
sphinxcontrib.datatemplates

Documentation

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`sphinxcontrib.datatemplates` helps you use static data in machine readable format in your documentation by letting you define Jinja2 templates to turn JSON or YAML data structures into reStructuredText for Sphinx to render as part of its output.

CHAPTER 1

Using datatemplate

The datatemplate directive is the interface between the data source and the rendering template. It requires two parameters.

```
... datatemplate::  
    source The source file, relative to the documentation build directory.  
    template The name of a template file on the Sphinx template search path.
```

1.1 Template Context

When a datatemplate directive is processed, the data is passed to the template through its context so that the symbol `data` is available as a global variable.

The data is loaded from the source and passed directly to the template. No pre-processing is done on the data, so the template needs to handle aspects like `None` values and fields that have values that may interfere with parsing `reStructuredText`.

1.2 Template Helpers

These helper functions are exposed using their short name (without the module prefix) in the template context.

```
sphinxcontrib.datatemplates.helpers.make_list_table(headers,      data,      title="",
                                                 columns=None)
```

Build a list-table directive.

Parameters

- **headers** – List of header values.
- **data** – Iterable of row data, yielding lists or tuples with rows.
- **title** – Optional text to show as the table title.

- **columns** – Optional widths for the columns.

```
sphinxcontrib.datatemplates.helpers.make_list_table_from_mappings(headers,  
data, title,  
columns=None)
```

Build a list-table directive.

Parameters

- **headers** – List of tuples containing header title and key value.
- **data** – Iterable of row data, yielding mappings with rows.
- **title** – Optional text to show as the table title.
- **columns** – Optional widths for the columns.

CHAPTER 2

JSON Samples

2.1 Data File

```
{  
    "key1": "value1",  
    "key2": [  
        "list item 1",  
        "list item 2",  
        "list item 3"  
    ],  
    "nested-list": [  
        ["a", "b", "c"],  
        ["A", "B", "C"]  
    ],  
    "mapping-series": [  
        {"cola": "a", "colb": "b", "colc": "c"},  
        {"cola": "A", "colb": "B", "colc": "C"}  
    ]  
}
```

2.2 Template File

```
.. -- mode: rst --  
  
Static Heading  
-----  
  
Individual Item  
~~~~~  
  
{ { data['key1'] } }
```

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```
List of Items
~~~~~
{% for item in data['key2'] %}
- {{item}}
{% endfor %}

Nested List Table
~~~~~

Rendering a table from a list of nested sequences using hard-coded
headers.

{{ make_list_table(
    ['One', 'Two', 'Three'],
    data['nested-list'],
    title='Table from nested lists',
) }}

Mapping Series Table
~~~~~

Rendering a table from a list of nested dictionaries using dynamic
headers.

{{ make_list_table_from_mappings(
    [('One', 'cola'), ('Two', 'colb'), ('Three', 'colc')],
    data['mapping-series'],
    title='Table from series of mappings',
) }}
```

2.3 Rendered Output

CHAPTER 3

YAML Samples

3.1 Data File

```
---
key1: value1
key2:
  - list item 1
  - list item 2
  - list item 3
nested-list:
  - ['a', 'b', 'c']
  - ['A', 'B', 'C']
mapping-series:
  - cola: a
    colb: b
    colc: c
  - cola: A
    colb: B
    colc: C
```

3.2 Template File

```
.. -- mode: rst --
Static Heading
-----
Individual Item
~~~~~
{{ data['key1'] }}
```

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```
List of Items
~~~~~
{% for item in data['key2'] %}
- {{item}}
{% endfor %}

Nested List Table
~~~~~

Rendering a table from a list of nested sequences using hard-coded
headers.

{{ make_list_table(
    ['One', 'Two', 'Three'],
    data['nested-list'],
    title='Table from nested lists',
) }}

Mapping Series Table
~~~~~

Rendering a table from a list of nested dictionaries using dynamic
headers.

{{ make_list_table_from_mappings(
    [('One', 'cola'), ('Two', 'colb'), ('Three', 'colc')],
    data['mapping-series'],
    title='Table from series of mappings',
) }}
```

3.3 Rendered Output

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