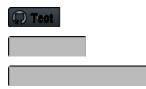
sphinxcontrib-mermaid documentation

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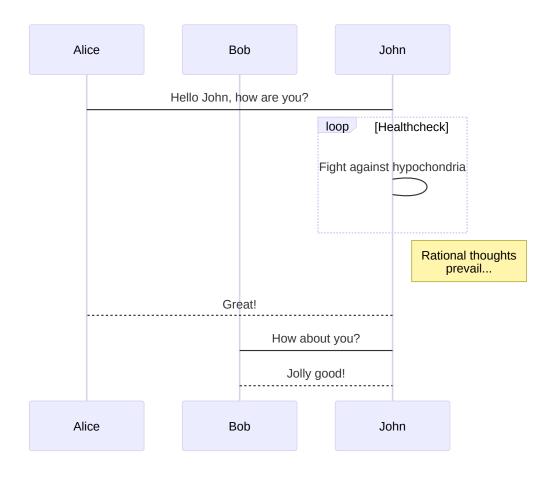
This extension allows you to embed Mermaid graphs in your documents, including general flowcharts, sequence diagrams, gantt diagrams and more.

It adds a directive to embed mermaid markup. For example:

```
.. mermaid::
    sequenceDiagram
    participant Alice
    participant Bob
    Alice->John: Hello John, how are you?
    loop Healthcheck
        John->John: Fight against hypochondria
    end
    Note right of John: Rational thoughts <br/>br/>prevail...
    John-->Alice: Great!
    John->Bob: How about you?
    Bob-->John: Jolly good!
```

By default, the HTML builder will simply render this as a div tag with class="mermaid", injecting the external javascript, css and initialization code to make mermaid works.

For other builders (or if mermaid_output_format config variable is set differently), the extension will use mermaidcli to render as to a PNG or SVG image, and then used in the proper code.



You can also embed external mermaid files, by giving the file name as an argument to the directive and no additional content:

.. mermaid:: path/to/mermaid-gantt-code.mmd

As for all file references in Sphinx, if the filename is not absolute, it is taken as relative to the source directory.

In addition, you can use mermaid to automatically generate a diagram to show the class inheritance using the directive autoclasstree. It accepts one or more fully qualified names to a class or a module. In the case of a module, all the class found will be included.

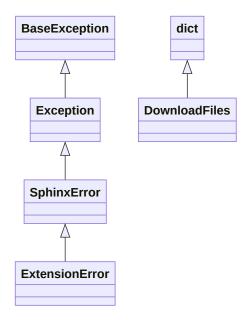
Of course, these objects need to be importable to make its diagram.

If an optional attribute : full: is given, it will show the complete hierarchy of each class.

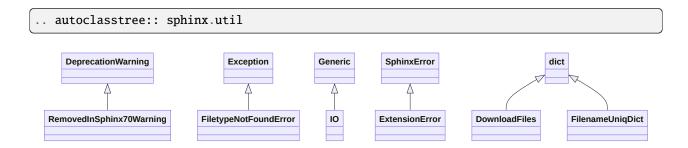
The option :namespace: <value> limits to the base classes that belongs to this namespace. Meanwhile, the flag :strict: only process the classes that are strictly defined in the given module (ignoring classes imported from other modules).

For example:

```
.. autoclasstree:: sphinx.util.DownloadFiles sphinx.util.ExtensionError
:full:
```



Or directly the module:



ONE

INSTALLATION

You can install it using pip

pip install sphinxcontrib-mermaid

Then add sphinxcontrib.mermaid in extensions list of your project's conf.py:

```
extensions = [
    ...,
    'sphinxcontrib.mermaid'
]
```

DIRECTIVE OPTIONS

:alt:: determines the image's alternate text for HTML output. If not given, the alternate text defaults to the mermaid code.

:align:: determines the image's position. Valid options are 'left', 'center', 'right'

:caption:: can be used to give a caption to the diagram.

:zoom:: can be used to enable zooming the diagram. For a global config see mermaid_d3_zoom` bellow.

sphinxcontri b-mermaid	Welcome to Sphinxcontrib-mermaid demo's documentation!
Navigation	C Test passing
Quick search	This extension allows you to embed <u>Mermaid</u> graphs in your documents, including general flowcharts, sequence and gantt diagrams.
	It adds a directive to embed mermaid markup. For example:
	<pre> mermaid:: DeequenceDiagram participant Alice participant Bob Alice->John: Hello John, how are you? loop Healthcheck John->John: Fight against hypochondria end Note right of John: Rational thoughts prevail John->Alice: Great! John->Bob: How about you? Bob>John: Jolly good!</br></pre>
	By default, the HTML builder will simply render this as a div tag with class="mermaid",

Fig. 1: A preview after adding :zoom: option only to the first diagram example above:

THREE

CONFIG VALUES

mermaid_output_format

The output format for Mermaid when building HTML files. This must be either 'raw' 'png' or 'svg'; the default is 'raw'. mermaid-cli is required if it's not raw

mermaid_version

The version of mermaid that will be used to parse raw output in HTML files. This should match a version available on https://unpkg.com/browse/mermaid/. The default is "10.2.0". If you need a newer version, you'll need to add the custom initialization. See below.

If it's set to "", the lib won't be automatically included from the CDN service and you'll need to add it as a local file in html_js_files. For instance, if you download the lib to _*static/js/mermaid.js*, in conf.py:

```
html_js_files = [
    'js/mermaid.js',
]
```

mermaid_init_js

Mermaid initilizaction code. Default to "mermaid.initialize({startOnLoad:true});".

Changed in version 0.7: The init code doesn't include the *<script>* tag anymore. It's automatically added at build time.

mermaid_cmd

The command name with which to invoke mermaid-cli program. The default is 'mmdc'; you may need to set this to a full path if it's not in the executable search path.

mermaid_cmd_shell

When set to true, the shell=True argument will be passed the process execution command. This allows commands other than binary executables to be executed on Windows. The default is false.

mermaid_params

For individual parameters, a list of parameters can be added. Refer to https://github.com/mermaidjs/ mermaid.cli#options. Examples:

This will render the mermaid diagram with theme forest, 600px width and transparent background.

mermaid_sequence_config

Allows overriding the sequence diagram configuration. It could be useful to increase the width between actors. It **needs to be a json file** Check options in the documentation

mermaid_verbose

Use the verbose mode when call mermaid-cli, and show its output in the building process.

mermaid_pdfcrop

If using latex output, it might be useful to crop the pdf just to the needed space. For this, pdfcrop can be used. State binary name to use this extra function.

mermaid_d3_zoom

Enables zooming in all the generated Mermaid diagrams.

FOUR

MARKDOWN SUPPORT

You can include Mermaid diagrams in your Markdown documents in Sphinx. You just need to setup the markdown support in Sphinx via myst-parser. See a minimal configuration from the tests

Then in your .*md* documents include a code block as in reStructuredTexts:

```
```{mermaid}
 sequenceDiagram
 participant Alice
 participant Bob
 Alice->John: Hello John, how are you?
```
```

BUILDING PDFS ON READTHEDOCS.IO

In order to have Mermaid diagrams build properly in PDFs generated on readthedocs.io, you will need a few extra configurations.

1. In your .readthedocs.yaml file (which should be in the root of your repository) include a post-install command to install the Mermaid CLI:

```
build:
  os: ubuntu-20.04
  tools:
    python: "3.8"
    nodejs: "16"
  jobs:
    post_install:
        - npm install -g @mermaid-js/mermaid-cli
```

Note that if you previously did not have a .readthedocs.yaml file, you will also need to specify all targets you wish to build and other basic configuration options. A minimal example of a complete file is:

```
# .readthedocs.yaml
# Read the Docs configuration file
# See https://docs.readthedocs.io/en/stable/config-file/v2.html for details
# Required
version: 2
# Set the version of Python and other tools you might need
build:
  os: ubuntu-20.04
  tools:
    python: "3.8"
    nodejs: "16"
 iobs:
    post_install:
      - npm install -g @mermaid-js/mermaid-cli
# Build documentation in the docs/ directory with Sphinx
sphinx:
   configuration: docs/conf.py
# If using Sphinx, optionally build your docs in additional formats such as PDF
formats:
                                                                   (continues on next page)
```

(continued from previous page)

```
- epub
- pdf
python:
    install:
    - requirements: docs/requirements.txt
```

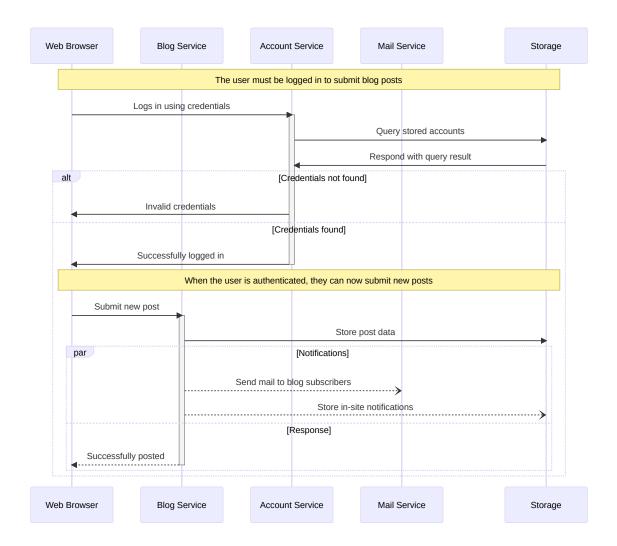
2. In your documentation directory add file puppeteer-config.json with contents:

```
{
    "args": ["--no-sandbox"]
}
```

3. In your documentation conf.py file, add:

```
mermaid_params = ['-p' 'puppeteer-config.json']
```

5.1 Diagrams with zoom



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INDICES AND TABLES

- genindex
- modindex
- search