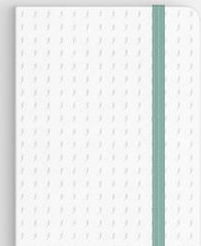


Anatomy of a repository

Karolina Przerwa
CERN



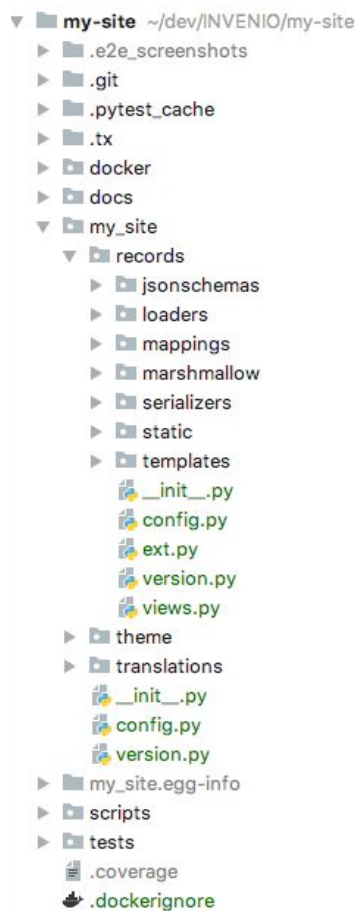
1. Invenio file structure
2. Tracking changes
3. Documentation
4. Development workflow
 - a. Docker services
 - b. Testing
 - c. Project dependencies





Project file structure

1. Application and it's modules
2. Docker files for services
3. Theme
4. Project scripts
5. Tests
6. Documentation
7. Configuration files





Project repository

```
kprzerwa@karolina-macbook:~/dev/INVENIO/my-site
```

```
[$ git init
```

```
Initialized empty Git repository in /Users/karolina/dev/INVENIO/my-site/.git/
```

```
kprzerwa@karolina-macbook:~/dev/INVENIO/my-site
```

```
[$ git add --all
```

```
kprzerwa@karolina-macbook:~/dev/INVENIO/my-site
```

```
[$ check-manifest --update
```

```
lists of files in version control and sdist do not match!
```

```
missing from sdist:
```

Build documentation

```
kprzerwa@karolina-macbook:~/dev/INVENIO/my-site  
[$ python setup.py build_sphinx
```

Build documentation

```
kprzerwa@karolina-macbook:~/dev/INVENIO/my-site
```

```
[$ python setup.py build_sphinx
```

```
docs/_build/html/index.html
```



My site

Invenio digital library framework.

Navigation

[Installation](#)

[Configuration](#)

[Usage](#)

[API Docs](#)

[Contributing](#)

[Changes](#)

[License](#)

[Authors](#)

[my-site@GitHub](#)

[my-site@PyPI](#)

Quick search

My site

build unknown coverage repository not found license repo not found

Invenio digital library framework.

Further documentation is available on <https://my-site.readthedocs.io/>

User's Guide

This part of the documentation will show you how to get started in using My site.

- [Installation](#)
 - [Running](#)
 - [Upgrading](#)
 - [Testing](#)
 - [Documentation](#)
 - [Production environment](#)
- [Configuration](#)
- [Usage](#)

API Reference

Developing with **INVENIO**)

Docker services



CU. CAP. 332 CU.M. 1.172 CU.FT.

MSKU 769 753 0
22G1

MAX. GROSS 30.480 KG
67.200 LB
TARE 2.170 KG
4.780 LB
PAYLOAD 28.310 KG
62.420 LB
CUBE 33.2 M³
1.170 FT³

MRKU 734 355 6
22G1

MAX. GROSS 30.480 KG
67.200 LB
TARE 2.170 KG
4.780 LB
PAYLOAD 28.310 KG
62.420 LB
CUBE 33.2 M³
1.170 FT³

SUDU 7696899

TC
MAX. GRO
TARE
NET
CU. CAP.

maerskline.com

maerskline.com



Scripts

- ▼ docker
 - ▶ haproxy
 - ▶ nginx
 - ▶ postgres
 - ▶ uwsgi
 - build-images.sh
 - wait-for-services.sh

- docker-compose.full.yml
- docker-compose.yml
- docker-services.yml
- Dockerfile
- Dockerfile.base

```
kprzerwa@karolina-macbook:~/dev/INVENIO/my-site  
$ docker-compose up  
Creating my-site_es_1      ... done  
Creating my-site_mq_1     ... done  
Creating my-site_db_1     ... done  
Creating my-site_cache_1  ... done
```

Tests

Fix me



Test files



```
1  # -*- coding: utf-8 -*-
2  #
3  # Copyright (C) 2019 CERN.
4  #
5  # My site is free software; you can redistribute it and/or modify it under
6  # the terms of the MIT License; see LICENSE file for more details.
7
8  """Test simple rest flow."""
9
10 import json
11
12 from invenio_search import current_search
13
14
15 def test_simple_flow(client):
16     """Test simple flow using REST API."""
17     headers = [('Content-Type', 'application/json')]
18     data = {
19         'title': 'The title of the record ',
20         'contributors': [
21             {'name': 'Ellis Jonathan'},
22         ]
23     }
24     url = 'https://localhost:5000/records/'
25
26     # create a record
27     response = client.post(url, data=json.dumps(data), headers=headers)
28     assert response.status_code == 201
29     current_search.flush_and_refresh('records')
30
31     # retrieve record
32     res = client.get('https://localhost:5000/records/1')
33     assert res.status_code == 200
34
```

End-to-end VM

```
kprzerwa@karolina-macbook:~/dev/INVENIO/my-site  
[$ export E2E="yes"
```

```
./training/00-prerequisites/install-chromedriver.sh
```


End-to-end custom

```
kprzerwa@karolina-macbook:~/dev/INVENIO/my-site  
[$ export E2E="yes"
```

```
kprzerwa@karolina-macbook:~/dev/INVENIO/my-site  
[$ export E2E_WEBDRIVER_BROWSERS="Chrome Firefox"
```

install latest version from

<https://sites.google.com/a/chromium.org/chromedriver/downloads>

add the chromedriver localisation to your \$PATH

Fixing tests

```
5
6 ▶ def test_frontpage(live_server, browser):
7     """Test retrieval of front page."""
8     browser.get(url_for('invenio_theme_frontpage.index', _external=True))
9     assert "Welcome to My Site" == browser.find_element_by_class_name(
10         'marketing').find_element_by_tag_name('h1').text
11
```

```
kprzerwa@karolina-macbook:~/dev/INVENIO/my-site
[$ ./run-tests.sh
```

Python dependencies



Managing dependencies

UC: Work with Images (Pillow)

1. development

```
kprzerwa@karolina-macbook:~/dev/INVENIO/my-site  
[$ pipenv shell  
  
(my-site) kprzerwa@karolina-macbook:~/dev/INVENIO/my-site  
$ pip install pillow
```


Managing dependencies

```
1  [[source]]
2  url = "https://pypi.org/simple"
3  verify_ssl = true
4  name = "pypi"
5
6  [packages]
7  Babel = ">=2.4.0"
8  Flask-BabelEx = ">=0.9.3"
9  invenio = {version = "==3.1.0", extras = ["base", "metadata", "postgresql", "auth", "elasticsearch6"]}
10 uwsgi = ">=2.0"
11 lxml = ">=3.5.0,<4.2.6"
12 pillow = "*" ←
```

```
kprzerwa@karolina-macbook:~/dev/INVENIO/my-site
$ git add Pipfile.lock
```



Questions?