Exercise 3: Using Query Parameters

For this exercise, we are going to be using the Open Movie Database (OMdb) API, which returns information on movies and television series.

The OMdb API only uses GET methods. This means that we can use a browser to make those requests, since requests from the browser address bar always use a GET method. Results are returned in JSON. Different browsers show JSON differently. If you use Chrome, you will simply see the JSON returned as text, whereas Firefox will display a structured version.

Note: Full documentation for the API can be found at: http://www.omdbapi.com/#usage

Step 1. Obtain an API key

The first step is to obtain an API key. This will be used in all requests. It's a way for the API owner to see who is using the API and how often. You can use my API key, which is:

```
d6961364
```

Or you can request your own at: http://www.omdbapi.com/apikey.aspx. Select the free option and enter your information. Check your email, which will contain an activation link. Click on the link to activate your key. Store your key somewhere.

Step 2. Use the search query parameter

Let's now use the search query parameter, which is simply the letter **s**. Put this URL in your browser to search on the word "avatar":

http://www.omdbapi.com/?s=avatar&apikey=d6961364

(Alternatively, you can use your own API key.)

When the JSON is formatted well, you can see that there are several movies and television shows with the word "avatar" in the title:

```
{
  "Search": [
    {
      "Title": "Avatar",
      "Year": "2009",
      "imdbID": "tt0499549",
      "Type": "movie",
```

```
      "Poster": "https://m.media-
amazon.com/images/M/MV5BMTYwOTEwNjAzMl5BMl5BanBnXkFtZTcwODc5MTUwMw@@._V1_S
X300.jpg"
    },
    {
      "Title": "Avatar: The Last Airbender",
      "Year": "2005-2008",
      "imdbID": "tt0417299",
      "Type": "series",
      "Poster": "https://m.media-
amazon.com/images/M/MV5BODc5YTBhMTItMjhkNi00ZTIxLWI0YjAtNTZmOTY0YjRlZGQ0Xk
EyXkFqcGdeQXVyODUwNjEzMzg@._V1_SX300.jpg"
    },
    ....
  ]
}
```

Now try searching your own movie title.

Step 3. Add another query parameter

Let's say you were only interested in television series with the word "avatar". Add a **type** query parameter and give it a value of **series**. Your URL should now look like this:

http://www.omdbapi.com/?s=avatar&type=series&apikey=d6961364

You should now see fewer items in your array, which are only the series.

Step 4. One more query parameter

Let's stay you are only interested in the television series, "Avatar: The Last Airbender", which came out in 2005. (And is, by the way, one of the best children's animation series ever made! In my opinion. And my kid's opinion, too.) Add a year of release query parameter for the year 2005. Look at http://www.omdbapi.com/#usage to see if you can figure out which query parameter to use.

Step 5. Try the title query parameter

Instead of the search, try the title query parameter. It's in the documentation. This will return only an exact match. Try looking for the movie "Toy Story". It will only return the original Toy Story movie, and not the sequels, which have longer names.

Note that the title has a space in the middle, and URLs are not allowed to have spaces. For this, you will need to "encode" the space. That means that instead of writing:

```
toy story
```

you should write

```
toy%20story
```

The %20 is the encoded space.

Answers to steps 4 and 5 are here: http://sdkbridge.com/ud/Exercise3Answers.pdf