Analysing Twitter for Ubisoft

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8.1 Analysing the Relationship Between Followers for Twitter Users

8.1.1 Retrieve the posts from Twitter

relevant posts can be retrieved from twitter by utilising the `rtweet` package, packages can be loaded for use in **R** thusly:

The `rtweet` API will search for tweets that contain all the words of a query regardless of uppercase or lowercase usage [**kearney2019**].

In order to leverage the *Twitter* API it is necessary to use tokens provided through a *Twitter* developer account:

and hence all tweets containing a mention of *Ubisoft* can be returned and saved to disk as shown in listing 3:

8.2.2 Count of Followers and Friends

In order to identify the number of users that are contained in the *tweets* the `unique()` function can be used to return a vector of names which can then be passed as an index to the vector of counts as shown in listing 4, this provides that 81.7% of the tweets are by unique users.

```
[1] 817
```

```r
1   # Load Packages
    ↪   ------------------------------------------------------------
2   setwd("~/Dropbox/Notes/DataSci/Social_Web_Analytics/SWA-Project/scripts⌋
    ↪   /")
3
4   if (require("pacman")) {
5     library(pacman)
6   } else{
7     install.packages("pacman")
8     library(pacman)
9   }
10
11  pacman::p_load(xts, sp, gstat, ggplot2, rmarkdown, reshape2,
12                 ggmap, parallel, dplyr, plotly, tidyverse,
13                 reticulate, UsingR, Rmpfr, swirl, corrplot,
14                 gridExtra, mise, latex2exp, tree, rpart,
15                 lattice, coin, primes, epitools, maps, clipr,
16                 ggmap, twitteR, ROAuth, tm, rtweet, base64enc,
17                 httpuv, SnowballC, RColorBrewer, wordcloud,
18                 ggwordcloud)
```

Listing 1: Load the Packages for **R**

Summary Statistics

The average number of friends and followers from users who posted tweets mentioning *Ubisoft* can be returned using the `mean()` as shown in listing 5 this provides that on average each user has 586 friends and 63,620 followers.

```
[1] 63620.24
[1] 585.9016
```

References

references

```
1  # Set up Tokens
   ↪   =======================================================
2
3  options(RCurlOptions = list(
4    verbose = FALSE,
5    capath = system.file("CurlSSL", "cacert.pem", package = "RCurl"),
6    ssl.verifypeer = FALSE
7  ))
8
9  setup_twitter_oauth(
10   consumer_key = "************************",
11   consumer_secret =
   ↪   "**************************************************",
12   access_token = "***************************************************",
13   access_secret = "*******************************************"
14 )
15
16 # rtweet
   ↪   ============================================================
17 tk <-    rtweet::create_token(
18   app = "SWA",
19   consumer_key    = "************************",
20   consumer_secret =
   ↪   "**************************************************",
21   access_token    =
   ↪   "**************************************************",
22   access_secret   = "********************************************",
23   set_renv        = FALSE
```

Listing 2: Import the twitter tokens (redacted)

```
1   n <- 1000
2   tweets.company <- search_tweets(q = 'ubisoft', n = n, token = tk,
3                                   include_rts = FALSE)
4   save(tweets.company[,], file = "resources/Download_1.Rdata")
```

Listing 3: Save the Tweets to the HDD as an rdata file

```
1  (users <- unique(tweets.company$name)) %>% length()
2  (x <- tweets.company$followers_count[duplicated(tweets.company$name)])
3  (y <- tweets.company$friends_count[duplicated(tweets.company$name)])
```

Listing 4: Return follower count of twitter posts

3

```
1   (xbar <- mean(x))
2   (ybar <- mean(y))
```

Listing 5: Determine the average number of friends and followers