

Package ‘graphTweets’

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Type Package

Title Visualise Twitter Interactions

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Maintainer John Coene <jcoenep@gmail.com>

Description Allows building an edge table from data frame of tweets, also provides function to build vertices (meta-data).

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Depends R (>= 3.0.0)

Imports reshape2,
dplyr

RoxygenNote 5.0.1

URL <https://github.com/JohnCoene/graphTweets>

BugReports <https://github.com/JohnCoene/graphTweets/issues>

Suggests testthat

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getEdges	<i>getEdges</i>
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Description

Builds a table of edges (source, target) from a list of tweets by subsetting @tags from the text.

Usage

```
getEdges(data, tweets, source, str.length = NULL, ...)
```

Arguments

<code>data</code>	data.frame of tweets, typically returned by <code>searchTwitter</code> , required
<code>tweets</code>	Column name of tweets within data, must be a character string, required.
<code>source</code>	User names or ID column of tweets author, must be a character string, required.
<code>str.length</code>	Defaults to NULL. Shorten length of @tags (see details), to a maximum number of characters, optional.
<code>...</code>	Any other columns to be passed on to the edges.

Details

The edges function takes in a data frame of tweets, typically obtained from the twitter Search or Streaming API, scrapes the content of tweets to subset the @tags subsequently forming a table of edges. @tags are subsets of regular expressions between at-signs (@) and first space (" "). Note that the table of edges returned is meant for a directed graph. Node labels can be shortened using the strLength parameters. This is useful for non-latin alphabet where nodes may be wrongly identified.

Author(s)

John Coene <john.coene@gmail.com>

See Also

`twitteR` and `streamR` packages wherefrom the data (tweets_df) can be obtained.

Examples

```
## Not run:
# load twitteR
library(twitteR)

# authenticate
token <- setup_twitter_oauth(consumer_key, consumer_secret,
                             access_token=NULL, access_secret=NULL)

# search tweets
tweets <- searchTwitter("rstats", n = 200)

# unlist to data.frame
tweets <- twListToDF(tweets)

# get edges
edges <- getEdges(data = tweets, tweets = "text", source = "screenName")

# get edges with coordinates
edges <- getEdges(data = tweets, tweets = "text", source = "screenName",
                  "longitude", "latitude")

# load igraph
library(igraph)

# plot
g <- graph.data.frame(edges, directed=TRUE)
```

```
plot(g)

## End(Not run)
```

getNodes

getNodes

Description

get nodes from a data.frame of edges as typically returned by [getEdges](#)

Usage

```
getNodes(edges, source = "source", target = "target", ...)
```

Arguments

edges	data.frame of edges as typically returned by getEdges
source	Column of source nodes in edges, must be a character string, defaults to source.
target	Column of target nodes in edges, must be a character string, required.
...	Any other columns to be passed on to the source nodes - will not be applied to target nodes.

Details

Duplicate values are dropped, additional arguments (...) are only applied to nodes from source.

Author(s)

John Coene <jcoenep@gmail.com>

Examples

```
## Not run:
# load twitterR
library(twitterR)

# authenticate
token <- setup_twitter_oauth(consumer_key, consumer_secret,
                             access_token=NULL, access_secret=NULL)

# search tweets
tweets <- searchTwitter("rstats", n = 200)

# unlist to data.frame
tweets <- twListToDF(tweets)

# get edges
edges <- getEdges(data = tweets, tweets = "text", source = "screenName")

# get nodes
```

```
nodes <- getNodes(edges)

# load igraph
library(igraph)

# plot
g <- graph.data.frame(edges, directed=TRUE, vertices = nodes)

plot(g)

## End(Not run)
```

graphTweets

graphTweets *visualise Twitter Interactions.*

Description

- [getEdges](#) - get edges from tweets
- [getNodes](#) - add meta-data to vertices

Examples

```
## Not run:
# authenticate
token <- twitterR::setup_twitter_oauth(consumer_key, consumer_secret,
                                       access_token=NULL, access_secret=NULL)

# search tweets
tweets <- twitterR::searchTwitter("rstats", n = 200)

# unlist to data.frame
tweets <- twitterR::twListToDF(tweets)

# load graphTweets
library(graphTweets)

# get edges
edges <- getEdges(data = tweets, tweets = "text", source = "screenName")

# load igraph
library(igraph)

# plot
g <- graph.data.frame(edges, directed=TRUE)

plot(g)

## End(Not run)
```

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