

Oct 13 2022 Code Review

Deficiencies

A lot of code, could be simpler

For loops might be deleted to make way for a simpler solution

i and j are not used inside the for loops

If statements can be simpler, some unnecessary else statements (line 48-56)

Line 78-86

Three nested for loops $O(n^3)$ runtime

Python is slow, so runtime will be very slow if a large amount of data is run through the JSON checker

Conformity

Methods must be camel-case

Iterator variables must be clear that they are iterators, instead of just 'i'

```
for outer_item in req_outer_layer:
```

```
    if val in outer_itemL
```

```
        found = True
```

Complexity

A lot of code

Might be hard to navigate

Standards

Notes

checkJSON class

Checks if the data is required or optional

Supposed to format

Reads as a dictionary, instead of list

Checks for missing required fields

data.keys

Reason for three nested for loops is to get j.keys

First for loops gets classification, group name, sources

Second, metrics, name

Third, gets data in second layer

To-Do

Simplify code

- Define functions for repeated code (line 64-69)

- Combine “source” and “metric” layer, possibly

Check for bugs

Search for something to prevent several-layered JSON for loops in the JSON library

In outer layer on the last iteration, loop source layer

Create functions for verifying sources and metrics with for loops in them and takes the previous iterator as a parameter, to make code simpler