**Musify**

**Overview**

Musify is a service for listening to music. You will have to implement the administrative part of it, not the streaming itself.

The app can do the following:

* manage users (register new users, login, update, inactivate a user)
* manage artists (create, update)
* manage songs, albums (create/update)
* manage playlists (create/update/delete)
* have a search capability for searching artists, albums, songs
* the users should be able to:
  + get the list of playlists they have or follow
  + add/remove songs to playlists; change order of a songs
  + get the list of songs for a playlist
  + load all albums of an artist; load all songs for an album

**Users**

Users are persons that will use the service.

Users must register into the application and can delete their accounts. The information about the users should not be deleted from the database, instead they should only be marked as deleted.

Users must login into the app before using it. They will be using a username and password, and the service will generate a JWT (Java Web Token) that will be used in every other requests.

Users can have roles (admin or regular user). Some operations can only be performed by admins. Creating artists, albums and songs can only be done by admins.

A User needs to have the following details:

* first name, last name
* email (used also as username)
* password (should be encrypted when saved into DB)
* country of origin
* role (admin or regular)

**Artists**

Artists can be persons or bands. For bands we need to capture the members of the band.

An Artist needs to have the following details:

* first name and last name for persons
* stage name (for persons)
* band’s name (for bands)
* birthday – for persons
* location (city or country of origin) – for bands
* active period (start and maybe end date; should not be precise, maybe we know only the year, or year/month)
* type (person or band)

**Songs**

A Song needs to have the following details:

* title
* alternative titles (the alternate title can be another title or a translation of the original title. The translation should also have the language in which the title is translated)
* contributor artists (one or more)
* album that it is part of
* duration
* creation date

**Albums**

They represent a list of songs. The order of songs in the album should be persistent.

Albums have:

* title
* description
* artist
* genre
* release date
* label

**Playlists**

Playlists are lists of songs, created by users. The order of the songs in the playlist should be preserved.

Users can create their own playlists. The playlist can be private (it can only be seen by the user that created it), or public (other users can see that playlist).

A user has a list of playlists (their own playlists or public ones that he/she is following).

Only the owner of the playlist can modify a public playlist.

A playlist can be created by adding songs to it or an album. If an album is used, all the songs of that album should be added to the list, in the order presented in the album.

Playlist can have:

* name
* owner user
* type (private or public)
* created date
* last updated date