

JSON

Working with the JSON format in Python

What is JSON?

- JSON stands for JavaScript Object Notation
- It's another format for serializing/deserializing data
- Human readable: It's easy for humans to look at and understand
- Machine readable: It's easy for computer programs to understand, read, and write
- Very commonly used across many domains

Why use JSON

- Simple
- Language independent
- Human-readable
- Standardized

What does it look like?

```
{  
  "name": "Jean",  
  "age": 31,  
  "city": "Paris"  
}
```

```
{  
  "Score": 90.5,  
  "Type": "Quiz"  
}
```

```
{  
  "Sleepy": True,  
  "NapTime": "13:00:00",  
}
```

Structure

JSON is structured as key-value pairs,
a lot like Python dictionaries!

JSON is structured as key-pair values, separated by commas, inside a set of curly brackets { }

JSON values can be one of several types:

- Strings
- Integers
- Floats
- Booleans
- Arrays (lists)
- Null
- Other JSON objects!

```
{  
  "name": "Jason",  
  "age": 23,  
  "weight": 150.5,  
  "awesome": True,  
  "hobbies": ["climbing", "pokemon", "python"],  
  "favorite_book":  
    {  
      "title": "The Hobbit",  
      "author": "J. R. R. Tolkein",  
      "published": 1937  
    },  
  "Favorite_color": null  
}
```