Emotional Attributes of diverging political spheres on Twitter

Florian Klement, David Siegl, Shirin Yanni

```
library(twitteR)
library(ggplot2)
library(tidyverse)
```

```
## -- Attaching packages --------------------------------------- tidyverse 1.3.1 --

## v tibble  3.1.5     v dplyr   1.0.7
## v tidyr   1.1.4     v stringr 1.4.0
## v readr   2.0.2     v forcats 0.5.1
## v purrr   0.3.4

## -- Conflicts ------------------------------------------ tidyverse_conflicts() --
## x dplyr::filter()   masks stats::filter()
## x dplyr::id()       masks twitteR::id()
## x dplyr::lag()      masks stats::lag()
## x dplyr::location() masks twitteR::location()
```

```
library(stopwords)
```

```
## Warning: Paket 'stopwords' wurde unter R Version 4.1.2 erstellt
```

Accessing the Twitter-API

```
# consumerKey = "X"
# consumerSecret = "X"
# accessToken = "X-X"
# accessSecret = "X"
# options(httr_oauth_cache=TRUE)
# setup_twitter_oauth(consumer_key = consumerKey, consumer_secret = consumerSecret,
#                     access_token = accessToken, access_secret = accessSecret)
```

Loading some data

```
sheet <- read.csv("./Emotion Analysis - Twitter.csv")
id_list <- as.list(sheet$Twitter.ID)
```

Defining Function for Twitter-Scraping

```r
scrape_tweets <- function(userID, n_tweets, filename){
  tweets <- userTimeline(userID, n_tweets)
  tweets_df <- tbl_df(map_df(tweets, as.data.frame))
  tweets_df <- tweets_df %>%
    select(c(id, text, screenName, created, favoriteCount, retweetCount))
  write.csv(tweets_df, paste(filename,"-tweets.csv", sep = ""), row.names = FALSE)
}

# for (id in id_list) {
#   scrape_tweets(id, 900, id)
# }
```

Loading the Tweets

```r
tweets_files <- list.files("./data")

for (i in 1:length(tweets_files)) {
  assign(paste0("tweets_", i),
         read.csv(paste0("./data/",
                  tweets_files[i])))
}
```

Preprocessing

```r
cleaning_tweets <- function(text){
  text <- gsub(",", "", text)
  text <- gsub("[[:punct:]]", "", text)
  text <- gsub("[[:digit:]]", "", text)
  words <- strsplit(text, " ")[[1]]
  words <- tolower(words)
}
```