Package 'CTM'

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Type Package

Title A Text Mining Toolkit for Chinese Document

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Author Jim Liu, Quan Gu

Maintainer Jim Liu <jimliu741523@gmail.com>

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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Contents

CDTM *Document Term Matrix*

Description

Constructs Document-Term Matrix from Chinese Text Documents.

Usage

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

Arguments

doc	The Chinese text document. A vector of Chinese strings.
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

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

CTDM *Term Document Matrix*

Description

Constructs Term-Document Matrix from Chinese Text Documents.

Usage

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

Arguments

doc	The Chinese text document. A vector of Chinese strings.
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 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)
```

termCount *Term Count*

Description

Computing term count from text documents

Usage

```
termCount(doc, EngTermDeleted = TRUE, NumTermDeleted = TRUE,
  shortTermDeleted = TRUE)
```

Arguments

doc	The Chinese text document.
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

```
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)
```

Index