments

x	Input variable
---	----------------

Value

Standard deviation

Examples

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

serr	<i>Standard error</i>
------	-----------------------

Description

Standard error

Usage

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

Arguments

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

Value

Standard error

Examples

```
serr(rnorm(100))
```

set_class	<i>Alias used to set the class for analysis function return</i>
-----------	---

Description

Alias used to set the class for analysis function return

Usage

```
set_class()
```

Examples

```
foo <- function(x) x^2 %>% set_class(c("foo", class(.)))
```

shopping	<i>Shopping attitudes</i>
----------	---------------------------

Description

Shopping attitudes

Usage

```
data(shopping)
```

Format

A data frame with 20 rows and 7 variables

Details

Attitudinal data on shopping for 20 consumers. Description provided in `attr(shopping,"description")`

sig_stars	<i>Add stars '***' to a data.frame (from broom's 'tidy' function) based on p.values</i>
-----------	---

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))
```

single_mean	<i>Compare a sample mean to a population mean</i>
-------------	---

Description

Compare a sample mean to a population mean

Usage

```
single_mean(dataset, sm_var, data_filter = "", sm_comp_value = 0,
            sm_alternative = "two.sided", sm_sig_level = 0.95)
```

Arguments

dataset	Dataset name (string). This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant
sm_var	The variable selected for the mean comparison
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")
sm_comp_value	Population value to compare to the sample mean
sm_alternative	The alternative hypothesis ("two.sided", "greater", or "less")
sm_sig_level	Span for the confidence interval

Details

See http://vnijs.github.io/radiant/quant/single_mean.html for an example in Radiant

Value

A list of variables defined in `single_mean` as an object of class `single_mean`

See Also

`summary.single_mean` to summarize results

`plot.single_mean` to plot results

Examples

```
single_mean("diamonds", "price")
```

single_prop	<i>Compare a sample proportion to a population proportion</i>
-------------	---

Description

Compare a sample proportion to a population proportion

Usage

```
single_prop(dataset, sp_var, data_filter = "", sp_levels = "",
  sp_comp_value = 0.5, sp_alternative = "two.sided", sp_sig_level = 0.95)
```

Arguments

dataset	Dataset name (string). This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant
sp_var	The variable selected for the proportion comparison
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")
sp_levels	The factor level selected for the proportion comparison
sp_comp_value	Population value to compare to the sample proportion
sp_alternative	The alternative hypothesis ("two.sided", "greater", or "less")
sp_sig_level	Span of the confidence interval

Details

See http://vnijs.github.io/radiant/quant/single_prop.html for an example in Radiant

Value

A list of variables used in `single_prop` as an object of class `single_prop`

See Also

[summary.single_prop](#) to summarize the results
[plot.single_prop](#) to plot the results

Examples

```
result <- single_prop("diamonds", "cut")
result <- single_prop("diamonds", "clarity", sp_levels = "IF", sp_comp_value = 0.05)
```

skew	<i>Exporting the skew function from the psych package</i>
------	---

Description

Exporting the skew function from the psych package

ssh	<i>Hide warnings and messages and return invisible</i>
-----	--

Description

Hide warnings and messages and return invisible

Usage

```
ssh(...)
```

Arguments

... Inputs to keep quiet

Details

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

Examples

```
ssh( library(dplyr) )
```

sshhr	<i>Hide warnings and messages and return result</i>
-------	---

Description

Hide warnings and messages and return result

Usage

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

Arguments

... Inputs to keep quiet

Details

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

Examples

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

state_init	<i>Set initial value for shiny input</i>
------------	--

Description

Set initial value for shiny input

Usage

```
state_init(inputvar, init = "")
```

Arguments

inputvar	Name shiny input
init	Initial value to use if state value for input not set

Details

Useful for radio button or checkbox

Value

value for inputvar

See Also

[state_single](#)
[state_multiple](#)
[copy_from](#)

Examples

```
r_state <- list()
state_init("test")
state_init("test",0)
r_state$test <- c("a","b")
state_init("test",0)
shiny::radioButtons("rb", label = "Button:", c("a","b"), selected = state_init("rb", "a"))
r_state$rb <- "b"
shiny::radioButtons("rb", label = "Button:", c("a","b"), selected = state_init("rb", "a"))
rm(r_state)
```

state_multiple	<i>Set initial values for shiny input from a list of values</i>
----------------	---

Description

Set initial values for shiny input from a list of values

Usage

```
state_multiple(inputvar, vals, init = character(0))
```

Arguments

inputvar	Name shiny input
vals	Possible values for inputvar
init	Initial value to use if state value for input not set

Details

Useful for select input with `multiple = TRUE` and when you want to use inputs selected for another tool (e.g., `pre_factor` and `full_factor` or `hier_clus` and `kmeans_clus` in Radiant)

Value

value for inputvar

See Also

[state_init](#)
[state_single](#)
[copy_from](#)

Examples

```
r_state <- list()
state_multiple("test",1:10,1:3)
r_state$test <- 8:10
state_multiple("test",1:10,1:3)
shiny::selectInput("sim", label = "Select:", c("a","b"),
  selected = state_multiple("sim", c("a","b")), multiple = TRUE)
r_state$sim <- c("a","b")
shiny::selectInput("sim", label = "Select:", c("a","b"),
  selected = state_single("sim", c("a","b")), multiple = TRUE)
```

state_single	<i>Set initial value for shiny input from a list of values</i>
--------------	--

Description

Set initial value for shiny input from a list of values

Usage

```
state_single(inputvar, vals, init = character(0))
```

Arguments

inputvar	Name shiny input
vals	Possible values for inputvar
init	Initial value to use if state value for input not set

Details

Useful for select input with multiple = FALSE

Value

value for inputvar

See Also

[state_init](#)
[state_multiple](#)
[copy_from](#)

Examples

```
r_state <- list()
state_single("test",1:10,1)
r_state$test <- 8
state_single("test",1:10,1)
shiny::selectInput("si", label = "Select:", c("a","b"), selected = state_single("si"))
r_state$si <- "b"
shiny::selectInput("si", label = "Select:", c("a","b"), selected = state_single("si", "b"))
```

summary.compare_means *Summary method for the compare_means function*

Description

Summary method for the compare_means function

Usage

```
## S3 method for class 'compare_means'  
summary(object, ...)
```

Arguments

object	Return value from compare_means
...	further arguments passed to or from other methods

Details

See http://vnijs.github.io/radiant/quant/compare_means.html for an example in Radiant

See Also

[compare_means](#) to calculate results
[plot.compare_means](#) to plot results

Examples

```
result <- compare_means("diamonds", "cut", "price")  
summary(result)  
result <- diamonds %>% tbl_df %>% compare_means("x", "y")  
summary(result)  
result <- diamonds %>% tbl_df %>% group_by(cut) %>% compare_means("x", c("x", "y"))  
summary(result)
```

summary.compare_props *Summary method for the compare_props function*

Description

Summary method for the compare_props function

Usage

```
## S3 method for class 'compare_props'  
summary(object, ...)
```

Arguments

object	Return value from compare_props
...	further arguments passed to or from other methods

Details

See http://vnijs.github.io/radiant/quant/compare_props.html for an example in Radiant

See Also

[compare_props](#) to calculate results

[plot.compare_props](#) to plot results

Examples

```
result <- compare_props("titanic", "pclass", "survived")
summary(result)
titanic %>% compare_props("pclass", "survived") %>% summary
```

summary.conjoint

Summary method for the conjoint function

Description

Summary method for the conjoint function

Usage

```
## S3 method for class 'conjoint'
summary(object, ca_vif = FALSE, ...)
```

Arguments

object	Return value from conjoint
ca_vif	Shows multicollinearity diagnostics.
...	further arguments passed to or from other methods

Details

See <http://vnijs.github.io/radiant/marketing/conjoint.html> for an example in Radiant

See Also

[conjoint](#) to generate results

[plot.conjoint](#) to plot results

Examples

```
result <- conjoint("mp3", ca_dep_var = "Rating", ca_indep_var = "Memory:Shape")
summary(result, ca_vif = TRUE)
mp3 %>% conjoint(ca_dep_var = "Rating", ca_indep_var = "Memory:Shape") %>% summary(., ca_vif = TRUE)
```

`summary.conjoint_profiles`*Summary method for the conjoint_profiles function*

Description

Summary method for the conjoint_profiles function

Usage

```
## S3 method for class 'conjoint_profiles'
summary(object, ...)
```

Arguments

<code>object</code>	Return value from conjoint_profiles
<code>...</code>	further arguments passed to or from other methods.

Details

See http://vnijs.github.io/radiant/marketing/conjoint_profiles.html for an example in Radiant

See Also

[conjoint_profiles](#) to calculate results

Examples

```
ca_prof <- readLines(system.file("examples/profiles-movie.txt", package='radiant'))
result <- conjoint_profiles("ca_prof")
summary(result)
rm(ca_prof, envir = .GlobalEnv)
readLines(system.file("examples/profiles-movie.txt", package='radiant')) %>%
  conjoint_profiles %>% summary
```

`summary.correlation_` *Summary method for the correlation function*

Description

Summary method for the correlation function

Usage

```
## S3 method for class 'correlation_'
summary(object, cor_cutoff = 0, ...)
```

Arguments

object	Return value from correlation
cor_cutoff	Show only correlations larger than the cutoff in absolute value. Default is a cutoff of 0
...	further arguments passed to or from other methods.

Details

See <http://vnijs.github.io/radiant/quant/correlation.html> for an example in Radiant

See Also

[correlation](#) to calculate results
[plot.correlation_](#) to plot results

Examples

```
result <- correlation("diamonds",c("price","carat","clarity"))
summary(result, cor_cutoff = .3)
diamonds %>% correlation("price:clarity") %>% summary
```

summary.cross_tabs	<i>Summary method for the cross_tabs function</i>
--------------------	---

Description

Summary method for the cross_tabs function

Usage

```
## S3 method for class 'cross_tabs'
summary(object, ct_check = "", ...)
```

Arguments

object	Return value from cross_tabs
ct_check	Show table(s) for variables ct_var1 and ct_var2. "observed" for the observed frequencies table, "expected" for the expected frequencies table (i.e., frequencies that would be expected if the null hypothesis holds), "chi_sq" for the contribution to the overall chi-squared statistic for each cell (i.e., $(o - e)^2 / e$), "dev_std" for the standardized differences between the observed and expected frequencies (i.e., $(o - e) / \sqrt{e}$), and "dev_perc" for the percentage difference between the observed and expected frequencies (i.e., $(o - e) / e$)
...	further arguments passed to or from other methods.

Details

See http://vnijs.github.io/radiant/quant/cross_tabs.html for an example in Radiant

See Also

[cross_tabs](#) to calculate results

[plot.cross_tabs](#) to plot results

Examples

```
result <- cross_tabs("newspaper", "Income", "Newspaper")
summary(result, ct_check = c("observed", "expected", "chi_sq"))
newspaper %>% cross_tabs("Income", "Newspaper") %>% summary("observed")
```

summary.explore

Summary method for the explore function

Description

Summary method for the explore function

Usage

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

Arguments

object	Return value from explore
...	further arguments passed to or from other methods

Details

See <http://vnijs.github.io/radiant/base/explore.html> for an example in Radiant

See Also

[explore](#) to generate summaries

[plot.explore](#) to plot summaries

Examples

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

summary.full_factor	<i>Summary method for the full_factor function</i>
---------------------	--

Description

Summary method for the full_factor function

Usage

```
## S3 method for class 'full_factor'
summary(object, ff_cutoff = 0, ff_sort = FALSE, ...)
```

Arguments

object	Return value from full_factor
ff_cutoff	Show only loadings with (absolute) values above ff_cutoff (default = 0)
ff_sort	Sort factor loadings
...	further arguments passed to or from other methods

Details

See http://vnijs.github.io/radiant/marketing/full_factor.html for an example in Radiant

See Also

[full_factor](#) to calculate results
[plot.full_factor](#) to plot results

Examples

```
result <- full_factor("diamonds",c("price","carat","depth","table","x"))
summary(result)
summary(result, ff_cutoff = 0, ff_sort = FALSE)
summary(result, ff_cutoff = 0, ff_sort = TRUE)
summary(result, ff_cutoff = .5, ff_sort = TRUE)
diamonds %>% full_factor(c("price","carat","depth","table","x")) %>% summary
diamonds %>% full_factor(c("price","carat","depth","table","x")) %>% summary(ff_cutoff = .5)
```

summary.glm_reg	<i>Summary method for the glm_reg function</i>
-----------------	--

Description

Summary method for the glm_reg function

Usage

```
## S3 method for class 'glm_reg'
summary(object, glm_sum_check = "", glm_conf_level = 0.95,
  glm_test_var = "", ...)
```

Arguments

object	Return value from <code>glm_reg</code>
glm_sum_check	Optional output or estimation parameters. "rsme" to show the root mean squared error. "sumsquares" to show the sum of squares table. "vif" to show multi-collinearity diagnostics. "confint" to show coefficient confidence interval estimates.
glm_conf_level	Confidence level to use for coefficient and odds confidence intervals (.95 is the default)
glm_test_var	Variables to evaluate in model comparison (i.e., a competing models Chi-squared test)
...	further arguments passed to or from other methods

Details

See http://vnijs.github.io/radiant/quant/glm_reg.html for an example in Radiant

See Also

`glm_reg` to generate the results
`plot.glm_reg` to plot the results
`predict.glm_reg` to generate predictions
`plot.glm_predict` to plot prediction output

Examples

```
result <- glm_reg("titanic", "survived", "pclass", glm_levels = "Yes")
summary(result, glm_test_var = "pclass")
res <- glm_reg("titanic", "survived", c("pclass", "sex"), glm_int_var="pclass:sex", glm_levels="Yes")
summary(res, glm_sum_check = c("vif", "confint", "odds"))
titanic %>% glm_reg("survived", c("pclass", "sex", "age"), glm_levels = "Yes") %>% summary("vif")
```

summary.hier_clus

Summary method for the hier_clus function

Description

Summary method for the hier_clus function

Usage

```
## S3 method for class 'hier_clus'
summary(object, ...)
```

Arguments

object	Return value from hier_clus
...	further arguments passed to or from other methods

Details

See http://vnijs.github.io/radiant/marketing/hier_clus.html for an example in Radiant

See Also

[summary.hier_clus](#) to summarize results
[plot.hier_clus](#) to plot results

Examples

```
result <- hier_clus("shopping", hc_vars = c("v1:v6"))
summary(result)
```

summary.kmeans_clus	<i>Summary method for kmeans_clus</i>
---------------------	---------------------------------------

Description

Summary method for kmeans_clus

Usage

```
## S3 method for class 'kmeans_clus'
summary(object, ...)
```

Arguments

object	Return value from kmeans_clus
...	further arguments passed to or from other methods

Details

See http://vnijs.github.io/radiant/marketing/kmeans_clus.html for an example in Radiant

See Also

[kmeans_clus](#) to generate results
[plot.kmeans_clus](#) to plot results
[save_membership](#) to add cluster membership to the selected dataset

Examples

```
result <- kmeans_clus("shopping", km_vars = c("v1:v6"))
summary(result)
shopping %>% kmeans_clus(km_vars = c("v1:v6"), km_nr_clus = 3) %>% summary
```


summary.mds

*Summary method for the mds function***Description**

Summary method for the mds function

Usage

```
## S3 method for class 'mds'
summary(object, mds_round = 1, ...)
```

Arguments

object	Return value from mds
mds_round	Rounding to use for output (default = 0). +1 used for coordinates. +2 used for stress measure. Not currently accessible in Radiant
...	further arguments passed to or from other methods

Details

See <http://vnijs.github.io/radiant/marketing/mds.html> for an example in Radiant

See Also

[mds](#) to calculate results
[plot.mds](#) to plot results

Examples

```
result <- mds("city", "from", "to", "distance")
summary(result)
summary(result, mds_round = 2)
city %>% mds("from", "to", "distance") %>% summary
```

summary.pmap

*Summary method for the pmap function***Description**

Summary method for the pmap function

Usage

```
## S3 method for class 'pmap'
summary(object, pmap_cutoff = 0, ...)
```

Arguments

object	Return value from pmap
pmap_cutoff	Show only loadings with (absolute) values above pmap_cutoff (default = 0)
...	further arguments passed to or from other methods

Details

See <http://vnijs.github.io/radiant/marketing/pmap.html> for an example in Radiant

See Also

[pmap](#) to calculate results

[plot.pmap](#) to plot results

Examples

```
result <- pmap("computer", "Brand", "HighEnd:Business")
summary(result)
summary(result, pmap_cutoff = .3)
result <- pmap("computer", "Brand", "HighEnd:Dated", pmap_pref = c("Innovative", "Business"))
summary(result)
computer %>% pmap("Brand", "HighEnd:Dated", pmap_pref = c("Innovative", "Business")) %>%
  summary
```

summary.pre_factor	<i>Summary method for the pre_factor function</i>
--------------------	---

Description

Summary method for the pre_factor function

Usage

```
## S3 method for class 'pre_factor'
summary(object, ...)
```

Arguments

object	Return value from pre_factor
...	further arguments passed to or from other methods

Details

See http://vnijs.github.io/radiant/marketing/pre_factor.html for an example in Radiant

See Also

[pre_factor](#) to calculate results

[plot.pre_factor](#) to plot results

Examples

```
result <- pre_factor("diamonds", c("price", "carat", "table"))
summary(result)
diamonds %>% pre_factor(c("price", "carat", "table")) %>% summary
result <- pre_factor("computer", "HighEnd:Business")
summary(result)
```

summary.regression	<i>Summary method for the regression function</i>
--------------------	---

Description

Summary method for the regression function

Usage

```
## S3 method for class 'regression'
summary(object, reg_sum_check = "",
        reg_conf_level = 0.95, reg_test_var = "", ...)
```

Arguments

object	Return value from regression
reg_sum_check	Optional output or estimation parameters. "rsme" to show the root mean squared error. "sumsquares" to show the sum of squares table. "vif" to show multi-collinearity diagnostics. "confint" to show coefficient confidence interval estimates.
reg_conf_level	Confidence level used to estimate confidence intervals (.95 is the default)
reg_test_var	Variables to evaluate in model comparison (i.e., a competing models F-test)
...	further arguments passed to or from other methods

Details

See <http://vnijs.github.io/radiant/quant/regression.html> for an example in Radiant

See Also

[regression](#) to generate the results
[plot.regression](#) to plot results
[predict.regression](#) to generate predictions

Examples

```
result <- regression("diamonds", "price", c("carat", "clarity"))
summary(result, reg_sum_check = c("rmse", "sumsquares", "vif", "confint"), reg_test_var = "clarity")
result <- regression("shopping", "v1", c("v2", "v3"))
summary(result, reg_test_var = "v2")
shopping %>% regression("v1", "v2:v6") %>% summary
```

summary.sample_size	<i>Summary method for the sample_size function</i>
---------------------	--

Description

Summary method for the sample_size function

Usage

```
## S3 method for class 'sample_size'
summary(object, ...)
```

Arguments

object	Return value from sample_size
...	further arguments passed to or from other methods

Details

See http://vnijs.github.io/radiant/quant/sample_size for an example in Radiant

See Also

[sample_size](#) to generate the results

Examples

```
result <- sample_size(ss_type = "mean", ss_mean_err = 2, ss_mean_s = 10)
summary(result)
```

summary.sampling	<i>Summary method for the sampling function</i>
------------------	---

Description

Summary method for the sampling function

Usage

```
## S3 method for class 'sampling'
summary(object, ...)
```

Arguments

object	Return value from sampling
...	further arguments passed to or from other methods

Details

See <http://vnijs.github.io/radiant/quant/sampling> for an example in Radiant

See Also

[sampling](#) to generate the results

Examples

```
result <- sampling("rndnames", "Names", 10)
summary(result)
rndnames %>% sampling("Names", 10) %>% summary
```

summary.single_mean	<i>Summary method for the single_mean function</i>
---------------------	--

Description

Summary method for the single_mean function

Usage

```
## S3 method for class 'single_mean'
summary(object, ...)
```

Arguments

object	Return value from single_mean
...	further arguments passed to or from other methods

Details

See http://vnijs.github.io/radiant/quant/single_mean.html for an example in Radiant

See Also

[single_mean](#) to generate the results

[plot.single_mean](#) to plot results

Examples

```
result <- single_mean("diamonds", "price")
summary(result)
diamonds %>% single_mean("price") %>% summary
```

summary.single_prop	<i>Summary method for the single_prop function</i>
---------------------	--

Description

Summary method for the single_prop function

Usage

```
## S3 method for class 'single_prop'
summary(object, ...)
```

Arguments

object	Return value from single_prop
...	further arguments passed to or from other methods

Details

See http://vnijs.github.io/radiant/quant/single_prop.html for an example in Radiant

See Also

[single_prop](#) to generate the results
[plot.single_prop](#) to plot the results

Examples

```
result <- single_prop("diamonds", "clarity", sp_levels = "IF", sp_comp_value = 0.05)
summary(result)
diamonds %>% single_prop("clarity", sp_levels = "IF", sp_comp_value = 0.05) %>% summary
```

superheroes	<i>Super heroes</i>
-------------	---------------------

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")

test_specs	<i>Add interaction terms to list of test variables if needed</i>
------------	--

Description

Add interaction terms to list of test variables if needed

Usage

```
test_specs(test_var, int_var)
```

Arguments

test_var	List of variables to use for testing for <code>_regression_</code> or <code>_glm_</code>
int_var	Interaction terms specified

Details

See <http://vnijs.github.io/radiant/quant/regression.html> for an example in Radiant

Value

'test_var' is a vector of variables to test

Examples

```
test_specs("a", c("a:b", "b:c"))
```

titanic	<i>Survival data for the Titanic</i>
---------	--------------------------------------

Description

Survival data for the Titanic

Usage

```
data(titanic)
```

Format

A data frame with 1309 rows and 11 variables

Details

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

titanic_pred	<i>Predict survival</i>
--------------	-------------------------

Description

Predict survival

Usage

```
data(titanic_pred)
```

Format

A data frame with 6 rows and 3 variables

Details

Prediction data.frame for glm_reg based on the Titanic dataset

toothpaste	<i>Toothpaste attitudes</i>
------------	-----------------------------

Description

Toothpaste attitudes

Usage

```
data(toothpaste)
```

Format

A data frame with 60 rows and 10 variables

Details

Attitudinal data on toothpaste for 60 consumers. Description provided in attr(toothpaste,"description")

var_check	<i>Check if main effects for all interaction effects are included in the model If ':' is used to select a range _indep_var_ is updated</i>
-----------	--

Description

Check if main effects for all interaction effects are included in the model If ':' is used to select a range _indep_var_ is updated

Usage

```
var_check(indep_var, cn, int_var = "")
```

Arguments

indep_var	List of independent variables provided to _regression_ or _glm_
cn	Column names for all independent variables in _dat_
int_var	Interaction terms specified

Details

See <http://vnijs.github.io/radiant/quant/regression.html> for an example in Radiant

Value

'vars' is a vector of right-hand side variables, possibly with interactions, 'indep_var' is the list of independent variables, and int_var are interaction terms

Examples

```
var_check("a:d", c("a", "b", "c", "d"))
var_check(c("a", "b"), c("a", "b"), "a:c")
```

viewdata	<i>View data</i>
----------	------------------

Description

View data

Usage

```
viewdata(dataset, vars = "")
```

Arguments

dataset	Name of the dataframe to change
vars	Variables to so (default is all)

visualize

Visualize data using ggplot2 <http://docs.ggplot2.org/current/>**Description**Visualize data using ggplot2 <http://docs.ggplot2.org/current/>**Usage**

```
visualize(dataset, viz_xvar, viz_yvar = "none", data_filter = "",
  viz_type = "hist", viz_facet_row = ".", viz_facet_col = ".",
  viz_color = "none", viz_bins = 10, viz_smooth = 1, viz_check = "",
  viz_axes = "", shiny = FALSE)
```

Arguments

dataset	Dataset name (string). This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant
viz_xvar	One or more variables to display along the X-axis of the plot
viz_yvar	Variable to display along the Y-axis of the plot (default = "none")
data_filter	Expression used to filter the dataset. This should be a string (e.g., "price > 10000")
viz_type	Type of plot to create. One of Histogram ('hist'), Density ('density'), Scatter ('scatter'), Line ('line'), Bar ('bar'), or Box-plot ('box')
viz_facet_row	Create vertically arranged subplots for each level of the selected factor variable
viz_facet_col	Create horizontally arranged subplots for each level of the selected factor variable
viz_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 colour
viz_bins	Number of bins used for a histogram (not accessible in Radiant)
viz_smooth	Adjust the flexibility of the loess line for scatter plots (not accessible in Radiant)
viz_check	Add a regression line ("line"), a loess line ("loess"), or jitter ("jitter") to a scatter plot
viz_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")
shiny	Did the function call originate inside a shiny app

DetailsSee <http://vnijs.github.io/radiant/base/visualize.html> for an example in Radiant**Value**

Generated plots

Examples

```
visualize("diamonds", "carat", "price", viz_type = "scatter", viz_check = "loess")
visualize("diamonds", "price:x", viz_type = "hist")
visualize("diamonds", "carat:x", viz_yvar = "price", viz_type = "scatter")
diamonds %>% visualize(c("price", "carat", "depth"), viz_type = "density")
```

win_launcher

*Create a launcher for Windows (.bat)***Description**

Create a launcher for Windows (.bat)

Usage

```
win_launcher(app = c("marketing", "quant", "base"))
```

Arguments

app App to run when the desktop icon is double-clicked ("marketing", "quant", or "base"). Default is "marketing"

Details

On Windows a file named 'radiant.bat' will be put on the desktop. Double-click the file to launch the specified Radiant app

Examples

```
if (interactive()) {
  if (Sys.info()["sysname"] == "Windows") {
    win_launcher()
    fn <- paste0(Sys.getenv("USERPROFILE"), "/Desktop/radiant.bat")
    if (!file.exists(fn))
      stop("Windows launcher not created")
    else
      unlink(fn)
  }
}
```

Index

*Topic **datasets**

- avengers, 4
- city, 6
- computer, 10
- diamonds, 15
- mp3, 29
- newspaper, 30
- publishers, 50
- rndnames, 52
- shopping, 58
- superheroes, 78
- titanic, 79
- titanic_pred, 80
- toothpaste, 80

avengers, 4

ca_the_table, 4

changedata, 5

city, 6

clean_loadings, 6

combinedata, 7

compare_means, 8, 32, 65

compare_props, 9, 33, 65, 66

computer, 10

conjoint, 5, 10, 33, 66

conjoint_profiles, 11, 17, 67

copy_all, 12

copy_from, 12, 62–64

correlation, 13, 34, 68

cross_tabs, 14, 35, 68, 69

cv, 15

diamonds, 15

explore, 16, 35, 36, 69

ff_design, 17

full_factor, 17, 36, 54, 70

getclass, 18

getdata, 19

getsummary, 19

glm_reg, 20, 37, 38, 47, 48, 54, 71

hier_clus, 21, 39, 72

is_empty, 22

is_string, 22

kmeans_clus, 23, 40, 55, 72

kurtosi, 24

launcher, 24

lin_launcher, 24, 25

mac_launcher, 24, 25

max_rm, 26

mds, 27, 41, 73

mean_rm, 28

median_rm, 28

min_rm, 29

mp3, 29

newspaper, 30

nmissing, 30

p25, 31

p75, 31

plot.compare_means, 8, 32, 65

plot.compare_props, 9, 32, 66

plot.conjoint, 5, 11, 33, 66

plot.correlation_, 13, 34, 68

plot.cross_tabs, 14, 34, 69

plot.explore, 16, 35, 69

plot.full_factor, 18, 36, 36, 70

plot.glm_predict, 20, 37, 38, 48, 71

plot.glm_reg, 20, 37, 38, 38, 48, 71

plot.hier_clus, 21, 39, 39, 72

plot.kmeans_clus, 23, 40, 55, 72

plot.mds, 27, 40, 73

plot.pmap, 41, 47, 74

plot.pre_factor, 42, 49, 74

plot.reg_predict, 44

plot.regression, 43, 44, 48, 51, 75

plot.single_mean, 45, 59, 77

plot.single_prop, 46, 60, 78

pmap, 41, 42, 46, 74

pre_factor, 42, 49, 74

predict.glm_reg, 20, 37, 38, 47, 71

predict.regression, [43](#), [44](#), [48](#), [51](#), [75](#)
print.arrange, [50](#)
publishers, [50](#)

radiant, [50](#)
radiant-package (radiant), [50](#)
regression, [43](#), [44](#), [48](#), [51](#), [56](#), [75](#)
rndnames, [52](#)

sample_size, [52](#), [76](#)
sampling, [53](#), [76](#), [77](#)
save_factors, [54](#)
save_glm_resid, [54](#)
save_membership, [23](#), [40](#), [55](#), [72](#)
save_reg_resid, [56](#)
sd_rm, [56](#)
serr, [57](#)
set_class, [57](#)
shopping, [58](#)
sig_stars, [58](#)
single_mean, [45](#), [59](#), [77](#)
single_prop, [46](#), [60](#), [78](#)
skew, [60](#)
sshh, [61](#)
sshhr, [61](#)
state_init, [62](#), [63](#), [64](#)
state_multiple, [62](#), [63](#), [64](#)
state_single, [62](#), [63](#), [64](#)
summary.compare_means, [8](#), [32](#), [65](#)
summary.compare_props, [9](#), [33](#), [65](#)
summary.conjoint, [5](#), [11](#), [33](#), [66](#)
summary.conjoint_profiles, [11](#), [17](#), [67](#)
summary.correlation_, [13](#), [34](#), [67](#)
summary.cross_tabs, [14](#), [35](#), [68](#)
summary.explore, [16](#), [36](#), [69](#)
summary.full_factor, [18](#), [70](#)
summary.glm_reg, [20](#), [37](#), [48](#), [70](#)
summary.hier_clus, [21](#), [39](#), [71](#), [72](#)
summary.kmeans_clus, [23](#), [40](#), [55](#), [72](#)
summary.mds, [27](#), [41](#), [73](#)
summary.pmap, [42](#), [47](#), [73](#)
summary.pre_factor, [42](#), [49](#), [74](#)
summary.regression, [43](#), [44](#), [48](#), [51](#), [75](#)
summary.sample_size, [53](#), [76](#)
summary.sampling, [53](#), [76](#)
summary.single_mean, [45](#), [59](#), [77](#)
summary.single_prop, [46](#), [60](#), [78](#)
superheroes, [78](#)

test_specs, [79](#)
titanic, [79](#)
titanic_pred, [80](#)
toothpaste, [80](#)

var_check, [81](#)
viewdata, [81](#)
visualize, [82](#)

win_launcher, [24](#), [83](#)