

## #How to write reusable apps

pack django app and install it in django project

## #Packaging your app

### #1

First, create a parent directory for polls, outside of your Django project. Call this directory django-polls

generally, while packing django app, prepend django- to your module name when creating a package to distribute

### #2

Move the polls directory into the django-polls directory

### #3

Create a file django-polls/README.rst with the following contents:

```
=====  
Polls  
=====
```

Polls is a Django app to conduct web-based polls. For each question, visitors can choose between a fixed number of answers.

Detailed documentation is in the "docs" directory.

Quick start

-----

1. Add "polls" to your INSTALLED\_APPS setting like this::

```
INSTALLED_APPS = [  
    ...  
    'polls',  
]
```

2. Include the polls URLconf in your project urls.py like this::

```
path('polls/', include('polls.urls')),
```

3. Run ``python manage.py migrate`` to create the polls models.

4. Start the development server and visit <http://127.0.0.1:8000/admin/> to create a poll (you'll need the Admin app enabled).

5. Visit <http://127.0.0.1:8000/polls/> to participate in the poll.

#4

Create a django-polls/LICENSE file

#5

create pyproject.toml, setup.cfg, and setup.py files

#django-polls/pyproject.toml

```
[build-system]
requires = ['setuptools>=40.8.0', 'wheel']
build-backend = 'setuptools.build_meta:__legacy__'
```

#django-polls/setup.cfg

```
[metadata]
name = django-polls
version = 0.1
description = A Django app to conduct web-based polls.
long_description = file: README.rst
url = https://www.example.com/
author = Your Name
author_email = yourname@example.com
license = BSD-3-Clause # Example license
classifiers =
    Environment :: Web Environment
    Framework :: Django
    Framework :: Django :: X.Y # Replace "X.Y" as appropriate
    Intended Audience :: Developers
    License :: OSI Approved :: BSD License
    Operating System :: OS Independent
    Programming Language :: Python
    Programming Language :: Python :: 3
    Programming Language :: Python :: 3 :: Only
    Programming Language :: Python :: 3.8
    Programming Language :: Python :: 3.9
    Topic :: Internet :: WWW/HTTP
    Topic :: Internet :: WWW/HTTP :: Dynamic Content
```

```
[options]
```

```
include_package_data = true
packages = find:
```

```
python_requires = >=3.8
install_requires =
    Django >= X.Y # Replace "X.Y" as appropriate
```

```
#django-polls/setup.py
from setuptools import setup

setup()
```

#6

To include additional files, we'll need to create a MANIFEST.in file

```
#django-polls/MANIFEST.in
include LICENSE
include README.rst
recursive-include polls/static *
recursive-include polls/templates *
```

#7

Add documentation, django-polls/docs and include it

```
recursive-include docs *
```

#8

building your package with **python setup.py sdist** (run from inside django-polls). This creates a directory called dist and builds your new package, django-polls-0.1.tar.gz.

#more info

<https://packaging.python.org/en/latest/tutorials/packaging-projects/>

# using our own package

#1

Install package(django app)

```
python -m pip install --user django-polls/dist/django-polls-0.1.tar.gz
```

note:

in venv, remove user tag

```
python -m pip install django-polls/dist/django-polls-0.1.tar.gz
```

Note: also make sure, django-polls directory is next to manage.py file

#2

Run the server again

#3

To uninstall the package, use pip:

```
python -m pip uninstall django-polls
```

#ref

<https://docs.djangoproject.com/en/4.1/intro/reusable-apps/>