json2latex

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`json2latex` is a library for converting a nested Python structure to a format accessible in LaTeX.

CHAPTER 1

Python Documentation

class `json2latex.python2latex.`**`python2latex`**(*name*, *obj*)

A class for converting a nested Python structure into a form accessible using LaTeX.

Parameters

- **name** (*str*) – The name of the LaTeX variable to save the data to.
- **obj** (*dict or list*) – The Python object to make accessible in LaTeX.

dump()

Get the string of LaTeX commands.

The returned string is a set of LaTeX commands which can be used to access the values of the object provided when initializing the class.

save(*fp*)

Write the LaTeX commands to a filelike object.

The string writen includes a set of LaTeX commands which can be used to access the values of the object provided when initializing the class.

CHAPTER 2

Python

`json2latex.`**`dumps`**(*name*, *obj*)

Convert a nested Python structure to a string accessible in LaTeX.

Parameters

- **name** (*str*) – The name of the LaTeX variable to save the data to.
- **obj** (*dict or list*) – The Python object to make accessible in LaTeX.

Returns A string of LaTeX code.

Return type str

`json2latex.`**`dump`**(*name*, *obj*, *fp*)

Convert a nested Python structure to a file accessible in LaTeX.

Parameters

- **name** (*str*) – The name of the LaTeX variable to save the data to.
- **obj** (*dict or list*) – The Python object to make accessible in LaTeX.
- **fp** (*TextIO*) – The filelike object to write LaTeX code to.

CHAPTER 3

Example

The following Python code saves a file, `out.tex` which includes the necessary LaTeX commands to access the data in LaTeX.

```
import json2latex

data = dict(a="test", b=[1, 2])

with open('out.tex', 'w') as f:
  json2latex.dump('data', data, f)
```

The same result can be accomplished by running,

```
json2latex example.json data out.tex
```

where `example.json` is a JSON file containing the same data is the `data` dictionary in the Python example.

The code output by JSON to LaTeX can be used as follows. First the file needs to be imported in LaTeX using `\input{out.tex}`. Then, the following commands can be used to access the data:

- `\data` will expand to the full JSON representation of the input, `{"a": "test", "b": [1, 2]}`.
- `\data[a]` will expand to `test`.
- `\data[b]` will expand to `[1, 2]`.
- `\data[b][0]` will expand to `1`.
- `\data[b][1]` will expand to `2`.
- `\data[b][2]`, and all other undefined values, will expand to `??`.

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