## Contents

1.1 Installation ......................................................... 3
1.2 Usage .................................................................. 4
1.3 Default breadcrumb root ........................................... 5
1.4 API ................................................................... 5
1.5 Changelog ............................................................. 6
1.6 Contributing .......................................................... 7
1.7 License ................................................................. 7
1.8 Authors ................................................................. 8

Python Module Index .................................................. 9
Flask-Breadcrumbs is a Flask extension that adds support for generating site breadcrumb navigation.
1.1 Installation

Flask-Breadcrumbs is on PyPI so all you need is:

$ pip install Flask-Breadcrumbs

The development version can be downloaded from its page at GitHub.

$ git clone https://github.com/inveniosoftware/flask-breadcrumbs.git
$ cd flask-breadcrumbs
$ python setup.py develop
$ ./run-tests.sh

1.1.1 Requirements

Flask-Breadcrumbs has the following dependencies:

• Flask-Menu
• Flask
• six

Flask-Breadcrumbs requires Python version 2.6, 2.7 or 3.3+. 
1.2 Usage

This guide assumes that you have successfully installed Flask-Breadcrumbs package already. If not, please follow the Installation instructions first.

1.2.1 Simple Example

Here is a simple Flask-Breadcrumbs usage example:

```python
from flask import Flask
from flask.ext import breadcrumbs

app = Flask(__name__)

# Initialize Flask-Breadcrumbs
breadcrumbs.Breadcrumbs(app=app)

@app.route('/
@breadcrumbs.register_breadcrumb(app, '.', 'Home')
def index():
    pass

if __name__ == '__main__':
    app.run(debug=True)
```

Save this as app.py and run it using your Python interpreter.

```bash
$ python app.py
* Running on http://127.0.0.1:5000/
```

1.2.2 Templating

By default, a proxy object to `current_breadcrumbs` is added to your Jinja2 context as `breadcrumbs` to help you with creating navigation bar. For example:

```html
<div>
  {% for breadcrumb in breadcrumbs -%}
    <a href="{{ breadcrumb.url }}">{{ breadcrumb.text }}</a>
    {{ '/' if not loop.last }}
  {%- endfor -%}
</div>
```

1.2.3 Blueprint Support

The most important part of an modular Flask application is Blueprint. You can create one for your application somewhere in your code and decorate your view function, like this:

```python
from flask import Blueprint
from flask.ext import breadcrumbs

account = Blueprint('account', __name__, url_prefix='/account')

@account.route('/
@breadcrumbs.register_breadcrumb(account, '.', 'Your account')
```
def index():
    pass

1.3 Default breadcrumb root

Sometimes you want to combine multiple blueprints and organize the navigation to certain hierarchy using function default_breadcrumb_root().

```python
from flask import Blueprint
from flask.ext import breadcrumbs

social = Blueprint('social', __name__, url_prefix='/social')
breadcrumbs.default_breadcrumb_root(social, '.account')

@social.route('/list')
@breadcrumbs.register_breadcrumb(social, '.list', 'Social networks')
def list():
    pass
```

As a result of this, your current_breadcrumbs object with contain list with 3 items during processing request for /social/list.

```python
from example import app
from flask.ext import breadcrumbs
import account
import social
app.register_blueprint(account.bp_account)
app.register_blueprint(social.bp_social)
with app.test_client() as c:
    c.get('/social/list')
    assert map(lambda x: x.url,
               list(breadcrumbs.current_breadcrumbs)) == ['/','/account/','/social/list']
```

1.4 API

If you are looking for information on a specific function, class or method, this part of the documentation is for you.

1.4.1 Flask extension

```python
class flask.ext.breadcrumbs.Breadcrumbs(app, init_menu=False)
    Breadcrumb organizer for a Flask application.

    static breadcrumbs()  # Backend function for breadcrumbs proxy.
        Returns  A list of breadcrumbs.

    static breadcrumbs_context_processor()  # Add variable breadcrumbs to template context.
        It contains the list of menu entries to render as breadcrumbs.
```
static current_path()
Determine current location in menu hierarchy.
Backend function for current_path proxy.

static get_path(app)
Return path to root of application’s or blueprint’s branch.

init_app(app, *args, **kwargs)
Configure an application. This registers a context_processor.

Parameters app(flask.Flask) – The flask.Flask object to configure.

1.4.2 Decorators

flask.ext.breadcrumbs.register_breadcrumb(app, path, text, endpoint_arguments_constructor=None, dynamic_list_constructor=None)
Decorate endpoints that should be displayed as a breadcrumb.

Parameters

• app – Application or Blueprint which owns the function.
• path – Path to this item in menu hierarchy (“breadcrumbs.” is automatically added).
• text – Text displayed as link.
• order – Index of item among other items in the same menu.
• endpoint_arguments_constructor – Function returning dict of arguments passed to url_for when creating the link.
• dynamic_list_constructor – Function returning a list of breadcrumbs to be displayed by this item. Every object should have ‘text’ and ‘url’ properties/dict elements.

flask.ext.breadcrumbs.default_breadcrumb_root(app, path)
Register default breadcrumb path for all endpoints in this blueprint.

Parameters

• app (flask.Flask or flask.Blueprint) – The Flask or flask.Blueprint object.
• path – Path in the menu hierarchy. It should start with ‘.’ to be relative to breadcrumbs root.

1.4.3 Proxies

flask.ext.breadcrumbs.current_breadcrumbs
List of breadcrumbs for current request.

flask.ext.breadcrumbs.breadcrumbs_root_path
Name of breadcrumbs root path.

1.5 Changelog

Here you can see the full list of changes between each Flask-Breadcrumbs release.

Version 0.2.0 (released 2014-11-05)
• The Flask-Breadcrumbs extension is now released under more permissive Revised BSD License. (#11)
• Documentation improvements. (#13)
• Extension initialization improvements. (#12)
• Support for Python 3.4. (#5)

Version 0.1.0 (released 2014-07-24)

• Initial public release

1.6 Contributing

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:

$ ./run-tests.sh

1.7 License

Flask-Breadcrumbs is free software; you can redistribute it and/or modify it under the terms of the Revised BSD License quoted below.

Copyright (C) 2013, 2014 CERN.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

• Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
• Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
• Neither the name of the copyright holder nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS “AS IS” AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

1.6. Contributing
In applying this license, CERN does not waive the privileges and immunities granted to it by virtue of its status as an Intergovernmental Organization or submit itself to any jurisdiction.

1.8 Authors

Flask-Breadcrumbs is developed for use in Invenio digital library software.

Contact us at info@invenio-software.org

• Krzysztof Lis <krzysztof.lis@cern.ch>
• Jiri Kuncar <jiri.kuncar@cern.ch>
• Tibor Simko <tibor.simko@cern.ch>
f
flask.ext.breadcrumbs,5
### Index

**B**
- Breadcrumbs (class in `flask.ext.breadcrumbs`), 5
- `breadcrumbs()` (flask.ext.breadcrumbs.Breadcrumbs static method), 5
- `breadcrumbs_context_processor()` (flask.ext.breadcrumbs.Breadcrumbs static method), 5
- `breadcrumbs_root_path` (in module flask.ext.breadcrumbs), 6

**C**
- `current_breadcrumbs` (in module flask.ext.breadcrumbs), 6
- `current_path()` (flask.ext.breadcrumbs.Breadcrumbs static method), 5

**D**
- `default_breadcrumb_root()` (in module flask.ext.breadcrumbs), 6

**F**
- `flask.ext.breadcrumbs` (module), 5

**G**
- `get_path()` (flask.ext.breadcrumbs.Breadcrumbs static method), 6

**I**
- `init_app()` (flask.ext.breadcrumbs.Breadcrumbs method), 6

**R**
- `register_breadcrumb()` (in module flask.ext.breadcrumbs), 6