R Twitter code for sentiment analysis

#TwitteR package is a R based twitter Client, provides an interface to twitter web API

#ROAuth package is a R based packages provies an interfacet to the OAuth 1.0 specification allowing users to authenticate via OAuth to the server of their choice.

library(twitteR)

library(ROAuth)

#Download the curl Cert and save it at default working directory

download.file(url = "http://curl.haxx.se/ca/cacert.pem",destfile = "cacert.pem")

consumer\_key = "rKyfHnx7qPudrSRAvAyUbNh3c"

consumer\_secret = "ZgxfrYFjoAvhNCfii61YjHE3VRHLwFTWGNtEL7y5RpC5OdY03M"

access\_token = "209102410-Oy5FNNimk0ECVPCY5oXYxzHrwL8RYcR9PFWonvxt"

access\_token\_secret = "IjQKB4IP5ZEby5D9fWmZadtUjmCThgBc2DiRw8LbVWuJy"

setup\_twitter\_oauth(consumer\_key,consumer\_secret,access\_token,access\_token\_secret)

GlobalFoodCrisis.list <- searchTwitter('#GlobalFoodCrisis')

GlobalFoodCrisis.list

GlobalFoodCrisis.df <- twListToDF(GlobalFoodCrisis.list)

write.csv(GlobalFoodCrisis.df,file ='C:/Users/Cloudwick/Documents/GlobalFoodCrisis.csv',

row.names = F)

globalfoodcrisis.list <- searchTwitter('globalfoodcrisis')

foodcrisis.list <- searchTwitter("foodcrisis", n=1500)

foodcrisis.df <- twListToDF(foodcrisis.list)

write.csv(foodcrisis.df,file ='C:/Users/Cloudwick/Documents/foodcrisis.csv',

row.names = F)

FoodCrisis.list <- searchTwitter("#FoodCrisis", n=1500)

FoodCrisis.list

FoodCrisis.df <-twListToDF(FoodCrisis.list)

write.csv(FoodCrisis.df,file ='C:/Users/Cloudwick/Documents/FoodCrisis.csv',

row.names = F)

Foodcrisis.list <- searchTwitter("#Foodcrisis", n=1500)

Foodcrisis.list

FoodInflation.list <- searchTwitter("#FoodInflation")

foodinflation.list <- searchTwitter("#foodinflation")

FoodInflation.df <- twListToDF(FoodInflation.list)

write.csv(FoodInflation.df,file ='C:/Users/Cloudwick/Documents/FoodInflation.csv',

row.names = F)

GlobalFoodSecurity.list <- searchTwitter("#GlobalFoodSecurity")

setup\_twitter\_oauth(consumer\_key,consumer\_secret,access\_token,access\_token\_secret)

GlobalFoodSecurity.list

WorldCrisis <- searchTwitter("#WorldCrisis")

WorldCrisis.list<- searchTwitter("#WorldCrisis")

WorldCrisis.list

WorldCrisis.df <- twListToDF(WorldCrisis.list)

write.csv(WorldCrisis.df,file ='C:/Users/Cloudwick/Documents/WorldCrisis.csv',

row.names = F)

GlobalCrisis.list <- searchTwitter("#GlobalCrisis")

GlobalCrisis.list

GlobalCrisis.list <- searchTwitter("#GlobalCrisis", n=1500)

GlobalCrisis.list

GlobalCrisis.df <- twListToDf(GlobalCrisis.list)

write.csv(GlobalCrisis.df,file ='C:/Users/Cloudwick/Documents/GlobalCrisis.csv',

row.names = F)

GlobalCrisis.df <- twListToDF(GlobalCrisis.list)

#sentiment function

library(plyr)

library(stringr)

score.sentiment = function(sentences, pos.words, neg.words, .progress = 'none')

{

require(plyr)

require(stringr)

scores = laply(sentences, function(sentence, pos.words, neg.words) {

sentence = gsub('[[:punct:]]', '', sentence)

sentence = gsub('[[:cntrl:]]', '', sentence)

sentence = gsub('\\d+', '', sentence)

sentence = tolower(sentence)

word.list = str\_split(sentence,'\\s+')

words = unlist(word.list)

pos.matches = match(words, pos.words)

neg.matches = match(words, neg.words)

pos.matches = !is.na(pos.matches)

neg.matches = !is.na(neg.matches)

score = sum(pos.matches) - sum(neg.matches)

return(score)

}, pos.words, neg.words, .progress = .progress)

scores.df = data.frame(score = scores, text = sentences)

return(scores.df)

}

> getwd()

[1] "C:/Users/Cloudwick/Documents"

> hu.liu.pos = scan('C:/Users/Cloudwick/Documents/positive-words.txt', what = 'character', comment.char = ';')

Read 2006 items

> hu.liu.neg = scan('C:/Users/Cloudwick/Documents/negative-words.txt', what = 'character', comment.char = ';')

Read 4783 items

> datasetfoodcrisis <- read.csv('C:/Users/Cloudwick/Documents/foodcrisis.csv')

> datasetfoodcrisis$text <- as.factor(datasetfoodcrisis$text)

> datasetFoodInflation <- read.csv('C:/Users/Cloudwick/Documents/FoodInflation.csv')

> dataserFoodInflation$text <- as.factor(datasetFoodInflation$text)

Error in dataserFoodInflation$text <- as.factor(datasetFoodInflation$text) :

object 'dataserFoodInflation' not found

> datasetFoodInflation$text <- as.factor(datasetFoodInflation$text)

> datasetGlobalCrisis <- read.csv('C:/Users/Cloudwick/Documents/GlobalCrisis.csv')

> datasetGlobalCrisis$text <- as.factor(datasetGlobalCrisis$text)

> GlobalFoodCrisis <- read.csv('C:/Users/Cloudwick/Documents/GlobalFoodCrisis.csv')

> datasetGlobalFoodCrisis$text <- as.factor(datasetGlobalFoodCrisis$text)

Error in is.factor(x) : object 'datasetGlobalFoodCrisis' not found

> datasetGlobalFoodCrisis <- read.csv('C:/Users/Cloudwick/Documents/GlobalFoodCrisis.csv')

> datasetGlobalFoodCrisis$text <- as.factor(datasetGlobalFoodCrisis$text)

> foodcrisis.scores <- score.sentiment(datasetfoodcrisis$text, pos.words, neg.words, .progress = 'text')

|

> foodcrisis.score

Error: object 'foodcrisis.score' not found

> foodcrisis.scores <- score.sentiment(datasetfoodcrisis$text, pos.words, neg.words, .progress = 'text')

| | 0%

Error in match(words, pos.words) : object 'pos.words' not found

Called from: match(words, pos.words)

Browse[1]>

> foodcrisis.scores <- score.sentiment(datasetfoodcrisis$text, hi.liu.pos, hi.liu.neg, .progress = 'text')

| |

> pos.words = scan('C:/Users/Cloudwick/Documents/positive-words.txt', what = 'character', comment.char = ';')

Read 2006 items

> neg.words = scan('C:/Users/Cloudwick/Documents/negative-words.txt', what = 'character', comment.char = ';')

Read 4783 items

> foodcrisis.scores <- score.sentiment(datasetfoodcrisis$text, pos.words,neg.words, .progress = 'text')

|=======================================================================| 100%

> path = 'C:/Users/Cloudwick/Documents/result/'

> write.csv(foodcrisis.scores, file = paste(path,'foodcrisisscores.csv', sep = ""), row.names = T)

> FoodInflation.scores <- score.sentiment(datasetFoodInflation$text, pos.words, neg.words, .progress = 'text')

|=======================================================================| 100%

> path = 'C:/Users/Cloudwick/Documents/result/'

> write.csv(FoodInflation.scores, file = paste(path, 'FoodInflationscores.csv', sep = ""), row.names = T)

> GlobalCrisis.scores <- score.sentiment(datasetGlobalCrisis$text, pos.words, neg.words, .progress = 'text')

|=======================================================================| 100%

> path = 'C:/Users/Cloudwick/Documents/result'

> write.csv(GlobalCrisis.scores, file = paste(path, 'GlobalCrisisscores.csv', sep = ""), row.names=T )

> GlobalCrisis.scores <- score.sentiment(datasetGlobalCrisis$text, pos.words, neg.words, .progress = 'text')

|=======================================================================| 100%

> path = 'C:/Users/Cloudwick/Documents/results'

> write.csv(GlobalCrisis.scores, file = paste(path, 'GlobalCrisisscores.csv', sep = ""), row.names=T )

> GlobalFoodCrisis.scores <- score.sentiment(datasetGlobalFoodCrisis$text, pos.words, neg.words, .progress = 'text')

|=======================================================================| 100%

> path = 'C:/Users/Cloudwick/Documents/result'

> write.csv(GlobalFoodCrisis.scores, file = paste(path, 'GlobalFoodCrisisscores.csv', sep = ""), row.names=T )

> write.csv(GlobalCrisis.scores, file = paste(path, 'GlobalCrisisscores.csv', sep = ""), row.names=T )

> write.csv(GlobalFoodCrisis.scores, file = paste(path, 'GlobalFoodCrisisscores.csv', sep = ""), row.names=T )

> GlobalFoodCrisisscores.csv

Error: object 'GlobalFoodCrisisscores.csv' not found

> read.csv('C:/Users/Cloudwick/Documents/result/GlobalFoodCrisisscores.csv')

Error in file(file, "rt") : cannot open the connection

In addition: Warning message:

In file(file, "rt") :

cannot open file 'C:/Users/Cloudwick/Documents/result/GlobalFoodCrisisscores.csv': No such file or directory

> read.csv('C:/Users/Cloudwick/Documents/result/foodcrisisscores.csv')

X score