

Package ‘screenmedR’

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Type Package

Title Filtering Pubmed Articles for a meta-analysis.

Version 0.1.0

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Description screenmedR is a package for automatizing the screening of publications in order to minimize the manual work needed to extract the proper publications for a meta-analysis project.

License GPL(>=2)

Encoding UTF-8

LazyData true

RoxygenNote 7.1.1

Imports rentrez,

XML,

dplyr,

purrr,

tm,

stringr,

RISmed,

tidyr,

proxy,

lsa

Suggests knitr,

rmarkdown

VignetteBuilder knitr

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abstractsofgroup	<i>Abstract PMID collector of a specific group, after clustering.</i>
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Description

Gathering the PMIDs of abstracts belonging to a specific cluster.

Usage

```
abstractsofgroup(clustering, group_number, initial_search)
```

Arguments

```
clustering, group_number, initial_search
```

diagnosis_clean	<i>Clean and manipulate the abstracts</i>
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Description

By Using tm functions works for cleaning, stemming removing special words etc.

Usage

```
diagnosis_clean(x)
```

Arguments

```
x
```

mesh_by_name	<i>Screens Pubmed PMID numbers in terms of the names of Descriptors & Qualifiers</i>
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Description

It can provide all the PMIDS of publications with specific Descriptors and Qualifiers. It is used for x < 300 PMIDS

Usage

```
mesh_by_name(x, Descriptor, Qualifier)
```

Arguments

```
x, Descriptor, Qualifier
```

mesh_by_name_bq	<i>Screens Pubmed PMID numbers in terms of the names of Descriptors & Qualifiers</i>
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Description

It can provide all the PMIDS of publications with specific Descriptors and Qualifiers. It is used for $x \geq 300$ PMIDS

Usage

```
mesh_by_name_bq(x, d, q)
```

Arguments

x, Descriptor, Qualifier

mesh_clean	<i>Cleaning not relevant publications in terms of number of mesh terms.</i>
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Description

It provides the PMID numbers of a set of publications x which have at least d descriptors and q qualifiers in common with a small default set y. Should be used for $x < 300$ abstracts.

Usage

```
mesh_clean(x, y, d, q)
```

Arguments

x, y, d, q

Value

```
result_final
```

mesh_clean_bq	<i>Cleaning not relevant publications in terms of number of mesh terms.</i>
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Description

It provides the PMID numbers of a set of publications x which have at least d descriptors and q qualifiers in common with a small default set y. Should be used for x > = 300 abstracts.

Usage

```
mesh_clean_bq(x, y, d, q)
```

Arguments

x, y, d, q

screenmed	<i>Screens Pubmed PMID numbers in accordance of a small group of relevant publications</i>
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Description

It provides us results for the cosine similarity of the group_number clusters as well as a list of the clustered abstracts and in which cluster they belong. Finally it also provides the PMIDS of the publications that no abstract was found.

Usage

```
screenmed(initial_search, filtered, sparcity, group_number)
```

Arguments

initial_search, filtered, sparcity, group_number

Value

group_number,cosine_similarity,clustering,missing_abstracts

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