
pandas-validator Documentation

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pandas-validator

Validates the pandas object such as *DataFrame* and *Series*. And this can define validator like django form class.

1.1 Why bugs occur in Data Wrangling with pandas

When we wrangle our data with pandas, We use *DataFrame* frequently. *DataFrame* is very powerfull and easy to handle. But *DataFrame* has no it's schema, so It allows irregular values without being aware of it. We are confused by these values and affect the results of data wrangling.

pandas-schema offeres the functions for validating *DataFrame* or *Series* objects and generating factory data.

1.2 Example

```
import pandas as pd
import pandas_validator as pv

class SampleDataFrameValidator(pv.DataFrameValidator):
    row_num = 5
    column_num = 2
    label1 = pv.IntegerColumnValidator('label1', min_value=0, max_value=10)
    label2 = pv.FloatColumnValidator('label2', min_value=0, max_value=10)

validator = SampleDataFrameValidator()

df = pd.DataFrame({'label1': [0, 1, 2, 3, 4], 'label2': [5.0, 6.0, 7.0, 8.0, 9.0]})
validator.is_valid(df) # True.

df = pd.DataFrame({'label1': [11, 12, 13, 14, 15], 'label2': [5.0, 6.0, 7.0, 8.0, 9.0]})
validator.is_valid(df) # False.

df = pd.DataFrame({'label1': [0, 1, 2], 'label2': [5.0, 6.0, 7.0]})
validator.is_valid(df) # False
```

Getting Started

```
$ pip install pandas_validator
```

Please see the following demo written by ipython notebook.

- [Demo in Japanese](#)
- [Demo in English](#)

Documentation

The latest documentation is hosted at ReadTheDocs.

<http://pandas-validator.readthedocs.org>

Requirements

- Support python version: 2.7, 3.3, 3.4, 3.5
- Support pandas version: 0.14, 0.15, 0.16, 0.17

License

This software is licensed under the MIT License.

Resources

- [Github](#)
- [PyPI](#)

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