

The json Module

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Overview

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What is JSON?

What is JSON

- JSON stands for Javascript Object Notation
- A data-interchange format aimed at serializing data
- Made to be machine readable and human readable
- Extremely popular interchange format for web services

What is GeoJSON?

What is GeoJson

- **GeoJSON** is an OGC standard for expressing geospatial data in JSON
- Allows a simple format for geospatial web applications
- Harder to see the implications of GeoJSON from the geography perspective, but it is taking over the internet via web mapping

Loading JSON data in python

Loading JSON data in python

- The json module allows loading and dumping of JSON data to and from native python dictionaries
- Loading is the process of taking a string of JSON and converting it to a dictionary
- Two functions in the json module for loading:
 - `json.load()`: to load JSON from a file object
 - `json.loads()`: to load JSON from a string (loads = load string)

```
import json

with open(filepath) as fileobj:
    data = json.load(fileobj)

# data is a dictionary representation of the JSON data
```


Dumping JSON data in python

Dumping JSON data in python

- Dumping is the process of converting a dictionary into serailized JSON-formatted string
- Two functions in the JSON module for dumping:
 - `json.dump()`: to dump a dictionary to a file object
 - `json.dumps()`: to dump a dictionary to a JSON string

```
data = {'name': 'Joe', 'age': 25, 'friends': ['Sam', 'Jane', 'Maria']}  
with open(filepath, 'w') as fileobj:  
    json.dump(data, fileobj)
```