Package 'String2AdjMatrix'

May 7, 2026

Type Package

Title Creates an Adjacency Matrix from a List of Strings

Version 0.1.0

Author Tom Drake

Maintainer Tom Drake <t.drake@ed.ac.uk>

Description Takes a list of character strings and forms an adjacency matrix for the times the specified characters appear together in the strings provided. For use in social network analysis and data wrangling. Simple package, comprised of three functions.

License GPL-3

Encoding UTF-8

Depends stringr

LazyData true

RoxygenNote @import stringr 6.0.1

NeedsCompilation no

Repository CRAN

Date/Publication 2018-01-30 10:24:44 UTC

Contents

generate_adj_matrix *generate_adj_matrix*

Description

Generates a blank adjacency matrix from a specified string

Usage

```
generate_adj_matrix(string_data, data_separator = ",", remove_spaces = F)
```

Arguments

string_data	The 'string_data' argument is the string from which the unique values and matrix will be generated.
data_separator	The 'data_separator' argument is the chracter separating specified substrings in the given string. Default is ','.
remove_spaces	The 'remove_spaces' argument will remove spaces from the header values (thus disrupting the search unless all spaces are removed in the given string in next steps). This is useful for separating strings with an irregular number of spaces between the same substrings.

Details

Generates an adjacency matrix from a given string. Detects unique values and generates a blank matrix with colnames and rownames of each unique value in supplied string. Data must be provided as a character string.

Author(s)

Tom Drake

Examples

```
##Example
library(String2AdjMatrix)

#Start with character string to generate an adjacency matrix from
string_in = c('apples, pears, bananas', 'apples, bananas', 'apples, pears')

#Generate a new blank matrix
blank_matrix = generate_adj_matrix(string_in)

#Now fill the matrix
string_2_matrix(blank_matrix, string_in)
```

string_2_matrix *string_2_matrix*

Description

Creates an adjacency matrix

Usage

```
string_2_matrix(new_matrix, supplied_string, self = 0)
```

Arguments

new_matrix	The 'new_matrix' element of the function should be either the matrix generated by 'generate_adj_matrix()' or an empty data matrix of equal number of rows and columns. These should have unique values specified as the row names and column names.
supplied_string	The 'supplied_string' element refers to the string in which the search is to be performed. i.e 'list = c('apples, pears, bananas', 'apples, bananas', 'apples, pears')'
self	The 'self' option specifies how to handle data when the specified object is found within a string. Default is 0. i.e. the adjacency matrix does not count it when the substring is found, only when the substring is found in combination with another unique substring.

Value

An adjacency matrix

Note

Generating large matrices is computationally intensive and may take a while.

Author(s)

Tom Drake

Examples

```
##Example
library(String2AdjMatrix)

#Start with character string to generate an adjacency matrix from
string_in = c('apples, pears, bananas', 'apples, bananas', 'apples, pears')

#Generate a new blank matrix
blank_matrix = generate_adj_matrix(string_in)
```

```
#Now fill the matrix
string_2_matrix(blank_matrix, string_in)
```

Index