

Package ‘graphTweets’

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Type Package

Title Visualise Twitter Interactions

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Description Allows building an edge table from data frame of tweets,
also provides function to build nodes and another create a temporal graph.

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Depends R (>= 3.2.0)

Imports dplyr, igraph, rtweet, purrr, magrittr, utils, tidyr, zeallot,
combinat

RoxygenNote 6.1.0

URL <http://graphTweets.john-coene.com>

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

Suggests testthat, htmltools

Encoding UTF-8

NeedsCompilation no

Author John Coene [aut, cre]

Maintainer John Coene <jcoenep@gmail.com>

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R topics documented:

gt_collect	2
gt_dyn	3
gt_edges	3
gt_edges_	4
gt_edges_from_text	5
gt_graph	6
gt_nodes	7
gt_save	7

gt_collect	<i>Collect</i>
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Description

Collect

Usage

```
gt_collect(gt)
```

Arguments

gt An object of class graphTweets as returned by [gt_edges](#) and [gt_nodes](#).

Value

A named list of [tibble](#) 1) edges and 2) nodes.

Examples

```
# simulate dataset
tweets <- data.frame(
  text = c("I tweet @you about @him",
           "I tweet @me about @you"),
  screen_name = c("me", "him"),
  retweet_count = c(19, 5),
  status_id = c(1, 2),
  stringsAsFactors = FALSE
)

tweets %>%
  gt_edges(text, screen_name, status_id) %>%
  gt_nodes() %>%
  gt_collect() -> net
```

`gt_dyn`*Dynamise*

Description

Create a dynamic graph to import in Gephi.

Usage

```
gt_dyn(gt, lifetime = Inf)
```

Arguments

`gt` An object of class `graphTweets` as returned by [gt_edges](#) and [gt_nodes](#).
`lifetime` Lifetime of a tweet in milliseconds, defaults to `Inf`.

Examples

```
## Not run:  
# simulate dataset  
tweets <- data.frame(  
  text = c("I tweet @you about @him and @her",  
           "I tweet @me about @you"),  
  screen_name = c("me", "him"),  
  created_at = c(Sys.time(), Sys.time() + 10000),  
  status_id = c(1, 2),  
  stringsAsFactors = FALSE  
)  
  
tweets %>%  
  gt_edges(text, screen_name, status_id, "created_at") %>%  
  gt_nodes() %>%  
  gt_dyn() %>%  
  gt_collect() -> net  
  
## End(Not run)
```

`gt_edges`*Edges*

Description

Get edges from data.frame of tweets.

Usage

```
gt_edges(data, source, target, ..., tl = TRUE)

gt_edges_bind(gt, source, target, ..., tl = TRUE)

gt_co_edges(data, col, tl = TRUE)

gt_co_edges_bind(gt, col, tl = TRUE)
```

Arguments

data	Data.frame of tweets, usually returned by the <code>rtweet</code> package.
source	Author of tweets.
target	Edges target.
...	any other column name, see examples.
tl	Set to TRUE to convert hashtags to lower case.
gt	An object of class <code>graphTweets</code> as returned by gt_edges and gt_nodes .
col	Column containing co-mentions.

 gt_edges_

Deprecated Functions

Description

These functions are deprecated, see [gt_edges](#) and [gt_co_edges](#).

Usage

```
gt_edges_(data, tweets = "text", source = "screen_name",
  id = "status_id", ...)

gt_edges_hashes(data, hashtags, tl = TRUE)

gt_edges_hashes_(data, hashtags = "hashtags", tl = TRUE)
```

Arguments

data	Data.frame of tweets, usually returned by the <code>rtweet</code> package.
tweets	Column containing tweets.
source	Author of tweets.
id	Unique id.
...	any other column name, see examples.
hashtags	Column containing co-mentions.
tl	Set to TRUE to convert hashtags to lower case.

gt_edges_from_text *Edges from text*

Description

Get edges from data.frame of tweets.

Usage

```
gt_edges_from_text(data, id, source, tweets, ...)  
  
gt_edges_from_text_(data, id = "status_id", source = "screen_name",  
  tweets = "text", ...)
```

Arguments

data	Data.frame of tweets, usually returned by the rtweet package.
id	tweets unique id.
source	Author of tweets.
tweets	Column containing tweets.
...	any other column name.

Details

The tl arguments stands for `tolower` and allows converting the #hashtags to lower case as these often duplicated, i.e.: #python #Python.

Value

An object of class graphTweets.

Functions

- `gt_edges` - Build networks of users.
- `gt_co_edges` - Build networks of users to hashtags.

Examples

```
# simulate dataset  
tweets <- data.frame(  
  text = c("I tweet @you about @him and @her",  
    "I tweet @me about @you"),  
  screen_name = c("me", "him"),  
  retweet_count = c(19, 5),  
  status_id = c(1, 2),  
  hashtags = c("rstats", "Python"),  
  stringsAsFactors = FALSE
```

```
)  
tweets %>%  
  gt_edges_from_text(status_id, screen_name, text)
```

gt_graph

Graph

Description

Build igraph object.

Usage

```
gt_graph(gt)
```

Arguments

gt An object of class graphTweets as returned by [gt_edges](#) and [gt_nodes](#).

Value

An object of class igraph.

Examples

```
# simulate dataset  
tweets <- data.frame(  
  text = c("I tweet @you about @him",  
           "I tweet @me about @you"),  
  screen_name = c("me", "him"),  
  retweet_count = c(19, 5),  
  status_id = c(1, 2),  
  stringsAsFactors = FALSE  
)  
  
tweets %>%  
  gt_edges(text, screen_name, status_id) %>%  
  gt_nodes() %>%  
  gt_graph() -> net
```

gt_nodes	<i>Nodes</i>
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Description

Get nodes from a graphTweets object.

Usage

```
gt_nodes(gt, meta = FALSE)
```

Arguments

gt	An object of class graphTweets as returned by gt_edges and gt_nodes .
meta	Set to TRUE to add meta data to nodes.

Value

An object of class graphTweets.

gt_save	<i>Save</i>
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Description

Save the graph to file.

Usage

```
gt_save(gt, file = "graphTweets.graphml", format = "graphml", ...)
```

Arguments

gt	An object of class graphTweets as returned by gt_edges and gt_nodes .
file	File name including extension (format).
format	Format file format, see write_graph .
...	Any other argument to pass to write_graph .

Examples

```
## Not run:
# simulate dataset
tweets <- data.frame(
  text = c("I tweet @you about @him",
           "I tweet @me about @you"),
  screen_name = c("me", "him"),
  retweet_count = c(19, 5),
  created_at = c(Sys.time(), Sys.time() + 15000),
  status_id = c(1, 2),
  stringsAsFactors = FALSE
)

tweets %>%
  gt_edges(text, screen_name, "created_at") %>%
  gt_nodes(TRUE) %>%
  gt_dyn() %>%
  gt_save()

## End(Not run)
```


Index

`gt_co_edges`, 4
`gt_co_edges(gt_edges)`, 3
`gt_co_edges_bind(gt_edges)`, 3
`gt_collect`, 2
`gt_dyn`, 3
`gt_edges`, 2, 3, 3, 4, 6, 7
`gt_edges_`, 4
`gt_edges_bind(gt_edges)`, 3
`gt_edges_from_text`, 5
`gt_edges_from_text_`
 (`gt_edges_from_text`), 5
`gt_edges_hashes(gt_edges_)`, 4
`gt_edges_hashes_(gt_edges_)`, 4
`gt_graph`, 6
`gt_nodes`, 2–4, 6, 7, 7
`gt_save`, 7

`tibble`, 2
`tolower`, 5

`write_graph`, 7