

# Package ‘instaR’

August 17, 2016

**Title** Access to Instagram API via R

**Description** Provides an interface to the Instagram API <<https://instagram.com/developer/>>, which allows R users to download public pictures filtered by hashtag, popularity, user or location, and to access public users' profile data.

**Version** 0.2.4

**Date** 2016-08-16

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**URL** <https://github.com/pablobarbera/instaR>

**BugReports** <https://github.com/pablobarbera/instaR/issues>

**Depends** R (>= 2.12.0), httr, jsonlite

**License** GPL-2

**Collate** 'getFollowers.R' 'getFollows.R' 'getUser.R' 'getUserMedia.R'  
'instaOAuth.R' 'searchInstagram.R' 'utils.R' 'getTagCount.R'  
'getComments.R' 'getLikes.R' 'getPopular.R' 'getLocation.R'

**RoxygenNote** 5.0.1

**NeedsCompilation** no

**Repository** CRAN

**Date/Publication** 2016-08-17 10:40:32

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getComments	<i>Returns up to 150 comments on an instagram post</i>
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## Description

getComments retrieves up to 150 recent comments on an instagram post, including text, author and date.

## Usage

```
getComments(id, token, verbose = TRUE)
```

## Arguments

id	String, id of instagram post.
token	An OAuth token created with instaOAuth.
verbose	If TRUE (default), outputs details about progress of function on the console.

## Details

**IMPORTANT:** After June 1st, 2016 only applications that have passed permission review by Instagram will be allowed to access data for users other than the authenticated user. See <https://www.instagram.com/developer/review/> for more information.

## Author(s)

Pablo Barbera <pablo.barbera@nyu.edu>

## Examples

```
## Not run:
## See examples for instaOAuth to know how token was created.
## Downloading list of followers of @senjohnmccain
load("my_oauth")
obama <- getUserMedia( username="barackobama", token=my_oauth )
comments <- getComments( obama$id[1], token=my_oauth )

## End(Not run)
```

---

getFollowers	<i>Get the list of users this user is followed by.</i>
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---

### Description

getFollowers retrieves the list of users that follow a given user, as well as basic information about all of them.

### Usage

```
getFollowers(username, token, userid = NULL, verbose = TRUE)
```

### Arguments

username	String, screen name of user.
token	An OAuth token created with instaOAuth.
userid	Numeric ID of user.
verbose	If TRUE (default), outputs details about progress of function on the console.

### Details

IMPORTANT: After June 1st, 2016 only applications that have passed permission review by Instagram will be allowed to access data for users other than the authenticated user. See <https://www.instagram.com/developer/review/> for more information.

### Author(s)

Pablo Barbera <pablo.barbera@nyu.edu>

### Examples

```
## Not run:  
## See examples for instaOAuth to know how token was created.  
## Downloading list of followers of @senjohnmccain  
load("my_oauth")  
mccain <- getFollowers( username="senjohnmccain", token=my_oauth )  
  
## End(Not run)
```

---

getFollows	<i>Get the list of users a user follows.</i>
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### Description

getFollows retrieves the list of users that a given user follows, as well as basic information about all of them.

### Usage

```
getFollows(username, token, userid = NULL, verbose = TRUE)
```

### Arguments

username	String, screen name of user.
token	An OAuth token created with instaOAuth.
userid	Numeric ID of user.
verbose	If TRUE (default), outputs details about progress of function on the console.

### Details

IMPORTANT: After June 1st, 2016 only applications that have passed permission review by Instagram will be allowed to access data for users other than the authenticated user. See <https://www.instagram.com/developer/review/> for more information.

### Author(s)

Pablo Barbera <pablo.barbera@nyu.edu>

### Examples

```
## Not run:  
## See examples for instaOAuth to know how token was created.  
## Downloading list of users that @senjohnmccain follows  
load("my_oauth")  
mccain <- getFollows( username="senjohnmccain", token=my_oauth )  
  
## End(Not run)
```

---

getLikes	<i>Get the list of users who liked a photo.</i>
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---

### Description

getLikes retrieves the list of users who liked a photo.

### Usage

```
getLikes(id, token, verbose = TRUE)
```

### Arguments

id	Numeric ID of photo.
token	An OAuth token created with instaOAuth.
verbose	If TRUE (default), outputs details about progress of function on the console.

### Details

IMPORTANT: After June 1st, 2016 only applications that have passed permission review by Instagram will be allowed to access data for users other than the authenticated user. See <https://www.instagram.com/developer/review/> for more information.

### Author(s)

Tiago Dantas <t.mendesdantas@gmail.com>

### Examples

```
## Not run:  
## See examples for instaOAuth to know how token was created.  
## Downloading list of users who liked @barackobama's most recent photo  
load("my_oauth")  
obama <- getUserMedia( username="barackobama", token=my_oauth, n=1)  
likes <- getLikes(obama$id[1], token=my_oauth)  
  
## End(Not run)
```

---

`getLocation`*Get basic information about a location using a location ID*

---

**Description**

`getLocation` retrieves location information

**Usage**

```
getLocation(location_id, token)
```

**Arguments**

`location_id`     numeric, location id.  
`token`            An OAuth token created with `instaOAuth`.

**Author(s)**

Jonne Guyt <j.y.guyt@uva.nl>

**Examples**

```
## Not run:  
## See examples for instaOAuth to know how token was created.  
## Capturing information about a location  
load("my_oauth")  
loc_id_info <- getLocation( location_id=423423, token=my_oauth)  
  
## End(Not run)
```

---

`getPopular`*Returns 24 popular instagram posts information*

---

**Description**

`getPopular` retrieves up to 24 popular instagram posts

**Usage**

```
getPopular(token, verbose = TRUE)
```

**Arguments**

`token`            An OAuth token created with `instaOAuth`.  
`verbose`         If TRUE (default), outputs details about progress of function on the console.

## Details

IMPORTANT: After June 1st, 2016 only applications that have passed permission review by Instagram will be allowed to access data for users other than the authenticated user. See <https://www.instagram.com/developer/review/> for more information.

## Author(s)

Jonne Guyt <j.y.guyt@uva.nl>

## Examples

```
## Not run:  
## See examples for instaOAuth to know how token was created.  
## Downloading list of popular instagram posts  
load("my_oauth")  
popular_posts <- getPopular(token=my_oauth )  
  
## End(Not run)
```

---

getTagCount

*Get number of times a tag has been used*

---

## Description

getTagCount retrieves a count of the number of times a tag has been used in comments to a picture or video.

## Usage

```
getTagCount(tag, token)
```

## Arguments

tag                   Hashtag used to filter media.  
token                  An OAuth token created with instaOAuth.

## Author(s)

Pablo Barbera <pablo.barbera@nyu.edu>

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getUser	<i>Get basic information about a user</i>
---------	---

---

## Description

getUser retrieves public information about Instagram user

## Usage

```
getUser(username, token, userid = NULL)
```

## Arguments

username	String, screen name of user.
token	An OAuth token created with instaOAuth.
userid	Numeric ID of user.

## Details

IMPORTANT: After June 1st, 2016 only applications that have passed permission review by Instagram will be allowed to access data for users other than the authenticated user. See <https://www.instagram.com/developer/review/> for more information.

## Author(s)

Pablo Barbera <pablo.barbera@nyu.edu>

## Examples

```
## Not run:  
## See examples for instaOAuth to know how token was created.  
## Capturing information about @barackobama  
load("my_oauth")  
obama <- getUser( username="barackobama", token=my_oauth,)  
  
## End(Not run)
```



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getUserMedia	<i>Extract recent media published by a user.</i>
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---

### Description

getUserMedia retrieves public media from a given user and, optionally, downloads recent pictures to a specified folder.

IMPORTANT: After June 1st, 2016 only applications that have passed permission review by Instagram will be allowed to access data for users other than the authenticated user. See <https://www.instagram.com/developer/review/> for more information.

### Usage

```
getUserMedia(username, token, n = 30, folder = NULL, userid = NULL,
             verbose = TRUE)
```

### Arguments

username	String, screen name of user.
token	An OAuth token created with instaOAuth.
n	Maximum number of media to return. Currently it is only possible to download the 20 most recent pictures or videos on the authenticated user's profile, unless Instagram has approved the application.
folder	If different than NULL, will download all pictures to this folder.
userid	Numeric ID of user.
verbose	If TRUE (default), outputs details about progress of function on the console.

### Author(s)

Pablo Barbera <pablo.barbera@nyu.edu>

### Examples

```
## Not run:
## See examples for instaOAuth to know how token was created.
## Capturing information about 50 most recent pictures by @barackobama
load("my_oauth")
obama <- getUserMedia( username="barackobama", token=my_oauth, n=50, folder="barackobama")

## End(Not run)
```

---

instaOAuth                      *Create OAuth token to Instagram R session*

---

### Description

instaOAuth creates an OAuth access token that enables R to make authenticated calls to the Instagram API. The token can be saved as a file in disk to be re-used in future sessions. This function relies on the httr package to create the OAuth token, and is a simplified version of one of its examples.

### Usage

```
instaOAuth(app_id, app_secret, scope = c("basic", "public_content"))
```

### Arguments

app_id	numeric, Client ID of application to be used to create OAuth token. Available at <a href="http://instagram.com/developer">http://instagram.com/developer</a>
app_secret	string, Client Secret of application to be used to create OAuth token. Available at <a href="http://instagram.com/developer">http://instagram.com/developer</a> .
scope	string, specifies scope of access to the authenticated user data. See <a href="http://instagram.com/developer/authentication/#scope">http://instagram.com/developer/authentication/#scope</a> for available options.

### Details

To obtain your app\_id and app\_secret, do the following steps. First, go to <http://instagram.com/developer/> and register your application with any name. Then, run the instaOAuth function with your "Client ID" and "Client Secret" as arguments. It will return a URL, which you will need to paste into the field "OAuth redirect\_uri" in your application settings on Instagram. After changing it, press Enter in R. A new browser window will open and sign the token. If everything works well, you will get a message that says you can return to R.

### Author(s)

Pablo Barbera <pablo.barbera@nyu.edu>

### See Also

[searchInstagram](#)

### Examples

```
## Not run:
## an example of an authenticated request after creating the OAuth token
## where app_id and app_secret are fictitious, and token is saved for
## future sessions
my_oauth <- instaOAuth(app_id="123456789", app_secret="1A2B3C4D")
save(my_oauth, file="my_oauth")
```

```
load("my_oauth")
obama <- searchInstagram(tag="obama", token=my_oauth)

## End(Not run)
```

---

searchInstagram	<i>Search public media that mention a specific hashtag, or that were sent from a given area</i>
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---

### Description

searchInstagram retrieves public pictures and video whose caption mentions a given hashtag, or that were sent within a given area, delimited by a set of coordinates and a radius. It returns a data frame with information about each picture or video, and optionally will download all pictures to a specific folder

### Usage

```
searchInstagram(tag = NULL, token, n = 100, lat = NULL, lng = NULL,
  distance = NULL, folder = NULL, mindate = NULL, maxdate = NULL,
  verbose = TRUE, sleep = 0)
```

### Arguments

tag	Hashtag used to filter media. It is only possible for a single hashtag.
token	An OAuth token created with instaOAuth.
n	Maximum number of media to return.
lat	Latitude of the center search coordinate
lng	Longitude of the center search coordinate
distance	Default is 1km (distance=1000), max distance is 5km.
folder	If different than NULL, will download all pictures to this folder.
mindate	Minimum date for search period
maxdate	Maximum date for search period
verbose	If TRUE (default), outputs details about progress of function on the console.
sleep	Number of seconds between API calls (default is 0).

### Details

It is only possible to apply one filter at a time: either search by hashtag OR search by coordinates.

The mindate and maxdata search parameters only work when searching by location, not when searching by tag.

**IMPORTANT:** After June 1st, 2016 only applications that have passed permission review by Instagram will be allowed to access this API endpoint. See <https://www.instagram.com/developer/review/> for more information.

**Author(s)**

Pablo Barbera <pablo.barbera@nyu.edu>

**See Also**

[instaOAuth](#)

**Examples**

```
## Not run:
## See examples for instaOAuth to know how token was created.
## Searching and downloading 100 public media that mention #obama
load("my_oauth")
obama <- searchInstagram( tag="obama", token=my_oauth, n=100, folder="obama")
## Searching and downloading pictures sent from Times Square with a minimum date
## of 2013-12-31 and a maximum date of 2014-01-01
tsq <- searchInstagram( lat=40.7577, lng=-73.9857, distance=500,
  token=my_oauth, n=500, folder="timesquare",
  mindate="2014-12-31", maxdate="2014-01-01")

## End(Not run)
```

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