# Getting Twitter Data

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# Requirements

- Request a Twitter API key (see link)

- Install package 'twitteR'

# Overview

- Access Twitter with R (twitteR)

- Query Twitter search with a handle

- Look at the returned data

# Access Twitter and Run Query

- Use `setup_twitter_oauth` to initiate access.

- Change n. API can only get tweets in the last 7 days (only 5 are available).

**1. Authenticate with access keys.**

```r
# I have my access tokens stored in a csv for 'easy access'
twitterAccess <- read.csv('~/Dropbox/twitterAcess.csv')

# authenticate
with(twitterAccess, setup_twitter_oauth(as.character(APIKey),
                                        as.character(APISecretKey),
                                        as.character(AccessToken),
                                        as.character(AccessTokenSecret)))
```

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

**2. Query twitter search for the author of the linked example.**

- `searchTwitter` returns a data structure called 'twList'
- `twListToDF` converts a twList to a data.frame

```r
# query the twitter handle of author of linked example
# get 6 tweets (n = 6)
tw = searchTwitter('@GalarnykMichael', n = 5)
d = twListToDF(tw)
```

@GalarnykMichael authored the example found at the link in the title page.

# What Data Came Back?

### 3. Look at the available fields from the query

```
# get names of data.frame `d`
names(d)
```

```
 [1] "text"        "favorited"    "favoriteCount" "replyToSN"
 [5] "created"     "truncated"    "replyToSID"    "id"
 [9] "replyToUID"  "statusSource" "screenName"    "retweetCount"
[13] "isRetweet"   "retweeted"    "longitude"     "latitude"
```

### 4. Get the users and associated text

```
# Note: paste auto iterates long the sequences (don't need a for loop)
print(paste(d$screenName, d$text, sep = ': '))
```

```
[1] "mangguiyufumu: How to Build a Data Science Portfolio by @GalarnykMichael https://t.co/8hrHtmSP9p"

[2] "HanningWamala: How to Build a Data Science Portfolio by @GalarnykMichael https://t.co/gKcV1zRvh5"

[3] "Shibbir002: How to Build a Data Science Portfolio by @GalarnykMichael https://t.co/jFsXQlhUWV"

[4] "javierflip: RT @GalarnykMichael: This is so cool!!! https://t.co/u8gbOyMlRh"

[5] "daveg1510: "Take note of all the interview questions you got asked, especially those questions you failed to
answer. You can f… https://t.co/9k5BTwPuvb"
[6] "andypiper: @Aakash_Aich @GalarnykMichael You need to find a search term that appears within the past 7 days
if you are using the standard search API."
```