Package ‘instaR’

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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.

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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'

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R topics documented:

getComments ........................................... 2
getFollowers .......................................... 3
getFollows ........................................... 4
getLikes .............................................. 5
getLocation ......................................... 6
getPopular ........................................... 6
getTagCount .......................................... 7
getUser .............................................. 8
getComments

Returns up to 150 comments on an Instagram post.

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

Get the list of users this user is followed by.

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

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

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

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>location_id</td>
<td>numeric, location id.</td>
</tr>
<tr>
<td>token</td>
<td>An OAuth token created with instaOAuth.</td>
</tr>
</tbody>
</table>

Author(s)

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

Examples

```r
## 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

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>token</td>
<td>An OAuth token created with instaOAuth.</td>
</tr>
<tr>
<td>verbose</td>
<td>If TRUE (default), outputs details about progress of function on the console.</td>
</tr>
</tbody>
</table>
**getTagCount**

**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**

```r
## 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**

```r
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>
**getDescription**

Get basic information about a user

**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/](https://www.instagram.com/developer/review/) for more information.

**Author(s)**

Pablo Barbera <pablo.barbera@nyu.edu>

**Examples**

```r
## 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)
```
getUserMedia

**Extract recent media published by a user.**

**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**

```r
## 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 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

```r
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 [http://instagram.com/developer](http://instagram.com/developer)
- `app_secret` string, Client Secret of application to be used to create OAuth token. Available at [http://instagram.com/developer](http://instagram.com/developer).
- `scope` string, specifies scope of access to the authenticated user data. See [http://instagram.com/developer/authentication/#scope](http://instagram.com/developer/authentication/#scope) for available options.

Details

To obtain your `app_id` and `app_secret`, do the following steps. First, go to [http://instagram.com/developer/](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

```r
## 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")
```
searchInstagram

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

## End(Not run)

searchInstagram  Search public media that mention a specific hashtag, or that were sent from a given area

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 = NULL, 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 maxdate 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

```r
## 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
youtu <- 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)
```
Index

getComments, 2
getFollowers, 3
getFollows, 4
getLikes, 5
getLocation, 6
getPopular, 6
getTagCount, 7
getUser, 8
getUserMedia, 9

instaOAuth, 10, 12

searchInstagram, 10, 11