Package ‘statquotes’

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Title Quotes on Statistics, Data Visualization and Science
Version 0.2.2
Description Generates a random quotation from a data base of quotes on topics in statistics, data visualization and science.
 Depends R (>= 3.2.5)
License GPL (>= 2)
Encoding UTF-8
LazyData true
Maintainer Michael Friendly <friendly@yorku.ca>

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Author Michael Friendly [aut, cre],
          Phil Chalmers [ctb],
          Matthew Sigal [ctb]
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quotes  

Quotes on statistics, data visualization and science

Description
A data frame with over 200 quotations. The variables are:

Usage
data(quotes)

Format
A data frame with 231 rows and 5 variables

Details
- qid quote ID, a numeric vector
- topic main topic, a factor with levels Computing Data Data visualization History Reviews Science Statistics Unclassified
- subtopic sub topic, a factor with levels Averages Box quotes Counts Design Ellipses Generalizations Milestones Pictures Tables Tidy data Time Tukey quotes
- text text of the quote, a character vector
- source source of the quote, a character vector

quote_cloud  

Function to generate word cloud based upon quote database

Description
This function takes a search pattern (can use regular expressions) and generates a word cloud based upon that filter.

Usage
quote_cloud(search = ".*", max.words = 80, colors = NA, ...)

Arguments
- search  A character string; used to search the database. Regular expression characters are allowed. Default is to search all quotes.
- max.words  Logical; designate maximum number of words to be plotted.
- colors  A character vector pertaining to the colors to be used to designate word frequency. The default is 5 levels, from light to dark green.
- ...  additional arguments passed to search_quotes and wordcloud
quote_topics

Value
A wordcloud is plotted.

See Also
statquote, quote_topics, quotes, search_quotes, wordcloud

Examples
quote_cloud()
quote_cloud(search = "graph")
quote_cloud(max.words = 10)

quote_topics  List the topics of the quotes data base

Description
List the topics of the quotes data base

Usage
quote_topics(subtopics = FALSE)

Arguments
subtopics  logical; if TRUE the subtopics are printed as well with the associated topic

Examples
quote_topics()
quote_topics(TRUE)

search_quotes  Function to search quote database

Description
This function takes a search pattern (can use regular expressions) and returns all quotes that match
the pattern. If fuzzy is FALSE, then only exact matches are returned (case sensitive).

Usage
search_quotes(search, fuzzy = FALSE, fields = c("topic", "subtopic", "text", "source"), ...)


Arguments

- **search**: A character string, used to search the database. Regular expression characters are allowed.
- **fuzzy**: Logical; If TRUE, the function uses `agrep` to allow approximate matches to the search string.
- **fields**: A character vector pertaining to the particular fields to search. The default is to search everything: `c("topic", "subtopic", "text", "source")`.
- **...**: additional arguments passed to `agrep` to fine-tune fuzzy search parameters.

Value

A data frame (also with class 'statquote') object containing all quotes that match the search parameters.

See Also

`agrep`, `statquote`, `quote_topics`, `quotes`

Examples

```r
search_quotes("D")  # regex to find all quotes that start with "D"
search_quotes("Tukey")  # all quotes with "Tukey"
search_quotes("bad answer", fuzzy = TRUE)  # fuzzy match

t # to a data.frame
out <- search_quotes("bad answer", fuzzy = TRUE)
as.data.frame(out)
```

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**statquote**

*Function to display a randomly chosen statistical quote*

Description

This function displays a randomly statistical quote from a collection. The quotations are classified by topics.

Usage

```r
statquote(ind, topic = NULL, source = NULL)
```

## S3 method for class 'statquote'

```r
print(x, width = NULL, ...)
```

## S3 method for class 'statquote'

```r
as.data.frame(x, row.names = NULL, optional = FALSE, ...)```
**Arguments**

- `ind` Optional index of a quote; if missing a random value is sampled from the available quotations.
- `topic` A character string, used to select a subset of the quotes based on the assigned topics.
- `source` A character string, used to select a subset of the quotes based on the source for the quote.
- `x` object of class `statquote`
- `width` Optional column width parameter
- `...` Other optional arguments
- `row.names` see `as.data.frame`
- `optional` see `as.data.frame`

**Value**

A character vector containing one randomly selected quote from the included data set. It is of class `statquote` for which an S3 print method will be invoked.

**See Also**

`quote_topics`, `search_quotes`, `quotes`, Inspired by: gaussfact (https://github.com/eddelbuettel/gaussfacts), `fortune`

**Examples**

```r
set.seed(1234)
statquote()
statquote(source="Tukey")
statquote(topic="science")
statquote(topic="history")
```
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