

---

# **ytmusicapi**

***Release 0.6.0***

**Apr 16, 2020**



---

## Contents

---

<b>1</b>	<b>Features</b>	<b>3</b>
<b>2</b>	<b>Usage Example</b>	<b>5</b>
<b>3</b>	<b>Contents</b>	<b>7</b>
3.1	Setup . . . . .	7
3.2	Usage . . . . .	8
3.3	Reference . . . . .	8
	<b>Index</b>	<b>15</b>



The purpose of this library is to automate interactions with [YouTube Music](#), such as retrieving your library content or creating large playlists.

**This project is not supported nor endorsed by Google**



# CHAPTER 1

---

## Features

---

- Browsing: get artist information and releases (songs, videos, albums, singles), get albums
- Library management: list, create, delete, and modify playlists and playlist items
- Search: Search for songs on YouTube Music
- Uploads: Upload songs, list uploaded songs and delete uploaded songs





## CHAPTER 2

---

### Usage Example

---

For a complete documentation of available functions, refer to the *Reference*

```
from ytmusicapi import YTMusic

ytmusic = YTMusic('headers_auth.json')
playlistId = ytmusic.create_playlist("test", "test description")
search_results = ytmusic.search("Oasis Wonderwall")
ytmusic.add_playlist_items(playlistId, [search_results[0]['videoId']])
```

The `tests` are also a great source of usage examples.



## 3.1 Setup

### 3.1.1 Installation

```
pip install ytmusicapi
```

### 3.1.2 Authenticated requests

To run authenticated requests you need to set up you need to copy your request headers from a POST request in your YTMusic Web Client. To do so, follow these steps:

- Open <https://music.youtube.com> in Firefox
- Go to the developer tools (Ctrl-Shift-I) and find an authenticated POST request. You can filter for /browse to easily find a suitable request.
- Copy the request headers (right click > copy > copy request headers)

Now call `YTMusic.setup()` and paste the request headers and it will create configuration file in the correct format in the current directory.

### 3.1.3 Manual file creation

Alternatively, you can paste the cookie to `headers_auth.json` below and create your own file:

```
{
  "User-Agent": "Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:72.0) Gecko/20100101 ↵
↵Firefox/72.0",
  "Accept": "*/*",
  "Accept-Language": "en-US,en;q=0.5",
```

(continues on next page)

(continued from previous page)

```
"Content-Type": "application/json",
"X-Goog-AuthUser": "0",
"x-origin": "https://music.youtube.com",
"Cookie" : "PASTE_COOKIE"
}
```

## 3.2 Usage

### 3.2.1 Unauthenticated

Unauthenticated requests for retrieving playlist content or searching:

```
from ytmusicapi import YTMusic

ytmusic = YTMusic()
```

If an endpoint requires authentication you will receive an error: Please provide authentication before using this function

### 3.2.2 Authenticated

For authenticated requests you need to set up your credentials first: [Setup](#)

After you have created the authentication JSON, you can instantiate the class:

```
from ytmusicapi import YTMusic
ytmusic = YTMusic('headers_auth.json')
```

With the `ytmusic` instance you can now perform authenticated requests:

```
playlistId = ytmusic.create_playlist("test", "test description")
search_results = ytmusic.search("Oasis Wonderwall")
ytmusic.add_playlist_items(playlistId, [search_results[0]['videoId']])
```

## 3.3 Reference

Reference for the `YTMusic` class.

**class** `ytmusicapi.YTMusic` (*auth=None*)

Allows automated interactions with YouTube Music by emulating the YouTube web client's requests. Permits both authenticated and non-authenticated requests. Authentication header data must be provided on initialization.

`YTMusic.__init__` (*auth=None*)

Create a new instance to interact with YouTube Music.

**Parameters** `auth` – Optional. Provide a string or path to file. Authentication credentials are needed to manage your library. Should be an adjusted version of *headers\_auth.json.example* in the project root. See [setup\(\)](#) for how to fill in the correct credentials. Default: A default header is used without authentication.

### 3.3.1 Setup

See also the [Setup](#) page

**classmethod** `YTMusic.setup` (*filepath=None*)

Requests browser headers from the user via command line and returns a string that can be passed to `YTMusic()`

**Parameters** `filepath` – Optional filepath to store headers to.

**Returns** configuration headers string

### 3.3.2 Search

`YTMusic.search` (*query, filter=None*)

Search YouTube music Returns up to 20 results within the provided category. By default only songs (audio-only) are returned

**Parameters**

- **query** – Query string, i.e. ‘Oasis Wonderwall’
- **filter** – Filter for item types. Allowed values: ‘songs’, ‘videos’, ‘albums’, ‘artists’, ‘playlists’. Default: Default search, including all types of items.

**Returns**

List of results depending on filter. `resultType` specifies the type of item (important for default search). albums, artists and playlists additionally contain a `browseId`, corresponding to `albumId`, `channelId` and `playlistId` (`browseId`=‘VL’+`playlistId`)

Example list:

```
[
  {
    'videoId': 'ZrOKjDZotkA',
    'artist': 'Oasis',
    'title': 'Wonderwall (Remastered)',
    'resultType': 'song'
  },
  {
    'videoId': 'Gvfgut8nAgw',
    'artist': 'Oasis',
    'title': 'Wonderwall',
    'resultType': 'song'
  }
]
```

### 3.3.3 Browsing

`YTMusic.get_artist` (*channelId*)

Get information about an artist and their top releases (songs, albums, singles and videos). The top lists contain pointers for getting the full list of releases. For songs/videos, pass the `browseId` to `get_playlist_items()`. For albums/singles, pass `browseId` and `params` to `get_artist_albums()`.

**Parameters** `channelId` – channel id of the artist

**Returns**

Dictionary with requested information. Example:

```
{
  "name": "Oasis", "description": "Oasis were ...", "views": "1,838,795,605", "songs":
  {
    "browseId": "VLPLMpM3Z0118S42R1npOhcjoakLIv1aqnS1", "results": [
      { "videoId": "ZrOKjDZOtkA", "title": "Wonderwall (Remastered)",
        "artist": "Oasis", "album": "(What's The Story) Morning Glory? (Re-
        mastered)"
      }
    ]
  }, "albums": {
    "results": [
      { "title": "Familiar To Millions", "year": "2018", "browseId":
        "MPREb_AYetWMZunqA"
      }
    ], "browseId": "UCmMUZbaYdNH0bEd1PAIAqsA"
  }, "singles": {
    "results": [
      { "title": "Stand By Me (Mustique Demo)", "year": "2016", "browseId":
        "MPREb_7MPKLhibN5G"
      }
    ], "browseId": "UCmMUZbaYdNH0bEd1PAIAqsA"
  }, "videos": {
    "results": [
      { "title": "Wonderwall", "views": "358M", "videoId": "bx1Bh8ZvH84",
        "playlistId": "PLMP3Z0118S5xuNckw1HUcj1D021AnMEB"
      }
    ], "browseId": "VLPLMpM3Z0118S5xuNckw1HUcj1D021AnMEB"
  }
}
```

`YTMusic.get_artist_albums(channelId, params)`

Get the full list of an artist's albums or singles

#### Parameters

- **channelId** – channel Id of the artist
- **params** – params obtained by `get_artist()`

#### Returns

List of albums or singles

Example:

```
{
  "browseId": "MPREb_0rtvKhqeCY0", "artist": "Armin van Buuren", "title": "This
  I Vow (feat. Mila Josef)", "type": "EP", "year": "2020"
}
```

`YTMusic.get_album(browseId)`

Get information and tracks of an album

**Parameters** `browseId` – browseId of the album, for example returned by `search()`

**Returns**

Dictionary with title, description, artist and tracks.

Each track is in the following format:

```
{
  "index": "1",
  "title": "WIEE (feat. Mesto)",
  "artists": "Martin Garrix",
  "videoId": "8xMNeXI9wxI",
  "lengthMs": "203406"
}
```

### 3.3.4 Library

`YTMusic.get_liked_songs(limit=1000)`

Gets playlist items for the ‘Liked Songs’ playlist

**Parameters** `limit` – How many items to return. Default: 1000

**Returns** List of `playlistItem` dictionaries. See `get_playlist_items()`

`YTMusic.get_history()`

Gets your play history in reverse chronological order

**Returns** List of `playlistItems`, see `get_playlist_items()` The additional property ‘played’ indicates when the `playlistItem` was played

`YTMusic.rate_song(videoId, rating='INDIFFERENT')`

Rates a song (“thumbs up”/“thumbs down” interactions on YouTube Music)

**Parameters**

- `videoId` – Video id
- `rating` – One of ‘LIKE’, ‘DISLIKE’, ‘INDIFFERENT’

‘INDIFFERENT’ removes the previous rating and assigns no rating

### 3.3.5 Playlists

`YTMusic.get_playlists()`

Retrieves the content of the ‘Library’ page

**Returns** List of owned playlists.

Each item is in the following format:

```
{
  'playlistId': 'PLQwVIlKxHM6rz0fDJVv_0U1XGEWf-bFys',
  'title': 'Playlist title'
}
```

`YTMusic.get_playlist_items (playlistId, limit=1000)`

Returns a list of playlist items

**Parameters**

- **playlistId** – Playlist id
- **limit** – How many songs to return. Default: 1000

**Returns** List of playlistItem dictionaries

Each item is in the following format:

```
{
  'videoId': 'PLQwVIlKxHM6rz0fDJVv_0U1XGEWf-bFys',
  'artist': 'Artist',
  'title': 'Song Title',
  'album': None,
  'setVideoId': '56B44F6D10557CC6'
}
```

The setVideoId is the unique id of this playlist item and needed for moving/removing playlist items

`YTMusic.create_playlist (title, description, privacy_status='PRIVATE')`

Creates a new empty playlist and returns its id.

**Parameters**

- **title** – Playlist title
- **description** – Playlist description
- **privacy\_status** – Playlists can be ‘PUBLIC’, ‘PRIVATE’, or ‘UNLISTED’. Default: ‘PRIVATE’

**Returns** ID of the YouTube playlist

`YTMusic.edit_playlist (playlistId, title=None, description=None, privacyStatus=None)`

Edit title, description or privacyStatus of a playlist.

**Parameters**

- **playlistId** – Playlist id
- **title** – Optional. New title for the playlist
- **description** – Optional. New description for the playlist
- **privacyStatus** – Optional. New privacy status for the playlist

**Returns** Status String or full response

`YTMusic.delete_playlist (playlistId)`

Delete a playlist.

**Parameters** **playlistId** – Playlist id



**Returns** Status String or full response

`YTMusic.add_playlist_items(playlistId, videoIds)`

Add songs to an existing playlist

**Parameters**

- **playlistId** – Playlist id
- **videoIds** – List of Video ids

**Returns** Status String or full response

`YTMusic.remove_playlist_items(playlistId, videos)`

Remove songs from an existing playlist

**Parameters**

- **playlistId** – Playlist id
- **videos** – List of PlaylistItems, see `get_playlist_items()`. Must contain videoId and setVideoId

**Returns** Status String or full response

### 3.3.6 Uploads

`YTMusic.get_uploaded_songs(limit=25)`

Returns a list of uploaded songs

**Parameters** **limit** – How many songs to return. Default: 25

**Returns** List of uploaded songs.

Each item is in the following format:

```
{
  "entityId": "t_po_CICr2crg7OWpchDpjPjrBA",
  "videoId": "Uise6RPKoek",
  "artist": "Coldplay",
  "title": "A Sky Full Of Stars",
  "album": "Ghost Stories"
}
```

`YTMusic.upload_song(filepath)`

Uploads a song to YouTube Music

**Parameters** **filepath** – Path to the music file (mp3, m4a, wma, flac or ogg)

**Returns** Status String or full response

`YTMusic.delete_uploaded_song(uploaded_song)`

Deletes a previously uploaded song

**Parameters** **uploaded\_song** – The uploaded song to delete, e.g. `get_uploaded_songs()`

**Returns** Status String or error



## Symbols

`__init__()` (*ytmusicapi.YTMusic method*), 8

## A

`add_playlist_items()` (*ytmusicapi.YTMusic method*), 13

## C

`create_playlist()` (*ytmusicapi.YTMusic method*), 12

## D

`delete_playlist()` (*ytmusicapi.YTMusic method*), 12

`delete_uploaded_song()` (*ytmusicapi.YTMusic method*), 13

## E

`edit_playlist()` (*ytmusicapi.YTMusic method*), 12

## G

`get_album()` (*ytmusicapi.YTMusic method*), 11

`get_artist()` (*ytmusicapi.YTMusic method*), 9

`get_artist_albums()` (*ytmusicapi.YTMusic method*), 10

`get_history()` (*ytmusicapi.YTMusic method*), 11

`get_liked_songs()` (*ytmusicapi.YTMusic method*), 11

`get_playlist_items()` (*ytmusicapi.YTMusic method*), 12

`get_playlists()` (*ytmusicapi.YTMusic method*), 11

`get_uploaded_songs()` (*ytmusicapi.YTMusic method*), 13

## R

`rate_song()` (*ytmusicapi.YTMusic method*), 11

`remove_playlist_items()` (*ytmusicapi.YTMusic method*), 13

## S

`search()` (*ytmusicapi.YTMusic method*), 9

`setup()` (*ytmusicapi.YTMusic class method*), 9

## U

`upload_song()` (*ytmusicapi.YTMusic method*), 13

## Y

`YTMusic` (*class in ytmusicapi*), 8