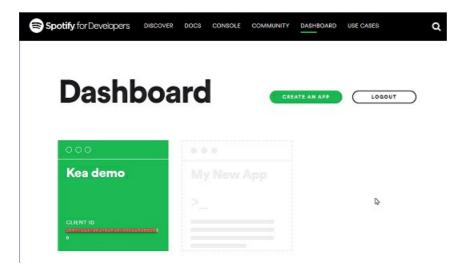
# Spotify's API & Spotipy

Spotify provides software and app developers access to some of their data about users, playlists, and artists through a Web API.

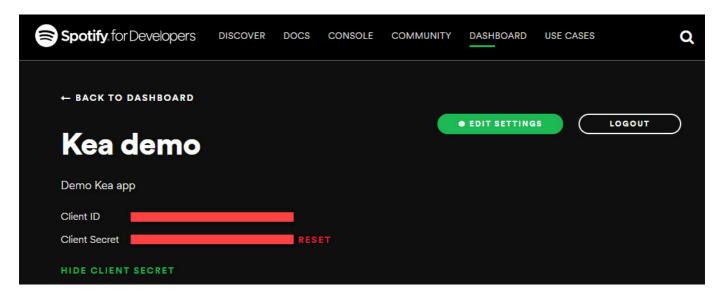
## Step 1 - Setting Up Your Spotify Developer Account

You need to create an free Spotify Developer Account to access the API.

- 1. Log In to Spotify Developer https://developer.spotify.com/dashboard/
- 2. Create a Client ID In your dashboard, click the green **Create a Client ID** button to fill out the form to create an app. Use *any* name for app.



3. Retrieve Client ID and Client Secret On your developer dashboard page, click on the new app you just created, and on the app's dashboard page you will find your Client ID just under the header name of your app. Click **Show Client Secret** to access your secondary Client ID. Copy the 2 keys



### **Spotify API Resources**

Spotify for Developers provides detailed and user friendly documentation for their Web API. After clicking the *DOCS* tab in the header of the website, click the Web API icon to access:

- Web API overview documentation
- A more in depth quick start tutorial
- Web API guides
- Links to wrapper libraries for various languages



### Step 2 - Spotipy, a Python Library for Spotify API

We are using **Spotipy**, a lightweight Python library for Spotify Web API.

- https://spotipy.readthedocs.io/en/latest
- https://github.com/tgel0/spotify-data

#### **Install Spotipy**

Run the code below in your terminal or a Jupyter Lab Notebook to install Spotipy.

```
pip install spotipy #Terminal
!pip install spotipy #Jupyter Lab Notebook
```

#### Import and Set Up Spotipy

You will need your Client ID and Secret ID that we set up in earlier step.

```
import spotipy
from spotipy.oauth2 import SpotifyClientCredentials

client_id = 'XXXXXXXXXX' #Insert your client id
client_secret = 'XXXXXXXXXX' #Insert your client secret id here

client_credentials_manager = SpotifyClientCredentials(client_id, client_secret)
sp = spotipy.Spotify(client_credentials_manager=client_credentials_manager)
```

We are using **spotipy.oauth2** to verify your developer account. We do not have access to *Spotify user information*.

## Step 3

We need the \*Spotify ID for an given artist, you can take a look in this Excel file with artist names and related Spotify ID for your favorite artist.

The Spotify ID is a 22 charters long unique code.

```
# Bruce Springsteen
#artist_uri = 'spotify:artist:3eqjTLE0HfPfh78zjh6TqT'

# Kim Larsen
artist_uri = 'spotify:artist:2ZQifdPOptKHxTaYTLh0BC'
```

### Step 4 - List albums

We are going to list all the albums fro the specifyede artist

```
results = sp.artist_albums(artist_uri, album_type='album')

albums = results['items']
while results['next']:
    results = sp.next(results)
    albums.extend(results['items'])

for album in albums:
    print(album['name'])
```

### Step 5 - Top 10 tracks

We can get the top 10 Spotify tracks for the artist.

```
results = sp.artist_top_tracks(artist_uri)

for track in results['tracks']:
    print(track['name'])
```

## Step 6 - Last 100 New Spotify releases

Lest get the last 100 Spotify releases.

```
results = sp.new_releases()

while results:
    albums = results['albums']
    for i, item in enumerate(albums['items']):
        print(albums['offset'] + i, item['name'])

if albums['next']:
    results = sp.next(albums)
else:
    results = None
```

If you have a Spotify account you can get your own playlist and so on.

Take a look in the documentation.