

JakeDineen_7.2.3

August 22, 2018

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In [5]: import urllib.request
import json
earthquake_url = "http://earthquake.usgs.gov/earthquakes/feed/v1.0/summary/significant"
response = urllib.request.urlopen(earthquake_url)
json_string = response.read().decode('utf-8')

In [7]: eq_parsed_json = json.loads(json_string)
type(eq_parsed_json)

Out[7]: dict

In [8]: eq_parsed_json.keys()

Out[8]: dict_keys(['type', 'metadata', 'features', 'bbox'])

In [9]: eq_parsed_json['type']

Out[9]: 'FeatureCollection'

In [10]: eq_parsed_json['metadata']

Out[10]: {'api': '1.5.8',
          'count': 19,
          'generated': 1535003473000,
          'status': 200,
          'title': 'USGS Significant Earthquakes, Past Month',
          'url': 'https://earthquake.usgs.gov/earthquakes/feed/v1.0/summary/significant_month'}

In [12]: title = eq_parsed_json['metadata']['title']
title

Out[12]: 'USGS Significant Earthquakes, Past Month'

In [14]: quakelist = eq_parsed_json['features']
len(quakelist)

Out[14]: 19

In [16]: quake1 = quakelist[0]
type(quake1)
```

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Out[16]: dict

In [17]: quake1.keys()

Out[17]: dict_keys(['type', 'properties', 'geometry', 'id'])

In [18]: print(json.dumps(quake1, indent=2))
{
  "type": "Feature",
  "properties": {
    "mag": 6.3,
    "place": "45km SSE of Tanaga Volcano, Alaska",
    "time": 1534995315950,
    "updated": 1535002639791,
    "tz": -600,
    "url": "https://earthquake.usgs.gov/earthquakes/eventpage/us1000gfvg",
    "detail": "https://earthquake.usgs.gov/earthquakes/feed/v1.0/detail/us1000gfvg.geojson",
    "felt": null,
    "cdi": null,
    "mmi": 5.84,
    "alert": "green",
    "status": "reviewed",
    "tsunami": 1,
    "sig": 611,
    "net": "us",
    "code": "1000gfvg",
    "ids": ",at00pdw9ys,ak20156243,us1000gfvg,",
    "sources": ",at,ak,us,",
    "types": ",geoserve,impact-link,losspager,origin,phase-data,shakemap,",
    "nst": null,
    "dmin": 0.567,
    "rms": 0.72,
    "gap": 67,
    "magType": "mww",
    "type": "earthquake",
    "title": "M 6.3 - 45km SSE of Tanaga Volcano, Alaska"
  },
  "geometry": {
    "type": "Point",
    "coordinates": [
      -177.881,
      51.5106,
      43.91
    ]
  },
  "id": "us1000gfvg"
}

```