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Twitter client for R, using the tutorial by the Jeff Gentry.

In [1]:

```
install.packages('twitter', repos='https://cran.r-project.org')
```

Installing package into 'C:/Users/Jay/Documents/R/win-library/3.3'
(as 'lib' is unspecified)

package 'twitter' successfully unpacked and MD5 sums checked

The downloaded binary packages are in
C:\Users\Jay\AppData\Local\Temp\RtmpcdDt6C\downloaded_packages

In [3]:

```
install.packages('roauth', repos = 'https://cran.r-project.org')
```

Installing package into 'C:/Users/Jay/Documents/R/win-library/3.3'
(as 'lib' is unspecified)

Warning message:

"package 'roauth' is not available (for R version 3.3.2)"Warning message:
"Perhaps you meant 'ROAuth' ?"

Library import statements. To be ran everytime the notebook/kernel is restarted.

In [4]:

```
library(twitter)
```

Authentication with OAuth.

Twitter Credentials.

Will need to run this for authenticating the session everytime notebook is restarted.

In [5]:

```
appname <- "jbcse587"
apikey <- "yCwDe8rI6TbRgKGmREZsWWsha"
apisecret <- "U2P6fhWFI4wk0PJFwDkhGDierFxiA4Q00o4xPXHo0brDx15dff"
token <- "2573201196-eKJFzxeu6QfdaDkYHdidF37682TIJX61eP6hHI"
tokensecret <- "mU2SxcTYzjNzXi51MX0tg2B2eQcDinANFjSsCLFn03iw9"
setup_twitter_oauth(apikey,apisecret,token,tokensecret)
```

```
[1] "Using direct authentication"
```

Getting started with the Twitter search using API

In [6]:

```
tweets <- searchTwitter('#rstats', n=50)
head(tweets)
```

```
[[1]]
```

```
[1] "TradeArcher: RT @KirkDBorne: How to Install #Microsoft R Server for Windows: https://t.co/1VPRKYFL9r #Rstats #BigData #MachineLearning #DataScience http□"
```

```
[[2]]
```

```
[1] "EClassHosting: RT @KirkDBorne: How to Install #Microsoft R Server for Windows: https://t.co/1VPRKYFL9r #Rstats #BigData #MachineLearning #DataScience http□"
```

```
[[3]]
```

```
[1] "DataScienceTH: RT @KirkDBorne: How to Install #Microsoft R Server for Windows: https://t.co/1VPRKYFL9r #Rstats #BigData #MachineLearning #DataScience http□"
```

```
[[4]]
```

```
[1] "TheDonquixotic: RT @micahstubbs: #WebVR Grammar of Graphics \nbuilt on #aframevr #shiny #ggplot2 #rstats\n<ed><U+00A0><U+00BC><ed><U+00BC><U+0090> @Datatitian \n<ed><U+00A0><U+00BD><ed><U+00B3><U+008A> https://t.co/mOgW4y0796 \n<ed><U+00A0><U+00BD><ed><U+00B4><U+0080> https:□"
```

```
[[5]]
```

```
[1] "krimuthu: RT @KirkDBorne: How to Install #Microsoft R Server for Windows: https://t.co/1VPRKYFL9r #Rstats #BigData #MachineLearning #DataScience http□"
```

```
[[6]]
```

```
[1] "dushyantgadewal: RT @KirkDBorne: How to Install #Microsoft R Server for Windows: https://t.co/1VPRKYFL9r #Rstats #BigData #MachineLearning #DataScience http□"
```

In [7]:

```
head(strip_retweets(tweets, strip_manual=TRUE, strip_mt=TRUE))
```

```
[[1]]
```

```
[1] "millard_joe: Experimenting with #python and #rstats integration - managed to successfully build a species spell checking #Shiny app!"
```

```
[[2]]
```

```
[1] "sellorm: @xieyihui Know of any others? https://t.co/4vu04bRT6r #blogdown #rstats"
```

```
[[3]]
```

```
[1] "dasaptaerwin: @BiswapriyaMisra thanks. Need to dig deeper into this #rstats packages. PS: if I have time :). Have a pleasant Sunday."
```

```
[[4]]
```

```
[1] "jonmcalders: It's been an unforgettable 3 days of collaborative investment into the #rstats community for #satRdayCapeTown - so many new friends made :-)"
```

```
[[5]]
```

```
[1] "SteffLocke: Use your .Rprofile to give you important notifications https://t.co/aDqKSXXfPr #bestpractices #hibpwned #rstats"
```

```
[[6]]
```

```
[1] "pjs_228: When you're watching rstudio::conf talks and think about that most of your colleagues still do gui / non tidy data analysis :/ #rstats"
```

Looking at users.

In [8]:

```
crantastic <- getUser('crantastic')  
crantastic$getDescription()
```

```
'I like some things, and I dislike everything else.'
```

In [9]:

```
crantastic$getFollowersCount()
```

In [10]:

```
crantastic$getFriends(n=5)
```

```
$`35985504`
```

```
[1] "MisElizaJane"
```

```
$`90472293`
```

```
[1] "emtothea"
```

```
$`30987732`
```

```
[1] "MelanieScrofano"
```

```
$`4709232802`
```

```
[1] "WynonnaEarp"
```

In [11]:

```
crantastic$getFavorites(n=5)
```

```
[[1]]
```

```
[1] "erictcarrasco: That \"Black lung\" line was a @Chy_Leigh joke. Loved  
it so much we made her keep saying it. #Supergirl #SupergirlLives #Sanver  
s"
```

```
[[2]]
```

```
[1] "MelanieScrofano: I shall be INSUFFERABLE when the @WynonnaEarp comic  
I'm co-writing with @BeauSmithRanch comes out. \"The Earp Sister\" http://t.co/h0Q6XrE1dV"
```

```
[[3]]
```

```
[1] "katevoegele: just casually throwing my white gold hoops in the ring t  
o play #GretchenWieners in this https://t.co/019FSGjTuD"
```

```
[[4]]
```

```
[1] "boglesthemind: Here we go, QSO - female writer, female director, fema  
le producer, female editor, female lead, female first ad #PersonOfInterest  
#toofemale"
```

```
[[5]]
```

```
[1] "ohnikkers: @keithkurson naw they did two shows in london and i went t  
o both. i made hannah fall in love with the scottish accent tho so NEXT T  
IME"
```

Conversion to data.frames

In [12]:

```
df <- twListToDF(tweets)
head(df)
```

text	favorited	favoriteCount	replyToSN	created	truncated	re
RT @KirkDBorne: How to Install #Microsoft R Server for Windows: https://t.co/1VPRKYFL9r #Rstats #BigData #MachineLearning #DataScience http...	FALSE	0	NA	2017-02-19 00:21:37	FALSE	N/
RT @KirkDBorne: How to Install #Microsoft R Server for Windows: https://t.co/1VPRKYFL9r #Rstats #BigData #MachineLearning #DataScience http...	FALSE	0	NA	2017-02-19 00:21:16	FALSE	N/
RT @KirkDBorne: How to Install #Microsoft R Server for Windows: https://t.co/1VPRKYFL9r #Rstats #BigData #MachineLearning #DataScience http...	FALSE	0	NA	2017-02-19 00:20:50	FALSE	N/
RT @micahstubbs: #WebVR Grammar of Graphics built on #aframevr #shiny #ggplot2 #rstats <ed> <U+00A0><U+00BC> <ed><U+00BC> <U+0090> @Datatitian <ed><U+00A0> <U+00BD><ed> <U+00B3><U+008A> https://t.co/mOgW4y0796 <ed><U+00A0> <U+00BD><ed> <U+00B4><U+0080> https://t.co/mOgW4y0796	FALSE	0	NA	2017-02-19 00:18:17	FALSE	N/
RT @KirkDBorne: How to Install #Microsoft R Server for Windows: https://t.co/1VPRKYFL9r #Rstats #BigData #MachineLearning #DataScience http...	FALSE	0	NA	2017-02-19 00:17:01	FALSE	N/

text	favorited	favoriteCount	replyToSN	created	truncated	re
RT @KirkDBorne: How to Install #Microsoft R Server for Windows: https://t.co/1VPRKYFL9r #Rstats #BigData #MachineLearning #DataScience http...	FALSE	0	NA	2017-02-19 00:14:06	FALSE	NA

Database Persistence

In [18]:

```
install.packages("RSQLite", repos='https://cran.r-project.org')
```

Installing package into 'C:/Users/Jay/Documents/R/win-library/3.3'
(as 'lib' is unspecified)
Warning message:
"package 'RSQLite' is in use and will not be installed"

In [19]:

```
install.packages("DBI", repos='https://cran.r-project.org')
```

Installing package into 'C:/Users/Jay/Documents/R/win-library/3.3'
(as 'lib' is unspecified)
Warning message:
"package 'DBI' is in use and will not be installed"

In [24]:

```
library(DBI)
library(RSQLite)
```

In [26]:

```
sql_lite_file = tempfile()
register_sqlite_backend(sql_lite_file)
store_tweets_db(tweets)
```

TRUE

In [28]:

```
from_db = load_tweets_db()
head(from_db)
```

```
[[1]]
```

```
[1] "TradeArcher: RT @KirkDBorne: How to Install #Microsoft R Server for Windows: https://t.co/1VPRKYFL9r #Rstats #BigData #MachineLearning #DataScience http□"
```

```
[[2]]
```

```
[1] "EClassHosting: RT @KirkDBorne: How to Install #Microsoft R Server for Windows: https://t.co/1VPRKYFL9r #Rstats #BigData #MachineLearning #DataScience http□"
```

```
[[3]]
```

```
[1] "DataScienceTH: RT @KirkDBorne: How to Install #Microsoft R Server for Windows: https://t.co/1VPRKYFL9r #Rstats #BigData #MachineLearning #DataScience http□"
```

```
[[4]]
```

```
[1] "TheDonquixotic: RT @micahstubbs: #WebVR Grammar of Graphics \nbuilt on #aframevr #shiny #ggplot2 #rstats\n<ed><U+00A0><U+00BC><ed><U+00BC><U+0090> @Datatitian \n<ed><U+00A0><U+00BD><ed><U+00B3><U+008A> https://t.co/mOgW4y0796 \n<ed><U+00A0><U+00BD><ed><U+00B4><U+0080> https:□"
```

```
[[5]]
```

```
[1] "krimuthu: RT @KirkDBorne: How to Install #Microsoft R Server for Windows: https://t.co/1VPRKYFL9r #Rstats #BigData #MachineLearning #DataScience http□"
```

```
[[6]]
```

```
[1] "dushyantgadewal: RT @KirkDBorne: How to Install #Microsoft R Server for Windows: https://t.co/1VPRKYFL9r #Rstats #BigData #MachineLearning #DataScience http□"
```

Timelines

In [29]:

```
cran_tweets <- userTimeline('cranatic')
cran_tweets[1:5]
```

```
[[1]]
```

```
[1] "cranatic: Update: Bchron, BoolNet, caribou, CePa, fmri, HTScluster, i
sa2, lessR, lgcp, spatstat. http://t.co/skyrajMA #rstats"
```

```
[[2]]
```

```
[1] "cranatic: New: extrafont, extrafontdb, Rttf2pt1, x12GUI. http://t.co/
skyrajMA #rstats"
```

```
[[3]]
```

```
[1] "cranatic: Update: drc, RcmdrPlugin.survival, rrcov, spls. http://t.c
o/eEoXNifB #rstats"
```

```
[[4]]
```

```
[1] "cranatic: New: hzar. http://t.co/eEoXNifB #rstats"
```

```
[[5]]
```

```
[1] "cranatic: Update: directlabels, forensim, gdata, gWidgetstcltk, gWidg
etsWWW, harvestr, rrlda, Rz, Sim.DiffProc, ... http://t.co/9JEe7K91 #rstat
s"
```

In [30]:

```
cran_tweets_large <- userTimeline('cranatic', n=100)
length(cran_tweets_large)
```

```
100
```

Trends

In [31]:

```
avail_trends = availableTrendLocations()
head(avail_trends)
```

name	country	woeid
Worldwide		1
Winnipeg	Canada	2972
Ottawa	Canada	3369
Quebec	Canada	3444
Montreal	Canada	3534
Toronto	Canada	4118

In [32]:

```
close_trends = closestTrendLocations(-42.8, -71.1)
head(close_trends)
```

name	country	woeid
Concepcion	Chile	349860

In [33]:

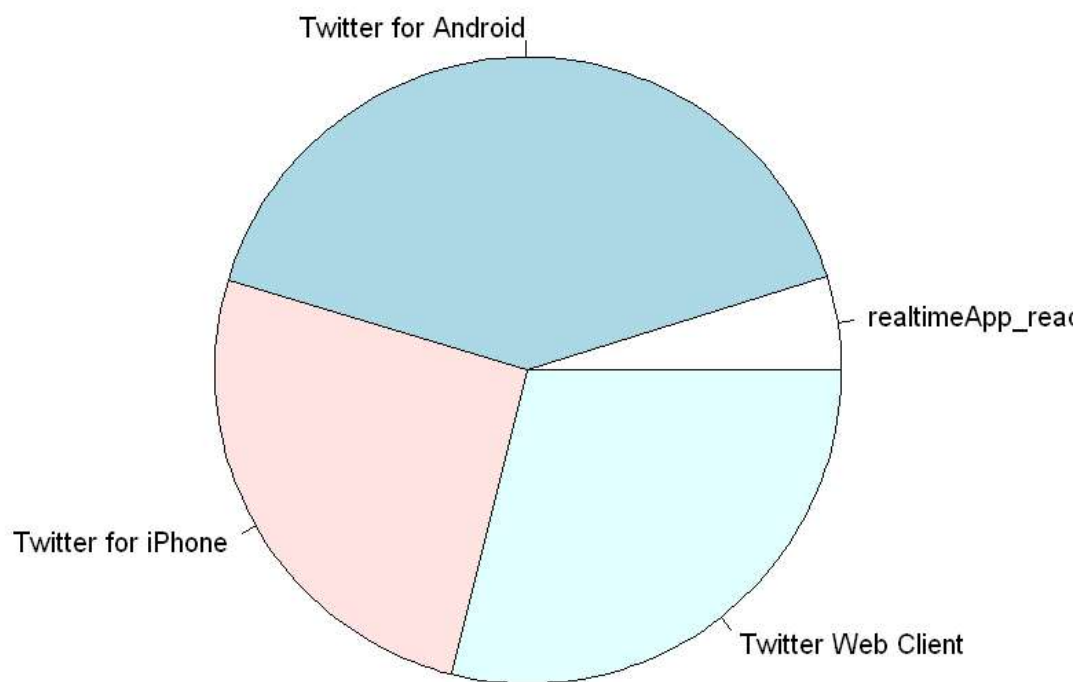
```
trends = getTrends(2367105)
head(trends)
```

name	url	query	woeid
#TrumpRally	http://twitter.com/search?q=%23TrumpRally	%23TrumpRally	2367
#NACA17	http://twitter.com/search?q=%23NACA17	%23NACA17	2367
#AAASmtg	http://twitter.com/search?q=%23AAASmtg	%23AAASmtg	2367
#ZGWL	http://twitter.com/search?q=%23ZGWL	%23ZGWL	2367
#NationalDrinkWineDay	http://twitter.com/search?q=%23NationalDrinkWineDay	%23NationalDrinkWineDay	2367
Clyde Stubblefield	http://twitter.com/search?q=%22Clyde+Stubblefield%22	%22Clyde+Stubblefield%22	2367

A simple example

In [34]:

```
r_tweets <- searchTwitter("#rstats", n=300)
sources <- sapply(r_tweets, function(x) x$statusSource())
sources <- gsub("</a>", "", sources)
sources <- strsplit(sources, ">")
sources <- sapply(sources, function(x) ifelse(length(x) > 1, x[2], x[1]))
source_table = table(sources)
pie(source_table[source_table > 10])
```



Examples Of twitterR In The Wild