

Group One

Our team **SeaQewL** have used the following as data sources.

Spotify API

Our team uses music data from the [Spotify API](#). This API allows us to pull music data that is available in Spotify's application. The spotify API also utilizes data for market codes and musical key signature encodings. The API's documentation provides wiki pages to show how they source the data for market codes and key signature encodings and we also use the data from those wiki pages as well!

Here are the following wiki pages:

Market Codes: [ISO 3166-1 alpha-2](#)

Key Signature Encodings: [Standard Pitch Class Notation](#)

Data Dictionary

Artists

artist_id (PRIMARY KEY) - The unique ID for an Artist

artist_name - The name of the artist

nbr_of_followers - The number of people currently following the artist

popularity - The popularity of the artist. The value will be between 0 and 100, with 100 being the most popular. The artist's popularity is calculated from the popularity of all the artist's tracks.

Tracks

track_id (PRIMARY KEY) - The ID for a track

track_name - The name of the track

album_id (FOREIGN KEY) - The ID of the album that the track is a part of

duration_ms - The duration of the track in milliseconds

explicit - A boolean indicating if a track contains explicit content

current_popularity - The popularity of a track is a value between 0 and 100, with 100 being the most popular. The popularity is calculated by an algorithm and is based, in the most part, on the total number of plays the track has had and how recent those plays are. Typically, songs that are frequently played today have a higher popularity than songs that were played a lot in the past. Duplicate tracks (e.g. the same track from a single and an album) are rated independently. Artist and album popularity is derived mathematically from track popularity.

Note: The popularity value may lag actual popularity by a few days: the value is not updated in real time.

acousticness - A confidence measure between 0.0 and 1.0 of whether a track is acoustic. 1.0 represents high confidence that the track is acoustic

danceability - Danceability describes how suitable a track is for dancing based on a combination of musical elements including tempo, rhythm stability, beat strength, and overall regularity. A value of 0.0 is least danceable and 1.0 is most danceable.

instrumentalness - Predicts whether a track contains no vocals. "Ooh" and "aah" sounds are treated as instrumental in this context. Rap or spoken word tracks are clearly "vocal". The closer the instrumentalness value is to 1.0, the greater likelihood the track contains no vocal content. Values above 0.5 are intended to represent instrumental tracks, but confidence is higher as the value approaches 1.0

key_signatures (FOREIGN KEY) - The key the track is in. Integers map to pitches using standard [Pitch Class notation](#). E.g. 0 = C, 1 = C Sharp/D Flat, 2 = D, and so on. If no key was detected, the value is -1

mode - Mode indicates the modality (major or minor) of a track, the type of scale from which its melodic content is derived. Major is represented by 1 and minor is 0

tempo - The overall estimated tempo of a track in beats per minute (BPM). In musical terminology, tempo is the speed or pace of a given piece and derives directly from the average beat duration

time_signature - An estimated time signature. The time signature (meter) is a notational convention to specify how many beats are in each bar (or measure). The time signature ranges from 3 to 7 indicating time signatures of "3/4", to "7/4"

valence - A measure from 0.0 to 1.0 describing the musical positiveness conveyed by a track. Tracks with high valence sound more positive (e.g. happy, cheerful, euphoric), while tracks with low valence sound more negative (e.g. sad, depressed, angry)

Albums

album_id (PRIMARY KEY) - The ID for a album

album_name - The name for an album

total_tracks - The number of tracks in the album

date_released - The date the album is released. If no month or day for the release date can be provided, the Spotify API gives only the year.

AlbumArtists

album_id (FOREIGN KEY) - The ID for an album

artist_id (FOREIGN KEY) - The ID for an artist

GenreArtists

artist_id (FOREIGN KEY) - The ID for an artist

genre - The genre that the artist is categorized as

KeySignatures

key_id (PRIMARY KEY) - The ID for a key signature

key_signature - The actual key signature

MarketCodes

country_code (PRIMARY KEY) - A two character country code

country - The name of a country

Playlists

name - The name of the playlist we pulled a track from

track_id (FOREIGN KEY) - The ID of the track

track_name - The name of the track

album_id (FOREIGN KEY) - The album ID of the track

album_name - The album name of the track

TrackArtists

track_id (FOREIGN KEY) - The ID of a track

artist_id (FOREIGN KEY) - The ID of an artist

TrackAvailableMarkets

track_id (FOREIGN KEY) - The ID of a track

country_code - The country code of where a track is available