

COP4813/5819 Internet Programming

Spring 2017

Lab 4 • March 6

Ching-Hua Chuan (c.chuan@unf.edu)

Due: March 20 (Monday)

Total points: 30

Question 1. This assignment is about DOM, Ajax, and JSON. Write an online music search engine using Spotify Web API. Spotify (see the reference below) provides abundant music data and services for developers to build music apps. More details about how to formulate an API call can be found in the following reference.

The first page of your music search site should provide a form with a text field for the user to enter an artist name and a submit button.

Search artist

submit

Once the user clicks the submit button, your JavaScript should send a request using Spotify API to retrieve information related to that artist name. You will receive the response in the format of JSON, and you can specify the file format in your request. If something went wrong during the process of request/response, a proper error message should be displayed on the web page.

Sometimes you will receive multiple results and you should display all of them on the page for the user to select the one that s/he is interested. The following shows an example of received results from the search with artist name radiohead.

Search artist

submit

Artist name: Radiohead

Artist name: Radiohead Tribute Band

One way to see what is returned in JSON is to type in the following request in the browser's url: <https://api.spotify.com/v1/search?q=radiohead&type=artist>

Once the user clicks on one of the returned artists, your JavaScript should send a request to retrieve more detailed information about that artist. Each artist has a unique Spotify ID and you should use the ID to retrieve more information about a particular artist.

Detailed information includes:

- popularity
- genre (pop, rock, jazz, and etc.)
- five related artists (if there are less than five related artists, just show them all)
- three albums or singles that are available in the US with the title and image

You can display the information in any styles that you prefer for clarity. An example of the output is shown below:

Enter artist's name and press search

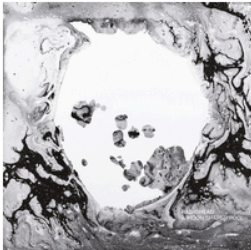


Search Results:
Artist: Radiohead
Popularity: 81
Genres:

- alternative rock
- indie rock
- melancholia
- permanent wave
- rock

Related Artists:

- Blur
- The Flaming Lips
- Arcade Fire
- Pixies
- Interpol

Albums:

A Moon Shaped Pool	TKOL RMX 1234567	The King Of Limbs
		

Reference

Spotify Web API User Guide:

<https://developer.spotify.com/web-api/user-guide/>

Submission

Upload the files to your personal web space on osprey.unf.edu. Create an index page at the following url (where xxx are the last 3 digits of your n-number):

http://www.unf.edu/~your_n_number/ip/xxx_hw4.html

Submit the link and the zip file on Canvas. 40% penalty will be taken if the link is missing in the submission.