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install.packages("twitteR")

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library(twitteR)

library(RCurl)

library(tidytext)

library(tidyverse)

library(readr)

library(geniusr)

library(magrittr)

library(circlize)

library(purrr)

library(reshape2)

library(circlize)

**Improved Words cloud**

tweets <- read.csv("C:/Users/User Name/Desktop/wadden2.csv", stringsAsFactors = FALSE)

as.data.frame.matrix(tweets)

emotions <- get\_nrc\_sentiment(tweets$ptext)

# Create comparison word cloud data

wordcloud\_tweet = c(

paste(tweets$ptext[emotions$anger > 0], collapse=" "),

paste(tweets$ptext[emotions$anticipation > 0], collapse=" "),

paste(tweets$ptext[emotions$disgust > 0], collapse=" "),

paste(tweets$ptext[emotions$fear > 0], collapse=" "),

paste(tweets$ptext[emotions$joy > 0], collapse=" "),

paste(tweets$ptext[emotions$sadness > 0], collapse=" "),

paste(tweets$ptext[emotions$surprise > 0], collapse=" "),

paste(tweets$ptext[emotions$trust > 0], collapse=" ")

)

# create corpus

corpus = Corpus(VectorSource(wordcloud\_tweet))

corpus <- tm\_map(corpus, removeWords, c("NOCOMMENT","and","the"))

tdm = TermDocumentMatrix(corpus)

tdm = as.matrix(tdm)

# column name binding

colnames(tdm) = c('anger', 'anticipation', 'disgust', 'fear', 'joy', 'sadness', 'surprise', 'trust')

comparison.cloud(tdm, random.order=FALSE, colors = c("#00B2FF", "red", "#FF0099", "#6600CC", "green", "orange", "blue", "brown"), title.size=1, max.words=250, scale=c(2.5, 0.4),rot.per=0.4)

**Top words for each sentiment**

tweets <- read.csv("C:/Users/User Name/Desktop/wadden2.csv", stringsAsFactors = FALSE)

tweets$ptext <- as.character(tweets$ptext)

tidy\_tweets <- tweets %>% unnest\_tokens(word,ptext)

tweets\_sentiment <- tidy\_tweets %>% inner\_join(get\_sentiment\_dictionary('nrc', language = "english"), by="word")

tweets\_sentiment %>%

count(word,sentiment,sort=TRUE) %>%

group\_by(sentiment)%>%top\_n(n=10) %>%

ungroup() %>%

ggplot(aes(x=reorder(word,n),y=n,fill=sentiment)) +

geom\_col(show.legend = FALSE) +

facet\_wrap(~sentiment,scales="free") +

coord\_flip()

**Sentiment Polarity Analysis**

tweets <- read.csv("C:/Users/User Name/Desktop/wadden2.csv", stringsAsFactors = FALSE)

#carryout sentiment mining using the **get\_nrc\_sentiment()**function #log the findings under a variable **result**

mySentiment <- get\_nrc\_sentiment(as.character(tweets$ptext))

#change result from a list to a data frame and transpose it

mySentiment\_1 <-data.frame(t(mySentiment))

#rowSums computes column sums across rows for each level of a #grouping variable.

new\_Sentiment <- data.frame(rowSums(mySentiment\_1))

#name rows and columns of the dataframe

names(new\_Sentiment)[1] <- "count"

new\_Sentiment <- cbind("sentiment" = rownames(new\_Sentiment), new\_Sentiment)

rownames(new\_Sentiment) <- NULL

#plot the first 8 rows,the distinct emotions

qplot(sentiment, data= new\_Sentiment[1:8,], weight=count, geom="bar",fill=sentiment)+ggtitle("Sentiments")

#plot the last 2 rows ,positive and negative

qplot(sentiment, data= new\_Sentiment[9:10,], weight=count, geom="bar",fill=sentiment)+ggtitle("Sentiments")