# django-project-portfolio Documentation Release 1.3.1

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django-project-portfolio is a Django application for displaying information about software projects you maintain.

*Models* are included for storing information about projects, versions of projects, the status of each release and associated metadata including licensing and location of packages, source code, documentation and continuous integration. *Built-in views* are provided for basic display of this information.

# CHAPTER 1

### Documentation contents

### Installation guide

The 1.3 release of django-project-portfolio supports Django 1.8, 1.10, and 1.11 on the following Python versions (matching the versions supported by Django itself):

- Django 1.8 supports Python 2.7, 3.3, 3.4, and 3.5.
- Django 1.10 supports Python 2.7, 3.4, and 3.5.
- Django 1.11 supports Python 2.7, 3.4, 3.5, and 3.6

#### **Important:** Python 3.2

Although Django 1.8 supported Python 3.2 at the time of its release, the Python 3.2 series has reached end-of-life, and as a result support for Python 3.2 has been dropped from django-project-portfolio.

If you do not already have a supported version of Django installed, installing django-project-portfolio will install the latest release of Django automatically as a dependency.

### **Normal installation**

The preferred method of installing django-project-portfolio is via pip, the standard Python package-installation tool. If you don't have pip, instructions are available for how to obtain and install it. If you're using Python 2.7.9 or later (for Python 2) or Python 3.4 or later (for Python 3), pip came bundled with your installation of Python.

Once you have pip, type:

pip install django-project-portfolio

### Installing from a source checkout

If you want to work on django-project-portfolio, you can obtain a source checkout.

The development repository for django-project-portfolio is at <<u>https://github.com/ubernostrum/</u>django-project-portfolio>. If you have git installed, you can obtain a copy of the repository by typing:

git clone https://github.com/ubernostrum/django-project-portfolio.git

From there, you can use normal git commands to check out the specific revision you want, and install it using pip install -e . (the -e flag specifies an "editable" install, allowing you to change code as you work on django-project-portfolio, and have your changes picked up automatically).

### Configuration and use

Once you have Django and django-project-portfolio installed, check out the quick start guide to see how to get your contact form up and running.

### Models for software projects

django-project-portfolio provides three models which work together to describe software projects: *Project* represents a software project, *Version* represents a particular version of a project, and *License* represents the license under which a particular version is released.

#### class projects.models.License

The license under which a particular *Version* is released. This is tied to *Version* rather than *Project* in order to allow the possibility of relicensing from one version to another.

A License has three fields, all of which are required:

name

```
CharField(max_length=255)
```

The name of the license (for example, "GPLv2" or "MIT").

slug

SlugField (prepopulated from name)

A short, descriptive URL-safe string to identify the license. Currently there are no views in django-projectportfolio which make use of this, but the field is provided so that custom views can make use of it.

#### link

URLField

A link to an online version of the license's terms, or to a description of the license. For open-source licenses, individual license pages in the OSI license list are useful values for this field.

class projects.models.Project

A software project.

Four fields (all required) provide basic metadata about the project:

name

CharField(max\_length=255)

The name of the project.

#### slug

SlugField (prepopulated from name)

A short, descriptive URL-safe string to identify the project.

#### description

TextField

A free-form text description of the project.

#### status

IntegerField with choices

Indicates whether the project is public or not. May be expanded to include additional options in future versions, hence the implementation as an IntegerField with choices instead of a BooleanField. Valid choices are:

#### PUBLIC\_STATUS

Indicates a project which is public; this will cause built-in views to list and display the project.

#### HIDDEN\_STATUS

Indicates a project which is hidden; built-in views will not list or display the project.

Four additional fields, all optional, allow additional useful data about the project to be specified:

#### package\_link

URLField

URL of a location where packages for this project can be found.

#### repository\_link

URLField

URL of the project's source-code repository.

#### documentation\_link

URLField

URL of the project's online documentation.

#### tests\_link

URLField

URL of the project's online testing/continuous integration status.

One utility method is also defined on instances of Project:

#### latest\_version()

Returns the latest *Version* of this project (as defined by the is\_latest field on Version), or None if no such version exists.

Finally, the default manager for Project defines one custom query method, public(), which returns only instances whose *status* is *PUBLIC\_STATUS*. This is implemented via a custom QuerySet subclass, so the method will be available on any QuerySet obtained from Project as well.

#### class projects.models.Version

A particular version of a software project.

There are six fields, all of which are required:

#### project

ForeignKey to Project

The project this version corresponds to.

#### version

CharField(max\_length=255)

A string representing the version's identifier. This is deliberately freeform to support different types of versioning systems, but be aware that it will (with the built-in views) be used in URLs, so URL-safe strings are encouraged here.

#### is\_latest

BooleanField

Indicates whether this is the latest version of the project. When a Version is saved with is\_latest=True, a post\_save signal handler will toggle all other versions of that *Project* to is\_latest=False.

#### status

IntegerField with choices

The status of this version. Valid choices are (taken from the Python Package Index's status choices):

#### PLANNING\_STATUS

This is an early/planning version.

#### PRE\_ALPHA\_STATUS

This is a pre-alpha version.

#### ALPHA\_STATUS

This is an alpha version.

### BETA STATUS

This is a beta version.

#### STABLE\_STATUS

This is a stable version.

#### license

ForeignKey to License

The license under which this version is released.

#### release\_date

The date on which this version was released.

Additionally, the default manager for Version defines one custom query method, stable(), which returns only instances whose *status* is *STABLE\_STATUS*. This is implemented via a custom QuerySet subclass, so the method will be available on any QuerySet obtained from Version as well, and also on any related QuerySet obtained through an instance of *Project*.

### Views for software projects

django-project-portfolio provides four built-in views for displaying information about software projects. Though not all possible views of the data are included here, the built-in views strive to cover the common cases.

#### class projects.views.ProjectDetail

Subclass of Django's generic DetailView.

Detail view of a *Project*. Has one required argument which must be captured in the URL:

slug

The *slug* of the project.

By default, this view will only display projects whose *status* is *PUBLIC\_STATUS*.

#### class projects.views.ProjectList

Subclass of Django's generic ListView.

List of *Project* instances.

By default, this view will only display projects whose *status* is *PUBLIC\_STATUS*.

### class projects.views.VersionDetail

Subclass of Django's generic DetailView.

Detail view of a Version. Has two required arguments which must be captured in the URL:

project\_slug

The *slug* of the *Project* with which this Version is associated.

slug

The version of the Version.

By default, only versions associated with a *Project* whose *status* is *PUBLIC\_STATUS* can be displayed.

#### class projects.views.LatestVersionList

Subclass of django.views.generic.ListView.

List of the latest Version of each public (i.e., status is PUBLIC\_STATUS) Project.

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