

Package ‘rslp’

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Type Package

Title A Stemming Algorithm for the Portuguese Language

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Description Implements the “Stemming Algorithm for the Portuguese Language” <DOI:10.1109/SPIRE.2001.10024>.

URL <https://github.com/dfalbel/rslp>

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LazyData TRUE

Encoding UTF-8

RoxygenNote 5.0.1

Imports stringr, stringi, plyr, magrittr

Suggests dplyr, testthat, covr

NeedsCompilation no

Repository CRAN

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apply_rules	<i>Apply rules</i>
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Description

Apply rules

Usage

```
apply_rules(word, name, steprules)
```

Arguments

word	word to which you want to apply the rules
name	the rule name, possible values are: 'Plural', 'Feminine', 'Adverb', 'Augmentative', 'Noun', 'Verb', 'Vowel' .
steprules	steprules as obtained from the function extract_rules.

Examples

```
steprules <- readRDS(system.file("steprules.rds", package = "rslp"))
rslp:::apply_rules("balões", name = "Plural", steprules)
rslp:::apply_rules("lâpis", name = "Plural", steprules)
rslp:::apply_rules("bolas", name = "Plural", steprules)
```

extract_raw_rules	<i>Extract raw rules</i>
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Description

Separate the seven kinds of rules

Usage

```
extract_raw_rules(raw_rules)
```

Arguments

raw_rules	a character with the raw rules.
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extract_replacement_rules
Extract replacement rules

Description

Parses the the raw replacement rules.

Usage

```
extract_replacement_rules(raw_repl)
```

Arguments

raw_repl the part with replacement rules for each step rule.

extract_rules *Extract Rules from file*

Description

This function parse the rules that are disponible in the RLSP package disponible in the this http://www.inf.ufrgs.br/~arcoelho/rslp/integrando_rslp.html This file has been downloaded and is installed with the package. It's path can be found using `system.file("steprules.txt", package = "rslp")` A parsed version is saved is also installed with the package and its path can be found using `system.file("steprules.rds", package = "rslp")`.

Usage

```
extract_rules(path = system.file("steprules.txt", package = "rslp"))
```

Arguments

path path to the raw steprules. Most of the times you don't have to change it.

extract_rules_info *Extract Rules Info*

Description

Extract all info from all rules

Usage

```
extract_rules_info(rules)
```

Arguments

rules rules parsed before by [extract_rule_info](#)

extract_rule_info *Extract Rule Info*

Description

Extract all info for one rule

Usage

```
extract_rule_info(rule)
```

Arguments

rule the rule you want to extract infos

remove_accents *Remove Accents*

Description

A wrappper for stringi package.

Usage

```
remove_accents(s)
```

Arguments

s the string you want to remove accents

rslp

RSLP

Description

Apply the Stemming Algorithm for the Portuguese Language to vector of words.

Usage

```
rslp(words, steprules = readRDS(system.file("steprules.rds", package =  
"rslp")))
```

Arguments

words vector of words that you want to stem.
steprules as obtained from the function `extract_rules`. (only define if you are certain about it). The default is to get the parsed version of the rules installed with the package.

References

V. Orenge, C. Huyck, "A Stemming Algorithm for the Portuguese Language", SPIRE, 2001, String Processing and Information Retrieval, International Symposium on, String Processing and Information Retrieval, International Symposium on 2001, pp. 0186, doi:10.1109/SPIRE.2001.10024

Examples

```
words <- c("balões", "aviões", "avião", "gostou", "gosto", "gostaram")  
rslp(words)
```

rslp_

RSLP_

Description

Apply the Stemming Algorithm for the Portuguese Language to a word.

Usage

```
rslp_(word, steprules = readRDS(system.file("steprules.rds", package =  
"rslp")))
```

Arguments

word word to be stemmed.
steprules as obtained from the function `extract_rules`.

rslp_doc	<i>RSLP Document</i>
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Description

Apply the Stemming Algorithm for the Portuguese Language to vector of documents. It extracts words using the regex "\b[:alpha:]\b"

Usage

```
rslp_doc(docs, steprules = readRDS(system.file("steprules.rds", package =
  "rslp")))
```

Arguments

docs	chr vector of documents
steprules	as obtained from the function extract_rules. (only define if you are certain about it). The default is to get the parsed version of the rules installed with the package.

References

V. Orengo, C. Huyck, "A Stemming Algorithm for the Portuguese Language", SPIRE, 2001, String Processing and Information Retrieval, International Symposium on, String Processing and Information Retrieval, International Symposium on 2001, pp. 0186, doi:10.1109/SPIRE.2001.10024

Examples

```
docs <- c("coma frutas pois elas fazem bem para a saúde.",
  "não coma doces, eles fazem mal para os dentes.")
rslp_doc(docs)
```

verify_suffix	<i>Verify</i>
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Description

Given a list of suffixes, returns a vector of true or false indicating if the word has each one of the suffixes.

Usage

```
verify_suffix(word, rep_rules)
```

Arguments

word	word you which to verify replacement rules
rep_rules	data.frame of rules as specified in steprules\$replacement_rule

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