Package ‘SnowballC’

April 25, 2023

Type Package
Version 0.7.1
Date 2023-04-25

Title Snowball Stemmers Based on the C 'libstemmer' UTF-8 Library

Description An R interface to the C 'libstemmer' library that implements
Porter's word stemming algorithm for collapsing words to a common
root to aid comparison of vocabulary. Currently supported languages are
Arabic, Basque, Catalan, Danish, Dutch, English, Finnish, French, German, Greek,
Hindi, Hungarian, Indonesian, Irish, Italian, Lithuanian, Nepali,
Norwegian, Portuguese, Romanian, Russian, Spanish, Swedish, Tamil
and Turkish.

License BSD_3_clause + file LICENSE

Copyright Dr Martin Porter (2001) and Richard Boulton (2004, 2005) for
the 'libstemmer' C library, and Milan Bouchet-Valat (2013) for
the R package contents.

URL https://github.com/nalimin/R.TeMiS

BugReports https://github.com/nalimin/R.TeMiS/issues

NeedsCompilation yes

Author Milan Bouchet-Valat [aut, cre]
Maintainer Milan Bouchet-Valat <nalimin@club.fr>

Repository CRAN
Date/Publication 2023-04-25 20:30:06 UTC

R topics documented:

getStemLanguages ................................................................. 2
wordStem ........................................................................ 3

Index 5
getStemLanguages  Query the list of supported languages

Description
This dynamically determines the names of the languages for which stemming is currently supported by this package.

Usage
getStemLanguages()

Details
The language names in lower case are returned, though please note that two- and three-letter ISO-639 codes are also accepted by wordStem (see references for the list of codes).
This queries the C code for the list of languages that were compiled when the package was installed which in turn is determined by the code that was included in the distributed package itself.

Value
A character vector giving the names of the languages.

Author(s)
Milan Bouchet-Valat

References
http://snowball.tartarus.org/

See Also
wordStem

Examples
getStemLanguages()
wordStem

Get the stem of words

Description

This function extracts the stems of each of the given words in the vector.

Usage

wordStem(words, language = "porter")

Arguments

words          a character vector of words whose stems are to be extracted.
language       the name of a recognized language, as returned by getStemLanguages, or a
two- or three-letter ISO-639 code corresponding to one of these languages (see
references for the list of codes).

Details

This uses Dr. Martin Porter’s stemming algorithm and the C libstemmer library generated by Snowball.

Value

A character vector with as many elements as there are in the input vector with the corresponding
elements being the stem of the word. Elements of the vector are converted to UTF-8 encoding
before the stemming is performed, and the returned elements are marked as such when they contain
non-ASCII characters.

Author(s)

Milan Bouchet-Valat

References

http://snowball.tartarus.org/

Examples

# Simple example
wordStem(c("win", "winning", "winner"))

# Test some of the vocabulary supplied at https://github.com/snowballstem/snowball-data
for(lang in getStemLanguages()) {
  load(system.file("words", paste0(lang, ".RData"), package="SnowballC"))
stopifnot(all(wordStem(dat$words, lang) == dat$stem))
}

stopifnot(is.na(wordStem(NA)))
Index

getStemLanguages, 2, 3

wordStem, 2, 3