



MUSIC DATA REPORTER

Data Acquisition and Integration
01219335

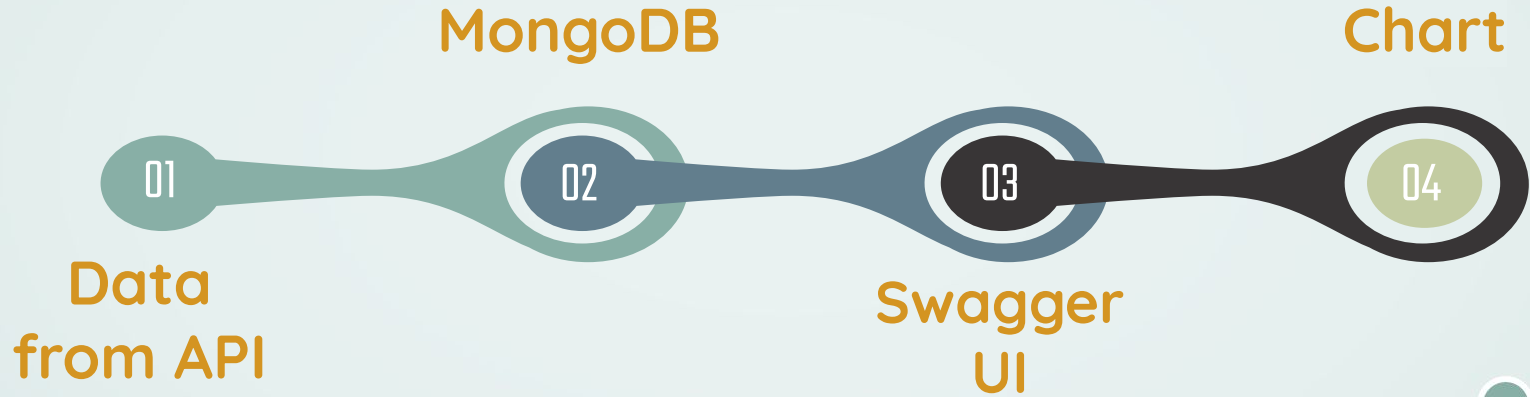


Project Overview



- We want to know the information of favorite artists and their top track such as release date and available countries.
- So, we provide our API to report various information about music. It can also be used to view the artist's popularity at a certain moment of time, showing their fans amount, as well as checking if the song is available for stream in that country or not.

Project Architecture





01

02

Data Sources and Database



Data Sources

S

Shazam

Top 5 tracks of the artist

B

Billboard

Top 10 artist since
26 September - 24 October

D

Deezer

Number of fans and albums,
Release date and available counties

G

Genius

The artist's contact



Database

Shazam Rapid API

Billboard API

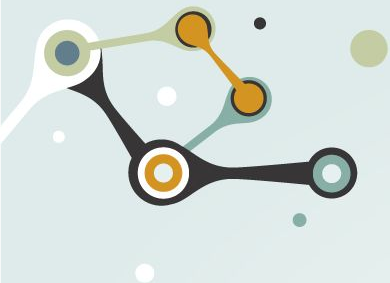


MongoDB



Deezer API


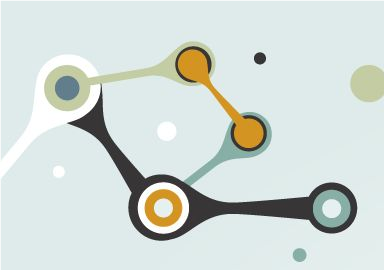
Genius API



Data sharing API



Provide by Swagger UI



Swagger
Supported by SMARTBEAR

/static/openapi.json Explore

Music Data API 1.0.0 OAS3

</static/openapi.json>

This API provides a music data information.

Servers

default

GET **/artists** Returns a list of artists.

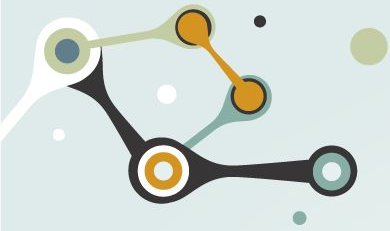
GET **/artists/albums** Returns a numbers of each artist's album.

GET **/artists/fans** Returns a numbers of each artist's fans.

GET **/artists/contacts** Returns a numbers of each artist's contacts information.

GET **/artists/{artist_id}** Returns an individual name of artists by order.

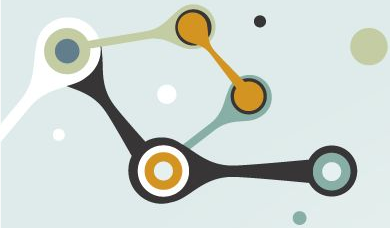
GET **/artists/songs** Returns a numbers of each artist's songs in database.



Why do we use Swagger UI ?

- Familiar User Interface, easy to navigate through.
- Also very easy to test each individual APIs and observe their outcome.
- We made this UI so that people can see how our APIs return the JSON object so that they may use some of our data for further implementation to their projects and work.





APIs return example 1

Endpoint: /artists

No parameters

Execute Clear

Responses

Curl

```
curl -X GET "http://localhost:5001/artists" -H "accept: application/json"
```

Request URL

```
http://localhost:5001/artists
```

Server response

Code Details

200

Response body

```
{
  "name": [
    "BLACKPINK",
    "BTS",
    "Taylor Swift",
    "Harry Styles",
    "The Weeknd",
    "Post Malone",
    "Joiit",
    "The 1975",
    "Phum Viphurit",
    "Arctic Monkeys"
  ]
}
```

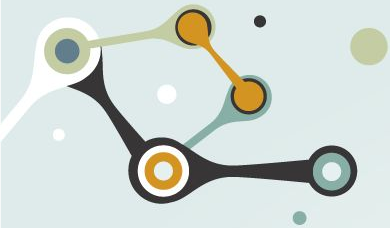
Response headers

```
access-control-allow-origin: *
content-length: 146
content-type: application/json
date: Thu, 03 Dec 2020 05:45:58 GMT
server: Werkzeug/0.16.0 Python/3.7.0
```

Responses

Download





APIs return example 2

Endpoint: /artists/contacts

GET /artists/contacts Returns a numbers of each artist's contacts information.

Parameters

Cancel

No parameters

ExecuteClear

Responses

Curl

curl -X GET "http://localhost:5001/artists/contacts" -H "accept: application/json"

Request URL

http://localhost:5001/artists/contacts

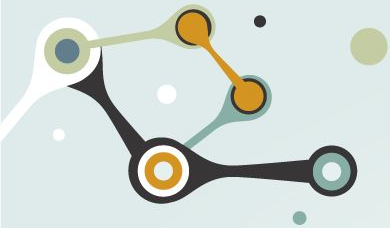
Server response

CodeDetails

200

Response body

```
{
  "Arctic Monkeys": {
    "facebook": "ArcticMonkeys",
    "instagram": "arcticmonkeys",
    "twitter": "ArcticMonkeys"
  },
  "BLACKPINK": {
    "facebook": "BLACKPINKOFFICIAL",
    "instagram": "blackpinkofficial",
    "twitter": "BLACKPINK"
  },
  "BTS": {
    "facebook": "bangtan.official",
    "instagram": "bts.bighitofficial",
    "twitter": "BTS_twt"
  }
}
```



APIs return example 3

Endpoint: /artists/songs

GET /artists/songs Returns a numbers of each artist's songs in database.

Parameters Cancel

No parameters

Execute **Clear**

Responses

Curl

```
curl -X GET "http://localhost:5001/artists/songs" -H "accept: application/json"
```

Request URL

```
http://localhost:5001/artists/songs
```

Server response

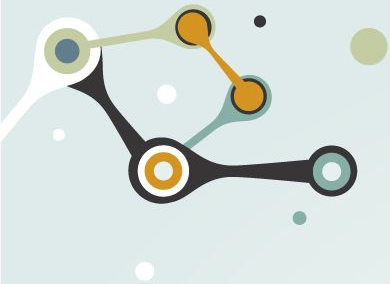
Code	Details
200	<p>Response body</p> <pre>{ "Arctic Monkeys": ["Do I Wanna Know?", "Why'd You Only Call Me When You're High?", "R U Mine?", "Fluorescent Adolescent", "Arabella"], "BLACKPINK": ["Kill This Love", "Kiss And Make Up", "How You Like That", "Ddu-Du Ddu-Du", "Ice Cream (with Selena Gomez)"], "BTS": [</pre>



Data Visualization

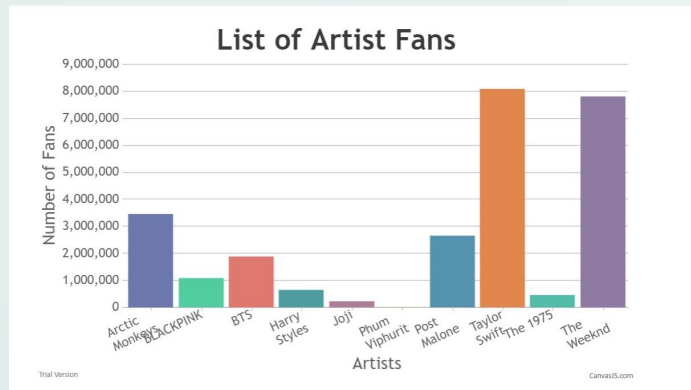
04

An abstract graphic design featuring organic, flowing shapes in shades of olive green, mustard yellow, and teal. A central green shape contains a dark teal circle with the number '04' in white. Other shapes include a yellow teardrop with a teal circle, a white teardrop with a green circle, and various small dots in teal, black, and white scattered across the light blue background.

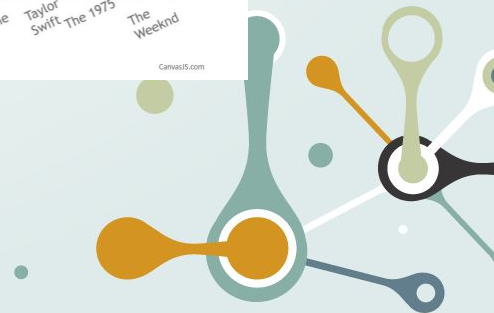
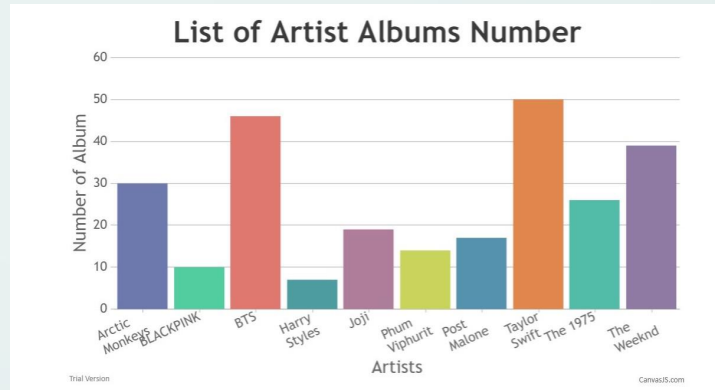


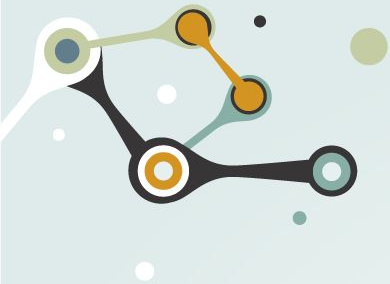
Data Visualization

Histogram of Artist fans



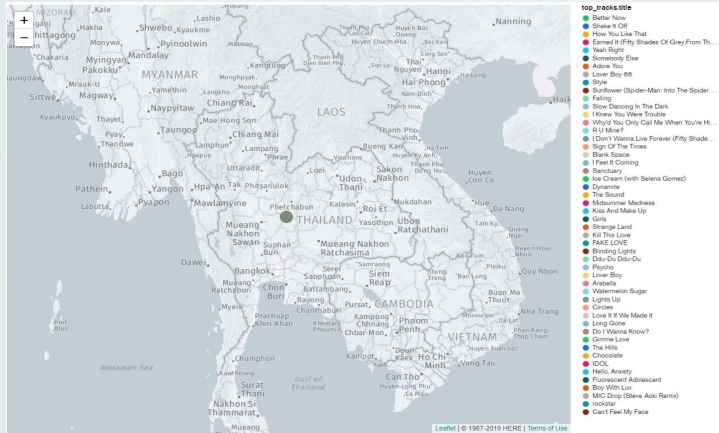
Histogram of Artist Albums





Data Visualization

Available counties of track



The artist's contacts

Contact information

artists	instagram	twitter	facebook
Arctic Monkeys	arcticmonkeys	ArcticMonkeys	ArcticMonkeys
BLACKPINK	blackpinkofficial	BLACKPINK	BLACKPINKOFFICIAL
BTS	bts.bighitofficial	BTS_twt	bangtan.official
Harry Styles	harrystyles	harry_styles	harrystyles
Joji	sushitrash	sushitrash	jojikansai
Phum Viphurit	phumviphurit	viphuritupdate	PhumViphurit
Post Malone	postmalone	PostMalone	postmalone
Taylor Swift	taylorswift	taylorswift13	TaylorSwift
The 1975	the1975	the1975	the1975
The Weeknd	theweeknd	theweeknd	theweeknd



Thank you

6110545562	Pawaris Wongsalung
6110545503	Nattapol Boonyapornpong
6110545481	Chananya Photan
6110545678	Arisa Pangpeng

