

Welcome Stephanie from Using Python to Access Web Data



Exit

Calling a JSON API

In this assignment you will write a Python program somewhat similar to <http://www.pythonlearn.com/code/geojson.py> (<http://www.pythonlearn.com/code/geojson.py>). The program will prompt for a location, contact a web service and retrieve JSON for the web service and parse that data, and retrieve the first **place_id** from the JSON. A place ID is a textual identifier that uniquely identifies a place as within Google Maps.

API End Points

To complete this assignment, you should use this API endpoint that has a static subset of the Google Data:

```
http://python-data.dr-chuck.net/geojson (http://python-data.dr-chuck.net/geojson)
```

This API uses the same parameters (sensor and address) as the Google API. This API also has no rate limit so you can test as often as you like. If you visit the URL with no parameters, you get a list of all of the address values which can be used with this API.

To call the API, you need to provide a **sensor=false** parameter and the address that you are requesting as the **address=** parameter that is properly URL encoded using the **urllib.urlencode()** function as shown in <http://www.pythonlearn.com/code/geojson.py> (<http://www.pythonlearn.com/code/geojson.py>)

Just for fun, you can also test your program with the real Google API:

```
http://maps.googleapis.com/maps/api/geocode/json?sensor=false&address=University+of+Michigan (http://maps.googleapis.com/maps/api/geocode/json?sensor=false&address=University+of+Michigan)
```

Since Google's data is always changing, the data returned from the Google API could easily be different than from my local copy API. And the Google API has rate limits. But your code should work with the Google API with no modifications other than the base URL.

Test Data / Sample Execution

You can test to see if your program is working with a location of "South Federal University" which will have a **place_id** of "ChIJJ8oO7_B_bIcR2AlhC8nKlok".

```
$ python solution.py
Enter location: South Federal University
Retrieving http://...
Retrieved 2101 characters
Place id ChIJJ8oO7_B_bIcR2AlhC8nKlok
```

Turn In

Please run your program to find the **place_id** for "University of Oklahoma" and enter the **place_id** and your Python code below. Hint: The first seven characters of the **place_id** are "ChIJWSZ ..."

place_id:

Submit Assignment

Python code: