Reusable Django Apps

Björn Andersson

mediapop

What is a reusable app?

What is a reusable app?

- *Models (pre 1.7 this was what defined an app)*

What is a reusable app?

- *Models (pre 1.7 this was what defined an app)*
- *Views*

What is a reusable app?

- *Models (pre 1.7 this was what defined an app)*
- *Views*
- *Templates*

What is a reusable app?

- *Models (pre 1.7 this was what defined an app)*
- *Views*
- *Templates*
- *Static assets*

What is a reusable app?

- *Models (pre 1.7 this was what defined an app)*
- *Views*
- *Templates*
- *Static assets*
- *Configuration*

What is a reusable app?

- *Models (pre 1.7 this was what defined an app)*
- *Views*
- *Templates*
- *Static assets*
- *Configuration*
- *URLs (routes)*

What makes people trust your app?

mediapop

What makes people trust your app?

- *Documentation*

What makes people trust your app?

- *Documentation*
  - *How to use your app*

What makes people trust your app?

- *Documentation*
  - *How to use your app*
  - *How to install it*

What makes people trust your app?

- *Documentation*
  - *How to use your app*
  - *How to install it*
  - *Requirements*

What makes people trust your app?

- *Documentation*
  - *How to use your app*
  - *How to install it*
  - *Requirements*
- *Tests*

What makes people trust your app?

- *Documentation*
    - *How to use your app*
    - *How to install it*
    - *Requirements*
- *Tests*
    - *Is your app green?*
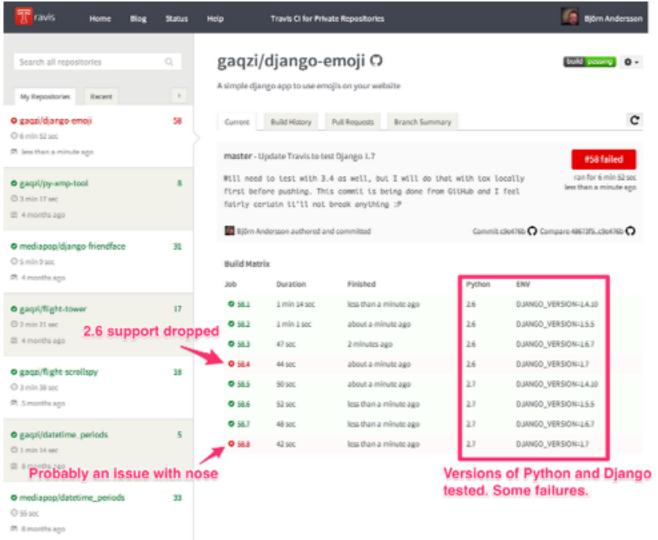
How to make a reusable app?

Easiest way to start is to use cookiecutter.


```
$ pip install cookiecutter
$ cookiecutter git@github.com:pydanny/
cookiecutter-djangopackage.git
```

mediapop

starting an app with cookiecutter

```
(test)ba@djuproera(system)% cookiecutter git@github.com:pydanny/cookiecutter-djangopackage.git
Cloning into 'cookiecutter-djangopackage'...
remote: Counting objects: 366, done.
remote: Total 366 (delta 0), reused 0 (delta 0)
Receiving objects: 100% (366/366), 55.67 KiB | 0 bytes/s, done.
Resolving deltas: 100% (179/179), done.
Checking connectivity... done.
full_name (default is "Your full name here")? Björn Andersson
email (default is "you@example.com")? ba@sanitarium.se
github_username (default is "yourname")? gaqzi
project_name (default is "dj-package")? django-test
repo_name (default is "dj-package")? django-test
app_name (default is "djpackage")? testapp
project_short_description (default is "Your project description goes here")? A fancy description
release_date (default is "2014-01-01")? 2014-09-04
year (default is "2014")?
version (default is "0.1.0")? 1.0.0
(test)ba@djuproera(system)% ls
django-test
(test)ba@djuproera(system)% ls django-test
AUTHORS.rst           LICENSE            README.rst              requirements.txt    setup.py
CONTRIBUTING.rst      MANIFEST.in        docs                    runtests.py         testapp
HISTORY.rst           Makefile           requirements-test.txt setup.cfg             tests
(test)ba@djuproera(system)%
```
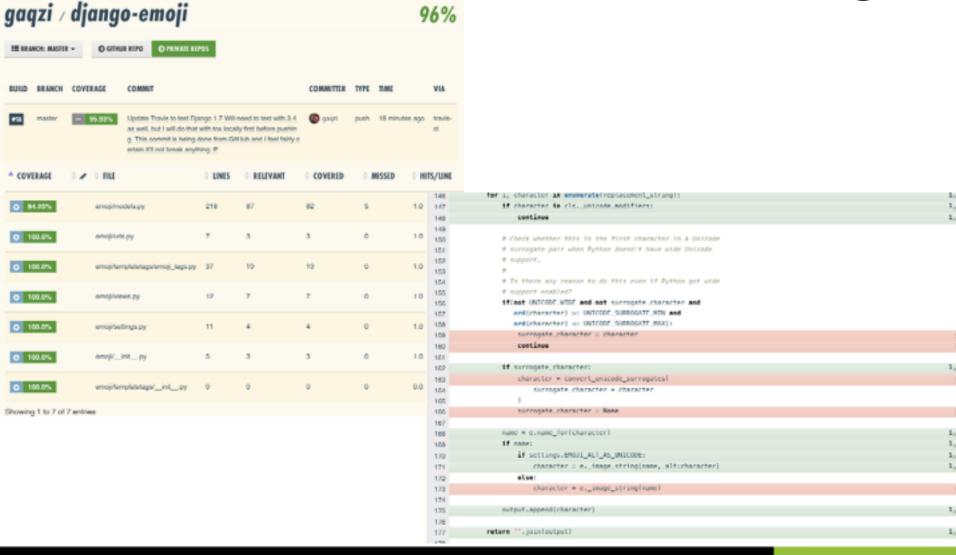
TravisCI / Continuous Integration

Travis can handle multiple versions of Python/Django for you as long as none of the packages differ.

Meaning that if you only care about support 2.7, 3.3 you can use a Travis matrix to test your app. Which gives you nice output like this one.

2.6 support dropped

Probably an issue with nose

Versions of Python and Django tested. Some failures.

Coveralls / Test coverage

mediapop

tox / Multi version testing

*Define which versions of Python you want to test
with and which package versions on that given version.*

For instance to test Python 2.6 with Django 1.4, 1.5 and 1.6.

Python 2.7 on Django 1.4, 1.5, 1.6 and 1.7

Python 3.3 on Django 1.6 and 1.7

*Checkout tox-matrix for an easy way to define versions and
dependencies.*

TravisCI with tox, example output


```
OK
Destroying test database for alias 'default'...
_____ summary
_____

  py26-django14: commands succeeded
  py27-django14: commands succeeded
  py26-django15: commands succeeded
  py27-django15: commands succeeded
  py26-django16: commands succeeded
  py27-django16: commands succeeded
  py33-django16: commands succeeded
  py27-django17: commands succeeded
  py33-django17: commands succeeded
  py34-django17: commands succeeded
  congratulations :)

The command "make test" exited with 0.
$ coveralls
```

References

- *cookiecutter*
  https://github.com/audreyr/cookiecutter

- *cookiecutter-djangopackage*
  https://github.com/pydanny/cookiecutter-djangopackage

- *tox*
  http://tox.testrun.org

- *tox-matrix*
  https://pypi.python.org/pypi/tox-matrix