pyscaffoldext-dsproject Documentation

Release unknown

Florian Wilhelm

Jan 07, 2021

CONTENTS

1 1 1 1	Contents			
	1.1	pyscaffoldext-dsproject	3	
	1.2	License	4	
	1.3	Contributors	5	
	1.4	Changelog	5	
	1.5	pyscaffoldext	6	
2	Indices and tables			
Python Module Index			9	
In	Index			

PyScaffold extension that adds a perfect structure for Data Science projects.

CHAPTER

ONE

CONTENTS

Build Status ReadTheDocs Coveralls PyPI-Server Downloads

1.1 pyscaffoldext-dsproject

PyScaffold extension tailored for *Data Science* projects. This extension is inspired by cookiecutter-data-science and enhanced in many ways. The main differences are that it

- 1. advocates a proper Python package structure that can be shipped and distributed,
- 2. uses a conda environment instead of something virtualenv-based and is thus more suitable for data science projects,
- 3. more default configurations for Sphinx, py.test, pre-commit, etc. to foster clean coding and best practices.

Also consider using dvc to version control and share your data within your team. Read this blogpost to learn how to work with JupyterLab notebooks efficiently by using a data science project structure like this.

The final directory structure looks like:

```
- AUTHORS.rst
                          <- List of developers and maintainers.
CHANGELOG.rst
                          <- Changelog to keep track of new features and fixes.
- LICENSE.txt
                          <- License as chosen on the command-line.
- README.md
                          <- The top-level README for developers.
                          <- Directory for configurations of model & application.
- configs
- data
                 <- Data from third party sources.
   — external
   — interim
                         <- Intermediate data that has been transformed.
                         <- The final, canonical data sets for modeling.

    processed

   — raw
                         <- The original, immutable data dump.
                         <- Directory for Sphinx documentation in rst or md.
- docs
                         <- The conda environment file for reproducibility.
- environment.yml
- models
                          <- Trained and serialized models, model predictions,
                             or model summaries.
- notebooks
                          <- Jupyter notebooks. Naming convention is a number (for
                             ordering), the creator's initials and a description,
                             e.g. `1.0-fw-initial-data-exploration`.
                          <- Data dictionaries, manuals, and all other materials.
 references
                          <- Generated analysis as HTML, PDF, LaTeX, etc.
 reports
  └── figures
                          <- Generated plots and figures for reports.
 scripts
                          <- Analysis and production scripts which import the
                             actual PYTHON_PKG, e.g. train_model.
                          <- Declarative configuration of your project.
- setup.cfg
                          <- Use `python setup.py develop` to install for_
- setup.py
<u>development or</u>
                                                                       (continues on next page)
```

(continued from previous page)

```
or create a distribution with `python setup.py bdist_

wheel`.

src

PYTHON_PKG <- Actual Python package where the main functionality_

ogoes.

tests <- Unit tests which can be run with `py.test`.

.coveragerc <- Configuration for coverage reports of unit tests.

.isort.cfg <- Configuration for git hook that sorts imports.

.pre-commit-config.yaml <- Configuration of pre-commit git hooks.</pre>
```

See a demonstration of the initial project structure under dsproject-demo and also check out the documentation of PyScaffold for more information.

1.1.1 Usage

Just install this package with pip install pyscaffoldext-dsproject and note that putup -h shows a new option --dsproject. Creating a data science project is then as easy as:

putup --dsproject my_ds_project

1.1.2 Making Changes & Contributing

This project uses pre-commit, please make sure to install it before making any changes:

```
pip install pre-commit
cd pyscaffoldext-dsproject
pre-commit install
```

It is a good idea to update the hooks to the latest version:

pre-commit autoupdate

Please also check PyScaffold's contribution guidelines.

1.1.3 Note

This project has been set up using PyScaffold 3.2. For details and usage information on PyScaffold see https://pyscaffold.org/.

1.2 License

The MIT License (MIT)

Copyright (c) 2019 Florian Wilhelm

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions: The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PAR-TICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFT-WARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

1.3 Contributors

- Florian Wilhelm < florian.wilhelm@gmail.com>
- Anderson Bravalheri <andersonbravalheri@gmail.com>

1.4 Changelog

1.4.1 Version 0.5 (development)

- Updated to use PyScaffold v4 API
- Updated Cirrus CI config file
- Added new useful tasks to tox.ini
- Renamed environment.yaml to environment.yml
- Added Yellowbrick to environment.yaml

1.4.2 Version 0.4.1

· Fix problem with additional new lines in Windows

1.4.3 Version 0.4

- Add a .gitignore also in the data folder
- Changed wording in README.md

1.4.4 Version 0.3.1

• Fixed wrong folder name in README.md template

1.4.5 Version 0.3

• Added a configs folder

1.4.6 Version 0.2.1

- Fixed some docs
- Adjusted line lengths
- Some cosmetic changes

1.4.7 Version 0.2

• Reworked the general layout some more

1.4.8 Version 0.1

• Initial commit

1.5 pyscaffoldext

1.5.1 pyscaffoldext.dsproject package

Subpackages

pyscaffoldext.dsproject.templates package

Module contents

Submodules

pyscaffoldext.dsproject.extension module

Module contents

CHAPTER

TWO

INDICES AND TABLES

- genindex
- modindex
- search

PYTHON MODULE INDEX

р

pyscaffoldext.dsproject,6

INDEX

Μ

module
 pyscaffoldext.dsproject,6

Ρ

pyscaffoldext.dsproject
 module,6