course_3_project

Due: 2018-11-25 01:37:00

Description: Final Project for Course 3 - OMDB and TasteDive Mashup

Score: 6.0 of 6 = 100.0%

Questions

Score: 1.0 / 1

Comment: autograded

This project will take you through the process of mashing up data from two different APIs to make movie recommendations. The TasteDive API lets you provide a movie (or bands, TV shows, etc.) as a query input, and returns a set of related items. The OMDB API lets you provide a movie title as a query input and get back data about the movie, including scores from various review sites (Rotten Tomatoes, IMDB, etc.).

You will put those two together. You will use TasteDive to get related movies for a whole list of titles. You'll combine the resulting lists of related movies, and sort them according to their Rotten Tomatoes scores (which will require making API calls to the OMDB API.)

To avoid problems with rate limits and site accessibility, we have provided a cache file with results for all the queries you need to make to both OMDB and TasteDive. Just use `requests_with_caching.get()` rather than `requests.get()`. If you're having trouble, you may not be formatting your queries properly, or you may not be asking for data that exists in our cache. We will try to provide as much information as we can to help guide you to form queries for which data exists in the cache.

Your first task will be to fetch data from TasteDive. The documentation for the API is at https://tastedive.com/read/api (https://tastedive.com/read/api).

Define a function, called `get_movies_from_tastedive`. It should take one input parameter, a string that is the name of a movie or music artist. The function should return the 5 TasteDive results that are associated with that string; be sure to only get movies, not other kinds of media. It will be a python dictionary with just one key, 'Similar'.

Try invoking your function with the input "Black Panther".

HINT: Be sure to include **only** `q`, `type`, and `limit` as parameters in order to extract data from the cache. If any other parameters are included, then the function will not be able to recognize the data that you're attempting to pull from the cache. Remember, you will *not* need an api key in order to complete the project, because all data will be found in the cache.

The cache includes data for the following queries:

q	type	limit
Black Panther	<omitted>	<omitted>
Black Panther	<omitted>	5
Black Panther	movies	<omitted>
Black Panther	movies	5
Tony Bennett	<omitted>	5
Tony Bennett	movies	5
Captain Marvel	movies	5
Bridesmaids	movies	5
Sherlock Holmes	movies	5

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```
1
2 # some invocations that we use in the automated tests; uncomment these if you are gettir
3 # get_movies_from_tastedive("Bridesmaids")
4 # get_movies_from_tastedive("Black Panther")
5 import requests_with_caching
6 import json
7
8 def get_movies_from_tastedive(title):
9     url = 'https://tastedive.com/api/similar'
10    param = {}
11    param['q']= title
12    param['type']= 'movies'
13    param['limit']= 5
14
15
```

```
found in permanent_cache
found in permanent_cache
found in permanent_cache
found in permanent_cache
found in permanent_cache
found in permanent_cache
```

ActiveCode (assess_ac_24_1_1_1)

Result	Actual Value	Expected Value	Notes
Pass	5	5	Testing that get_movies_from_tastedive returns only 5 results
Pass	0	0	Testing that get_movies_from_tastedive retrieves only movies and not music.
Pass	'Bridesmaids'	'Bridesmaids'	Testing that the results for Bridesmaids is the expected result.
Pass			Testing that the correct python type is returned.

You passed: 100.0% of the tests

Score: 1.0 / 1

Comment: autograded

Please copy the completed function from above into this active code window. Next, you will need to write a function that extracts just the list of movie titles from a dictionary returned by `get_movies_from_tastedive`. Call it `extract_movie_titles`.

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```
1
2  # some invocations that we use in the automated tests; uncomment these if you are gettin
3  # extract_movie_titles(get_movies_from_tastedive("Tony Bennett"))
4  # extract_movie_titles(get_movies_from_tastedive("Black Panther"))
5  import requests_with_caching
6  import json
7
8
9  def get_movies_from_tastedive(title):
10     endpoint = 'https://tastedive.com/api/similar'
11     param = {}
12     param['q'] = title
13     param['limit'] = 5
14     param['type'] = 'movies'
15
```

```
found in permanent_cache
```

ActiveCode (assess_ac_24_1_1_2)

Result	Actual Value	Expected Value	Notes
Pass	['The...een']	['The...een']	Testing that correct results are returned for extract_movie_titles(get_movies_from_tastedive("Tony Bennett").

Expand Differences

You passed: 100.0% of the tests

Score: 1.0 / 1

Comment: autograded

Please copy the completed functions from the two code windows above into this active code window. Next, you'll write a function, called `get_related_titles` . It takes *a list of movie titles* as input. It gets five related movies for each from TasteDive, extracts the titles for all of them, and combines them all into a single list. Don't include the same movie twice.

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```
1
2  # some invocations that we use in the automated tests; uncomment these if you are gettin
3  # get_related_titles(["Black Panther", "Captain Marvel"])
4  # get_related_titles([])
5  import requests_with_caching
6  import json
7
8
9  def get_movies_from_tastedive(title):
10     endpoint = 'https://tastedive.com/api/similar'
11     param = {}
12     param['q'] = title
13     param['limit'] = 5
14     param['type'] = 'movies'
15
```

```
found in permanent_cache
found in permanent_cache
found in permanent_cache
found in permanent_cache
```

ActiveCode (assess_ac_24_1_1_3)

Result	Actual Value	Expected Value	Notes
Pass	[]	[]	Testing that the correct response is returned when no titles are included.
Pass	['Cap...her']	['Cap...her']	Testing that the correct response is returned when searching for Black Panther and Captain Marvel.

Expand Differences

You passed: 100.0% of the tests

Score: 1.0 / 1

Comment: autograded

Your next task will be to fetch data from OMDB. The documentation for the API is at https://www.omdbapi.com/ (https://www.omdbapi.com/)

Define a function called `get_movie_data` . It takes in one parameter which is a string that should represent the title of a movie you want to search. The function should return a dictionary with information about that movie.

Again, use `requests_with_caching.get()` . For the queries on movies that are already in the cache, you *won't* need an api key. You will need to provide the following keys: `t` and `r` . As with the TasteDive cache, be sure to **only** include those two parameters in order to extract existing data from the cache.

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```
1
2  # some invocations that we use in the automated tests; uncomment these if you are gettin
3  # get_movie_data("Venom")
4  # get_movie_data("Baby Mama")
5  import requests_with_caching
6  import json
7
8
9  def get_movie_data(title):
10     endpoint = 'http://www.omdbapi.com/'
11     param = {}
12     param['t'] = title
13     param['r'] = 'json'
14     this_page_cache = requests_with_caching.get(endpoint, params=param)
15
```

```
found in permanent_cache
found in permanent_cache
found in permanent_cache
found in permanent_cache
```

ActiveCode (assess_ac_24_1_1_4)

Result	Actual Value	Expected Value	Notes
Pass			Testing that the correct python type is returned.
Pass	'Baby Mama'	'Baby Mama'	Testing that the results match the query.

You passed: 100.0% of the tests

Score: 1.0 / 1

Comment: autograded

Please copy the completed function from above into this active code window. Now write a function called `get_movie_rating` . It takes an OMDB dictionary result for one movie and extracts the Rotten Tomatoes rating as an integer. For example, if given the OMDB dictionary for "Black Panther", it would return 97. If there is no Rotten Tomatoes rating, return 0.

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```
1
2 # some invocations that we use in the automated tests; uncomment these if you are gettin
3 # get_movie_rating(get_movie_data("Deadpool 2"))
4 import requests_with_caching
5 import json
6
7
8 def get_movie_data(title):
9     endpoint = 'http://www.omdbapi.com/'
10    param = {}
11    param['t'] = title
12    param['r'] = 'json'
13    this_page_cache = requests_with_caching.get(endpoint, params=param)
14    return json.loads(this_page_cache.text)
15
```

```
found in permanent_cache
{'Source': 'Rotten Tomatoes', 'Value': '97%'}
found in permanent_cache
found in permanent_cache
found in permanent_cache
found in permanent_cache
```

ActiveCode (assess_ac_24_1_1_5)

Result	Actual Value	Expected Value	Notes
Pass	0	0	Testing that the code is acurate for Venom (no rating).
Pass	83	83	Testing that the code for 'Deadpool 2'.
Pass			Testing that a dictionary is returned.

You passed: 100.0% of the tests

Score: 1.0 / 1

Comment: autograded

Now, you'll put it all together. Don't forget to copy all of the functions that you have previously defined into this code window. Define a function `get_sorted_recommendations` . It takes a list of movie titles as an input. It returns a sorted list of related movie titles as output, up to five related movies for each input movie title. The movies should be sorted in descending order by their Rotten Tomatoes rating, as returned by the `get_movie_rating` function. Break ties in reverse alphabetic order, so that 'Yahşi Batı' comes before 'Eyyvah Eyvah'.

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```
1
2 # some invocations that we use in the automated tests; uncomment these if you are gettin
3 # get_sorted_recommendations(["Bridesmaids", "Sherlock Holmes"])
4 import requests_with_caching
5 import json
```

```
6
7  def get_movies_from_tastedive(title):
8      endpoint = 'https://tastedive.com/api/similar'
9      param = {}
10     param['q'] = title
11     param['limit'] = 5
12     param['type'] = 'movies'
13     this_page_cache = requests_with_caching.get(endpoint, params=param)
14     return json.loads(this_page_cache.text)
15
```

```
found in permanent_cache
found in permanent_cache
['Baby Mama', 'The Five-Year Engagement', 'Bachelorette', 'The Heat', 'Date Night', 'Sherlock Holmes
found in permanent_cache
found in permanent_cache
found in permanent_cache
found in permanent_cache
found in permanent_cache
found in permanent_cache
found in permanent_cache
found in permanent_cache
found in permanent_cache
found in permanent_cache
{'Baby Mama': 64, 'The Five-Year Engagement': 63, 'Bachelorette': 56, 'The Heat': 65, 'Date Night':
```

ActiveCode (assess_ac_24_1_1_6)

Result	Actual Value	Expected Value	Notes
Pass	['Dat...vah']	['Dat...vah']	Testing that actual value returned is the expected value returned.
Pass			Testing that the correct python type is returned.

Expand Differences

You passed: 100.0% of the tests

Score Me