

JakeDineen_7.5

August 23, 2018

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In [19]: import urllib.request
import json
import pymongo

# get the bbc rss feed of news stories and connect to it
earthquake_url = "http://earthquake.usgs.gov/earthquakes/feed/v1.0/summary/significant"

try:
    response = urllib.request.urlopen(earthquake_url)
except urllib.error.URLError as e:
    if hasattr(e, 'reason'):
        print('We failed to reach a server.')
        print('Reason: ', e.reason)
    elif hasattr(e, 'code'):
        print('The server couldn\'t fulfill the request.')
        print('Error code: ', e.code)
else:
    # the url request was successful - convert the response to a string
    json_string = response.read().decode('utf-8')

    # the json package loads() converts the string to python dictionaries and lists
    eq_json = json.loads(json_string)

    # from the json dictionary we get the title to print
    title = eq_json['metadata']['title']
    print('Collected data from', title)
    # and we get the list of earthquakes
    quakelist = eq_json['features']

    # Connection to Mongo DB
    try:
        client=pymongo.MongoClient('localhost', 27017)
        print ("Connected successfully!!!")
    except pymongo.errors.ConnectionFailure as e:
        print ("Could not connect to MongoDB: %s" % e )
    else:
```

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# use database named usgs or create it if not there already
eqdb = client.usgs
# create collection named earthquakes or create it if not there already
quakecoll = eqdb.earthquakes
# add all the earthquakes to the list
quakecoll.insert_many(quakelist)
print("Added", len(quakelist), "to earthquakes collection in usgs database")
# close the database connection
client.close()

```

Collected data from USGS Significant Earthquakes, Past Month

Connected successfully!!!

Added 19 to earthquakes collection in usgs database

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In [99]: docs = quakecoll.find()
         a = list(docs)

         places = []
         times = []
         for i in range(0, len(a)):
             places.append((a[i]['properties']['place']))
             times.append((a[i]['properties']['time']))

         for i,j in zip(places, times):
             print('Location-> {}----- Time-> {}'.format(i,j))

```

```

Location-> 45km SSE of Tanaga Volcano, Alaska----- Time-> 1534995315950
Location-> 265km WNW of Bandon, Oregon----- Time-> 1534930307050
Location-> 79km E of Lakatoro, Vanuatu----- Time-> 1534890747010
Location-> 30km NE of Rio Caribe, Venezuela----- Time-> 1534887106070
Location-> 2km S of Belanting, Indonesia----- Time-> 1534690588090
Location-> 282km ESE of Lambasa, Fiji----- Time-> 1534652939760
Location-> 6km NE of Sembalunlawang, Indonesia----- Time-> 1534651821570
Location-> 259km NNE of Ndoi Island, Fiji----- Time-> 1534638182740
Location-> 280km NNE of Ndoi Island, Fiji----- Time-> 1534637977970
Location-> 14km N of Golfito, Costa Rica----- Time-> 1534548144900
Location-> 109km NNW of Kampungbajo, Indonesia----- Time-> 1534520102070
Location-> 250km SE of Iwo Jima, Japan----- Time-> 1534443773350
Location-> 50km S of Tanaga Volcano, Alaska----- Time-> 1534370214780
Location-> 7km NE of Aguanga, CA----- Time-> 1534296266310
Location-> 90km SW of Kaktovik, Alaska----- Time-> 1534085934286
Location-> 3km SE of Todo, Indonesia----- Time-> 1533792331910
Location-> 0km SW of Lololan, Indonesia----- Time-> 1533469598190
Location-> 10km ESE of Black Point-Green Point, CA----- Time-> 1532989373470
Location-> 5km WNW of Obelobel, Indonesia----- Time-> 1532818058740
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