Package ‘healthforum’

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Type Package

Title Scrape Patient Forum Data

Version 0.1.0

Description Scrape data from Patient Forum <https://patient.info/forums> by entering urls. It will return a data frame containing text, user names, like counts, reply counts, etc.

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Encoding UTF-8

LazyData true

Imports rvest, magrittr, xml2, purrr, tokenizers, stringr

Depends R (>= 3.5.0)

RoxygenNote 6.1.1

Suggests testthat (>= 2.1.0)

NeedsCompilation no

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count_medical_terms  Count medical glossaries

Description
Count the number and ratio of medical glossaries used in the text.

Usage

count_medical_terms(text)

Arguments

text  Input data. Should be character vector or data frame with character variable of interest named "text".

Details

Value
A data frame containing the number of medical words, the number of total words, and the ratio of medical words to total words.

Examples

```r
## create a character vector
medical_text <- c("No, it isn't possible to predict anything before the result of your biopsy is received.",
                  "Thank you for the nice reply! Very thoughtful answer that did ease my fears!",
                  "Can't help regards the meds. Just want to give support.")

## get the medical glossaries counts from a character vector
count_medical_terms(text = medical_text)

## creat a data frame with a character vector named "text"
df <- data.frame(
  id = c(1, 2, 3),
  text = c("No, it isn't possible to predict anything before the result of your biopsy is received.",
            "Thank you for the nice reply! Very thoughtful answer that did ease my fears!",
            "Can't help regards the meds. Just want to give support.")

stringsAsFactors = FALSE)
```
## medical_words

**The English medical glossary dictionary**

### Description


### Usage

```r
medical_words
```

### Format

A data frame with 94959 rows and 2 variables:

- **word**    medical words
- **value**   weight of the medical words ...

### Source


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### scrape_groups_by_category

**Scrape groups by category**

### Description

Get posts and all the replies to the posts from groups of a category by entering category name or URL

### Usage

```r
scrape_groups_by_category(cat, post_number_per_group = NULL, ...)
```
scrape_groups_by_initial_letter

Arguments

- **cat**
  The category name (lower case, replace space with -) or category URL

- **post_number_per_group**
  The number of random posts to scrape per group. Default is NULL, which means scrape the total number of posts in each group

... optional arguments to FUN.

Value

A data frame

Examples

```r
## Get the posts data of groups whose names starting with the letter "a" and "z"
space_groups_by_category(cat = "health-promotion", post_number_per_group = 1)
cat_url = "https://patient.info/forums/categories/health-promotion-17"
space_groups_by_category(cat = cat_url, post_number_per_group = 1)
```

Description

Get posts and all the replies to the posts from groups by entering the initial letter of group names

Usage

```r
scrape_groups_by_initial_letter(index, post_number_per_group = NULL, ...)
```

Arguments

- **index**
  The initial letter of groups. Can be one letter or a vector of letters.

- **post_number_per_group**
  The number of random posts to scrape per group. Default is NULL, which means scrape the total number of posts in each group

... optional arguments to FUN.

Value

A data frame
Examples

```r
## Get the posts data of groups whose names starting with the letter "a" and "z"
sccape_groups_by_initial_letter(index = "x", post_number_per_group = 1)
```

### Description

Get all the posts containing all the replies to those posts from one group by entering its url.

### Usage

```r
scrape_one_group(group_url, random_post_number = NULL,
                  random_seed = NULL, ...)
```

### Arguments

- **group_url**: URL to the page to scrape.
- **random_post_number**: The number of random posts to scrape. Default is NULL, which means scrape the total number of posts.
- **random_seed**: A random number used to set the random seed to reproduce the work.
- **...**: optional arguments to FUN.

### Value

A data frame

### Examples

```r
## get the data of 5 random posts from the group "Angiotensin II Receptor Blockers"
group_url = "https://patient.info/forums/discuss/browse/angiotensin-ii-receptor-blockers-3037"
sccape_one_group(group_url = group_url, random_post_number = 5)
```
scrape_one_post  Scrape one initial post

Description

Get the data from one initial post by entering its url

Usage

```r
scrape_one_post(url, From = 1L, To = Inf, get_user_info = TRUE)
```

Arguments

- `url` URL to the post to scrape
- `From` The starting page number. Default is the first page
- `To` The ending page number. Default (Inf) is the last page (so all pages)
- `get_user_info` Get users’ profile information. It includes the date of joining the forum and the total posts they have sent. The default is TRUE.

Value

A data frame

Examples

```r
## get two pages of data from the post titled "Can Gastritis be cured?"
post_url = "https://patient.info/forums/discuss/can-gastritis-be-cured--613999"
scrape_one_post(url = post_url, From = 1, To = 2)
```

scrape_user_posts  Scrape a user's posts

Description

Get all posts/replies one user has sent by his/her user name

Usage

```r
scrape_user_posts(user_profile_url, type = c("both", "replies", "topic_post"))
```
scrape_user_posts

Arguments

user_profile_url
  The URL of a user's profile page.

type
  Choose a type of posts to be scraped. It includes "replies", i.e., a user's replies
to others' posts, or "topic_post", i.e., a user's initial posts. The default is to get
"both"

Value

A data frame

Examples

user_profile_url <- "https://patient.info/forums/profiles/utgh4k33-1264038"
scrape_user_posts(user_profile_url = user_profile_url, type = "both")
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