

Package: DSpoty (via r-universe)

September 3, 2024

Type Package

Date 2020-01-07

Title Get 'Spotify' API Multiple Information

Version 0.1.0

Author Alberto Almuña <albertogonzalezalmuinha@gmail.com>

Maintainer Alberto Almuña <albertogonzalezalmuinha@gmail.com>

Description 'DSpoty' R package allows you to retrieve 'Spotify' API

Information such as artists, albums, tracks, features tracks,
recommendations or related artists. This package allows you to
search all the information by name and also includes a distance
based algorithm to find similar songs. More information:

<<https://developer.spotify.com/documentation/web-api/>>.

License GPL-3

Encoding UTF-8

LazyData true

RoxygenNote 6.1.1

URL <https://github.com/AlbertoAlmuinha/DSpoty>

Imports dplyr, purrr, httr, stringr

Suggests knitr, rmarkdown

VignetteBuilder knitr

Repository <https://albertoalmuinha.r-universe.dev>

RemoteUrl <https://github.com/AlbertoAlmuinha/dspoty>

RemoteRef HEAD

RemoteSha 6ed06cd67a4359e31375448e43c2f2c606cea335

Contents

get_album_popularity	2
get_artist	3

get_artists_by_genre	4
get_artist_albums	5
get_artist_tracks	6
get_artist_tracks_features	7
get_related_artists	8
get_several_artists	8
get_several_tracks	9
get_several_tracks_features	10
get_several_tracks_features_vectorized	11
get_spotify_access_token	11
get_spotify_item	12
get_tracks_recommendations	13
get_tracks_recommendations_by_name	14
get_track_popularity	15

Index	16
--------------	-----------

get_album_popularity *Get Album Popularity*

Description

This function returns the popularity of an album on Spotify.

Usage

```
get_album_popularity(album_uri, limit = 1, offset = 0,
access_token = DSpoty::get_spotify_access_token())
```

Arguments

album_uri	An album uri from Spotify to search for or a group of albums uris separated by a comma
limit	Integer indicating the max number of artists to return. Defaults to 1, max of 50.
offset	Integer indicating the offset of the first artist to return. Defaults to 0 (Spotify's API default value).
access_token	Spotify Web API token. Defaults to DSpoty::get_spotify_access_token()

Value

Returns an integer vector with the popularity value (0-100).

Author(s)

Alberto Almuñá

Examples

```
## Not run:  
get_album_popularity('1T2uKSyUf7DBWOABtsmYLM')  
  
## End(Not run)
```

get_artist

Get Artist

Description

This function searches spotify artists by name

Usage

```
get_artist(artist_name, offset = "0", limit = "1",  
          access_token = DSpoty::get_spotify_access_token())
```

Arguments

artist_name	String of artist name
offset	Integer indicating the offset of the first artist to return. Defaults to 0 (Spotify's API default value).
limit	Integer indicating the max number of artists to return. Defaults to 1, max of 50.
access_token	Spotify Web API token. Defaults to DSpoty::get_spotify_access_token()

Value

Returns a data frame with the artist's information

Author(s)

Alberto Almui?a

Examples

```
## Not run:  
get_artist('Arctic Monkeys')  
  
## End(Not run)
```

`get_artists_by_genre` *Get Artists by Genre*

Description

Function to search artists by genre

Usage

```
get_artists_by_genre(genre = is.character(), offset = "0",
                      limit = "10", year = 2019,
                      access_token = DSpoty::get_spotify_access_token())
```

Arguments

<code>genre</code>	String of genre name to search for
<code>offset</code>	Integer indicating the offset of the first artist to return. Defaults to 0 (Spotify's API default value).
<code>limit</code>	Integer indicating the max number of artists to return. Defaults to 10, max of 50.
<code>year</code>	Year to search for
<code>access_token</code>	Spotify Web API token. Defaults to DSpoty::get_spotify_access_token()

Value

Returns a data frame with the artist's information of a determined genre

Author(s)

Alberto Almuñá

Examples

```
## Not run:
rock_artists <- get_artists_by_genre("rock")

## End(Not run)
```

get_artist_albums *Get Artist Albums*

Description

This function returns an artist's discography on Spotify.

Usage

```
get_artist_albums(artist_name, album_type = "album", limit = 50,  
                  offset = 0, access_token = DSpoty::get_spotify_access_token())
```

Arguments

artist_name	String of artist name.
album_type	Character vector of album types to include. Valid values are "album", "single", "appears_on", and "compilation". Defaults to "album".
limit	Integer indicating the max number of artists to return. Defaults to 50, max of 50.
offset	Integer indicating the offset of the first artist to return. Defaults to 0 (Spotify's API default value).
access_token	Spotify Web API token. Defaults to DSpoty::get_spotify_access_token()

Value

Returns a data frame with all the albums of the selected artist

Author(s)

Alberto Almuñá

Examples

```
## Not run:  
albums <- get_artist_albums('radiohead')  
  
## End(Not run)
```

`get_artist_tracks` *Get Artist Tracks*

Description

This function returns all the tracks of an artist.

Usage

```
get_artist_tracks(artist_name, limit = 50, offset = 0,
                  access_token = DSpoty::get_spotify_access_token())
```

Arguments

<code>artist_name</code>	String of artist name.
<code>limit</code>	Integer indicating the max number of artists to return. Defaults to 50, max of 50.
<code>offset</code>	Integer indicating the offset of the first artist to return. Defaults to 0 (Spotify's API default value).
<code>access_token</code>	Spotify Web API token. Defaults to DSpoty::get_spotify_access_token().

Value

Returns a data frame with all the tracks of the selected artist.

Author(s)

Alberto Almuñ?a

Examples

```
## Not run:
tracks <- get_artist_tracks('Shakira')

## End(Not run)
```

get_artist_tracks_features
Get Artist Tracks Features

Description

This function returns audio features for all the tracks of a given artist

Usage

```
get_artist_tracks_features(artist_name, limit = 100, offset = 0,  
                           access_token = DSpoty::get_spotify_access_token())
```

Arguments

artist_name	String of an artist name
limit	Integer indicating the max number of artists to return. Defaults to 100, max of 100.
offset	Integer indicating the offset of the first artist to return. Defaults to 0 (Spotify's API default value).
access_token	Spotify Web API token. Defaults to DSpoty::get_spotify_access_token()

Value

Returns a data frame with the tracks features for all the tracks of an artist

Author(s)

Alberto Almuñá

Examples

```
## Not run:  
tracks_features<-get_artist_tracks_features('Shakira')  
  
## End(Not run)
```

`get_related_artists` *Get Related Artists*

Description

This function returns the most similar artists of the selected artist.

Usage

```
get_related_artists(artist_uri,
access_token = DSpoty::get_spotify_access_token())
```

Arguments

<code>artist_uri</code>	Artist ID.
<code>access_token</code>	Spotify Web API token. Defaults to DSpoty::get_spotify_access_token()

Value

Returns a data frame with the related artist information.

Author(s)

Alberto Almuñáa

Examples

```
## Not run:
get_related_artists('7Ln801US6He07XvHI8qqHH')

## End(Not run)
```

`get_several_artists` *Get Several Artists*

Description

This function allows you to load several artists in a faster way.

Usage

```
get_several_artists(artist_ids_df, ids_label = 1,
access_token = DSpoty::get_spotify_access_token())
```

Arguments

- artist_ids_df Dataframe containing the artists ids in one of the columns.
- ids_label Integer indicating the column number of the artists ids. Default to 1.
- access_token Spotify Web API token. Defaults to DSpoty::get_spotify_access_token()

Value

Returns a data frame with all the artist's information

Author(s)

Alberto Almuñeca

Examples

```
## Not run:  
get_several_artists(df,1)  
  
## End(Not run)
```

get_several_tracks *Get Several Tracks*

Description

This function allows you to load several tracks in a faster way.

Usage

```
get_several_tracks(tracks_id_df, ids_label = 1,  
access_token = DSpoty::get_spotify_access_token())
```

Arguments

- tracks_id_df Dataframe containing the tracks ids in one of the columns.
- ids_label Integer indicating the column number of the tracks ids. Default to 1.
- access_token Spotify Web API token. Defaults to DSpoty::get_spotify_access_token()

Value

Returns a data frame with all the artist's information

Author(s)

Alberto Almuñeca

Examples

```
## Not run:
get_several_tracks(df,1)

## End(Not run)
```

get_several_tracks_features
Get Several Tracks Features

Description

This function allows you to load several tracks features in a faster way.

Usage

```
get_several_tracks_features(tracks_df,
  access_token = DSpoty::get_spotify_access_token())
```

Arguments

<code>tracks_df</code>	Dataframe containing the tracks ids in the first column.
<code>access_token</code>	Spotify Web API token. Defaults to DSpoty::get_spotify_access_token().

Value

Returns a data frame with all the tracks_features for the selected tracks uris.

Author(s)

Alberto Almuñá

Examples

```
## Not run:
get_several_tracks_features(df)

## End(Not run)
```

```
get_several_tracks_features_vectorized
    Get Several Tracks Features Vectorized
```

Description

This function allows you to load several tracks features really fast specially with a large amount of tracks. Improves the performance in comparision with get_several_tracks_features.

Usage

```
get_several_tracks_features_vectorized(tracks_df,
                                         access_token = DSpoty::get_spotify_access_token())
```

Arguments

`tracks_df` Dataframe containing the tracks ids in the first column.
`access_token` Spotify Web API token. Defaults to `DSpoty::get_spotify_access_token()`.

Value

Returns a data frame with all the tracks_features for the selected tracks uris.

Author(s)

Alberto Almuñáa

Examples

```
## Not run:
get_several_tracks_features_vectorized(df)

## End(Not run)
```

```
get_spotify_access_token
    Get Spotify Access Token.
```

Description

This function returns the Spotify's access token.

Usage

```
get_spotify_access_token(client_id = Sys.getenv("client_id"),
                         client_secret = Sys.getenv("client_secret"))
```

Arguments

- `client_id` String with the Spotify CLIENT_ID.
- `client_secret` String with the Spotify CLIENT_SECRET.

Value

Returns a string with de access token.

Author(s)

Alberto Almuñáa

Examples

```
## Not run:
access_token<-get_spotify_access_token(client_id = 'client_id', client_secret = 'client_secret')

## End(Not run)
```

`get_spotify_item` *Get Spotify Item***Description**

This function searches spotify item by name

Usage

```
get_spotify_item(name = NULL, type, limit = 1, offset = 0,
                 access_token = DSpoty::get_spotify_access_token(), artist = NULL,
                 album = NULL)
```

Arguments

- `name` String of item name (artist, album, track...). Default: NULL
- `type` String of the search type. Possible values are 'artist', 'album' and 'track'.
- `limit` Integer indicating the max number of artists to return. Defaults to 1, max of 50.
- `offset` Integer indicating the offset of the first artist to return. Defaults to 0 (Spotify's API default value).
- `access_token` Spotify Web API token. Defaults to DSpoty::get_spotify_access_token()
- `artist` String of album's artist name. Default: NULL
- `album` String of album name. Default: NULL

Details

You have two options to use this function: Search by parameter name or search by parameters artist + album. In this second case, type must always be 'album'.

Value

Returns a data frame with the item's information

Author(s)

Alberto Almuñá

Examples

```
## Not run:  
get_spotify_item(name = 'Arctic Monkeys', type = 'artist')  
get_spotify_item(artist = 'Leiva', album = 'Nuclear', type = 'album')  
get_spotify_item(name = 'Do I Wanna Know?', type = 'track')  
  
## End(Not run)
```

get_tracks_recommendations

Get Tracks Recommendations

Description

This function returns the recommended songs by Spotify.

Usage

```
get_tracks_recommendations(artist_uri, track_uri, limit = 10,  
                           access_token = DSpoty::get_spotify_access_token())
```

Arguments

artist_uri	Artist ID.
track_uri	Track ID.
limit	Integer indicating the max number of artists to return. Default 10.
access_token	Spotify Web API token. Defaults to DSpoty::get_spotify_access_token().

Value

Returns a data frame with the recommended artists information.

Author(s)

Alberto Almuñá

Examples

```
## Not run:
get_tracks_recommendations('7Ln80lUS6He07XvHI8qqHH', '0FgNSsaSZTvbLXUumS08LQ')

## End(Not run)
```

`get_tracks_recommendations_by_name`
Get Tracks Recommendations By Name

Description

This function returns the recommendend songs by Spotify.

Usage

```
get_tracks_recommendations_by_name(artist_name, track_name, limit = 10,
access_token = DSpoty::get_spotify_access_token())
```

Arguments

<code>artist_name</code>	Artist Name character.
<code>track_name</code>	Track Name character.
<code>limit</code>	Integer indicating the max number of artists to return. Default 10.
<code>access_token</code>	Spotify Web API token. Defaults to DSpoty::get_spotify_access_token().

Value

Returns a data frame with the recommended songs information.

Author(s)

Alberto Almua?a

Examples

```
## Not run:
get_tracks_recommendations_by_name('Arctic Monkeys', 'Do I wanna know?')

## End(Not run)
```

```
get_track_popularity  Get Track Popularity
```

Description

This function that returns the popularity of a track uri on Spotify.

Usage

```
get_track_popularity(track_uri, limit = 1, offset = 0,  
access_token = DSpoty::get_spotify_access_token())
```

Arguments

track_uri	A track uri corresponding to one track in Spotify.
limit	Integer indicating the max number of artists to return. Defaults to 1, max of 50.
offset	Integer indicating the offset of the first artist to return. Defaults to 0 (Spotify's API default value).
access_token	Spotify Web API token. Defaults to DSpoty::get_spotify_access_token().

Value

Returns an integer vector with the popularity value (0-100).

Author(s)

Alberto Almuñá

Examples

```
## Not run:  
popularity <- get_track_popularity('0FgNSsaSZTvbLXUumS08LQ')  
## End(Not run)
```

Index

```
get_album_popularity, 2
get_artist, 3
get_artist_albums, 5
get_artist_tracks, 6
get_artist_tracks_features, 7
get_artists_by_genre, 4
get_related_artists, 8
get_several_artists, 8
get_several_tracks, 9
get_several_tracks_features, 10
get_several_tracks_features_vectorized,
    11
get_spotify_access_token, 11
get_spotify_item, 12
get_track_popularity, 15
get_tracks_recommendations, 13
get_tracks_recommendations_by_name, 14
```