DoJSON is a simple Pythonic JSON to JSON converter.
CHAPTER 1

Installation

DoJSON is on PyPI so all you need is:

```bash
$ pip install dojson
```
A simple example on how to convert MARCXML to JSON:

```python
from dojson.contrib.marc21.utils import create_record, split_blob
from dojson.contrib.marc21 import marc21
[marc21.do(create_record(data)) for data in split_blob(open('/tmp/data.xml', 'r').read())]
```
DoJSON API.

```python
class dojson.Overdo(bases=None, entry_point_group=None)
    Translation index.

    build()
    Build.

    do(blob)
    Translate blob values and instantiate new model instance.

    missing(blob)
    Return keys with missing rules.

    over(name, *source_tags)
    Register creator rule.
```

### 3.1 Command line interface

DoJSON command line interface.

This script is installed using the magic `console_script` section in `entry_points` parameters thanks to `setuptools`. In order to get help from console one can run:

```bash
$ dojson --help
```

Extensions

New extensions with loaders, dumpers, or rules can be provided via entry points.

- `dojson.cli.load` functions expecting a stream and returning Python dict or iterator;
- `dojson.cli.dump` functions expecting a Python object and returning `str`;
- `dojson.cli.rule` instances of `dojson.Overdo` with loaded rules.

```python
dojson.cli.open_entry_point(group_name)
Open entry point.
```

### 3.2 Contrib
4.1 Version 0.3.0 (released 2015-11-09):

4.1.1 New features

• Adds experimental rules for converting human readable JSON into a JSON representation of the MARC21 Format.
• Adds do and missing commands for dojson command line interface (see dojson –help for more information).

4.1.2 Improved features

• Adds missing mapping for the first indicator of field 856.

4.2 Version 0.2.0 (released 2015-10-07):

4.2.1 New features

• Adds the possibility to use base DoJSON model so the rules are “inherited” from them.
• Adds new decorator ignore_value that removes the key in the resulting json for None value.

4.2.2 Improved features

• Uses entry points instead of plain imports to load the creator rules.

4.2.3 Bug fixes

• Removes calls to PluginManager consider_setuptools_entrypoints() removed in PyTest 2.8.0.

4.3 Version 0.1.1 (released 2015-07-27):

• Sorts and removes duplicated enum values.
• Swaps wrongly defined repeatable and non-repeatable subfields. (#23)
• Addresses issue when allowed indicators where defined as a range. (#22)

4.4 Version 0.1.0 (released 2015-07-03):

• Initial public release.
Contribution

Bug reports, feature requests, and other contributions are welcome. If you find a demonstrable problem that is caused by the code of this library, please:

1. **Search for already reported problems.**
2. Check if the issue has been fixed or is still reproducible on the latest *master* branch.
3. Create an issue with a **test case**.

If you create a feature branch, you can run the tests to ensure everything is operating correctly:

```
$ python setup.py test
...
 ====== 31 passed, 23 skipped in 1.37 seconds ======
```

You can also test your feature branch using Docker:

```
$ docker-compose build
$ docker-compose run web python setup.py test
$ docker-compose run web python setup.py build_sphinx
$ docker-compose run web pep257 --match-dir='dojson'
```
DoJSON is developed for the Invenio digital library software.

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