Package ‘CTM’

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Type Package

Title A Text Mining Toolkit for Chinese Document

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Description The CTM package is designed to solve problems of text mining and is specific for Chinese document.

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LazyData TRUE

RoxygenNote 5.0.1

Imports jiebaR, plyr

NeedsCompilation no

Repository CRAN

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CDTM

**Description**

Constructs Document-Term Matrix from Chinese Text Documents.

**Usage**

```r
CDTM(doc, weighting, EngTermDeleted = TRUE, NumTermDeleted = TRUE,
     shortTermDeleted = TRUE)
```

**Arguments**

- **doc**

- **weighting**
  Available weighting function with matrix are binary, count, tf, tfidf. See details.

- **EngTermDeleted**
  remove English from text documents.

- **NumTermDeleted**
  remove Numbers from text documents.

- **shortTermDeleted**
  Deltected short word when nchar <2.

**Details**

This function run a Chinese word segmentation by jiebeR and build document-term matrix, and there is four weighting function with matrix, and "binary" means value can only be 1 if the term occurs, "count" means how many times the term occurs in a doc, "tf" means term frequency and "tfidf" means term frequency inverse document frequency.

**Author(s)**

Jim Liu, Quan Gu

**Examples**

```r
library(CTM)
a1 <- "hello taiwan"
b1 <- "world of tank"
c1 <- "taiwan weather"
d1 <- "local weather"
text1 <- t(data.frame(a1,b1,c1,d1))
dtm1 <- CDTM(doc = text1, weighting = "tfidf",EngTermDeleted = FALSE, shortTermDeleted = FALSE)
```
Description

Constructs Term-Document Matrix from Chinese Text Documents.

Usage

CTDM(doc, weighting, EngTermDeleted = TRUE, NumTermDeleted = TRUE, shortTermDeleted = TRUE)

Arguments

weighting Available weighting function with matrix are binary, count, tf, tfidf. See details.
EngTermDeleted remove English from text documents.
NumTermDeleted remove Numbers from text documents.
shortTermDeleted Detected short word when nchar < 2.

Details

This function run a Chinese word segmentation by jiebeR and build term-document matrix, and there is four weighting function with matrix, and "binary" means value can only be 1 if the term occurs, "count" means how many times the term occurs in a doc, "tf" means term frequency and "tfidf" means term frequency inverse document frequency.

Author(s)

Jim Liu, Quan Gu

Examples

library(CTM)
a1 <- "hello taiwan"
b1 <- "world of tank"
c1 <- "taiwan weather"
d1 <- "local weather"
text1 <- t(data.frame(a1,b1,c1,d1))
tdm1 <- CTDM(doc = text1, weighting = "tfidf", EngTermDeleted = FALSE, shortTermDeleted = FALSE)
Description
Computing term count from text documents

Usage
\[
\text{termCount}(\text{doc, EngTermDeleted = TRUE, NumTermDeleted = TRUE, shortTermDeleted = TRUE})
\]

Arguments
- EngTermDeleted: remove English from text documents.
- NumTermDeleted: remove Numbers from text documents.
- shortTermDeleted: Deltected short word when nchar <2.

Details
This function run a Chinese word segmentation by jiebeR and compute term count from all these text document.

Author(s)
Jim Liu

Examples
\begin{verbatim}
library(CTM)
a1 <- "hello taiwan"
b1 <- "world of tank"
c1 <- "taiwan weather"
d1 <- "local weather"
text1 <- t(data.frame(a1,b1,c1,d1))
count1 <- termCount(doc = text1, EngTermDeleted=FALSE, shortTermDeleted = FALSE)
\end{verbatim}
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