Joyce Woznica  
IST 652, Week 6

Activity 6.3: HTML – Hypertext Markup Language

Code:

﻿# Week 7

# Joyce Woznica

# Working with JSON

# working with urllib

import urllib.request

import json

earthquake\_url = "http://earthquake.usgs.gov/earthquakes/feed/v1.0/summary/significant\_month.geojson"

response = urllib.request.urlopen(earthquake\_url)

# unicode transformation format

json\_string = response.read().decode('utf-8')

# start parsing this information

eq\_parsed\_json = json.loads(json\_string)

type(eq\_parsed\_json)

eq\_parsed\_json.keys()

eq\_parsed\_json['metadata']

eq\_parsed\_json['type']

title = eq\_parsed\_json['metadata']['title']

title

quakelist = eq\_parsed\_json['features']

len(quakelist)

quake1 = quakelist[0]

quake1.keys()

# can keep going deeper here

print(json.dumps(quake1, indent = 2))

Output:

﻿import urllib.request

import json

earthquake\_url = "http://earthquake.usgs.gov/earthquakes/feed/v1.0/summary/significant\_month.geojson"

response = urllib.request.urlopen(earthquake\_url)

# unicode transformation format

json\_string = response.read().decode('utf-8')

# start parsing this information

eq\_parsed\_json = json.loads(json\_string)

type(eq\_parsed\_json)

Out[74]: dict

eq\_parsed\_json.keys()

Out[75]: dict\_keys(['type', 'metadata', 'features', 'bbox'])

eq\_parsed\_json['metadata']

Out[76]:

{'generated': 1589239395000,

'url': 'https://earthquake.usgs.gov/earthquakes/feed/v1.0/summary/significant\_month.geojson',

'title': 'USGS Significant Earthquakes, Past Month',

'status': 200,

'api': '1.8.1',

'count': 12}

eq\_parsed\_json['type']

Out[77]: 'FeatureCollection'

title = eq\_parsed\_json['metadata']['title']

title

Out[79]: 'USGS Significant Earthquakes, Past Month'

quakelist = eq\_parsed\_json['features']

len(quakelist)

Out[81]: 12

quake1 = quakelist[0]

quake1.keys()

Out[83]: dict\_keys(['type', 'properties', 'geometry', 'id'])

# can keep going deeper here

print(json.dumps(quake1, indent = 2))

{

"type": "Feature",

"properties": {

"mag": 4.54,

"place": "17km SE of Ocotillo Wells, CA",

"time": 1589148460370,

"updated": 1589239259174,

"tz": -480,

"url": "https://earthquake.usgs.gov/earthquakes/eventpage/ci38488354",

"detail": "https://earthquake.usgs.gov/earthquakes/feed/v1.0/detail/ci38488354.geojson",

"felt": 4363,

"cdi": 5.2,

"mmi": 6.73,

"alert": "green",

"status": "reviewed",

"tsunami": 0,

"sig": 837,

"net": "ci",

"code": "38488354",

"ids": ",ci38488354,us70009dtk,",

"sources": ",ci,us,",

"types": ",dyfi,focal-mechanism,geoserve,losspager,moment-tensor,nearby-cities,origin,phase-data,scitech-link,shake-alert,shakemap,",

"nst": 141,

"dmin": 0.138,

"rms": 0.27,

"gap": 21,

"magType": "mw",

"type": "earthquake",

"title": "M 4.5 - 17km SE of Ocotillo Wells, CA"

},

"geometry": {

"type": "Point",

"coordinates": [

-116.0201667,

33.0183333,

10.16

]

},

"id": "ci38488354"

}