django-periodicals Documentation

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django-periodicals

A Django application for periodical/magazine websites with fully cross linked indices on Periodical, Issue, Article, Author, Article Series and Tags. Provides full text search of article titles and descriptions. A complete set of templates are provided. A sitemap is also dynamically generated.

1.1 Documentation

The full documentation is at http://django-periodicals.rtfd.org.

1.2 Quickstart

Simple to install from a package using `pip` which will install all it's dependencies (coming soon). For now see installing-from-github.

```
pip install django-periodicals
```

Install two packages manually to get newer versions than are currently in PyPi:

```
$ pip install -e git://github.com/saschwarz/django-recaptcha.git#egg=django-recaptcha
```

```
$ pip install -e git://github.com/nemith/django-tagging.git@dev-django1.5#egg=django_tagging-dev
```

Install a search backend for use by Haystack. To start install Whoosh:

```
$ pip install Whoosh
```

1.2.1 settings.py

Add `periodicals` and the other applications it uses to `INSTALLED_APPS`:

```
INSTALLED_APPS = (
    ...
    'haystack',
    'tagging',
    'captcha',
```

```
    'periodicals',
)
```

Configure your Haystack backend. Here is an example using Whoosh:

```
HAYSTACK_CONNECTIONS = {
    'default': {
        'ENGINE': 'haystack.backends.whoosh_backend.WhooshEngine',
        'PATH': os.path.join(os.path.abspath(os.path.dirname(__file__)), 'whoosh_periodicals_index'),
        'STORAGE': 'file',
        'POST_LIMIT': 128 * 1024 * 1024,
        'INCLUDE_SPELLING': True,
        'BATCH_SIZE': 100,
    },
}
```

Configure your reCAPTCHA keys - only used when users add links to Articles or Issues:

```
RECAPTCHA_PRIVATE_KEY = "your-recaptcha-private-key"
RECAPTCHA_PUBLIC_KEY = "your-recaptcha-public-key"
```

1.2.2 urls.py

Choose a URL prefix at which to base the application:

```
...
import periodicals

urlpatterns = patterns('',
    ...
    url(r'^admin/', include(admin.site.urls)),
    url(r'^periodicals/', include(periodicals.urls)),
)
```

1.2.3 Management Commands

```
$ python manage.py syncdb
```

1.3 Features

I developed `django-periodicals` to provide a searchable index for a printed/online magazine. I wanted all the meta data to be fully cross linked. So users can easily browse all articles for an author, all articles in an issue, all articles in a series/category, all articles tagged with a keyword and so forth.

I turned it in to a standalone application when I ported it to Django 1.5. Here are the features:

- Provides Django models for Periodicals, Issues, Articles, Authors, Tags and Links to external material.
- A full set of templates are provided including:
  - Individual Periodical pages with yearly indices.
  - Fully cross-linked indexes of Authors, Issues, Article Series, Tags, and Articles.
  - Search across Article titles and descriptions.

  - Tagging:
    * Per article.
    * Index pages per tag.
    * Tag cloud.
- Moderated user added links of blog posts and other web resources to each Issue and Article. Spam protection by reCAPTCHA and requiring approval by the admin. This feature can be disabled via setting.
- Django admin forms for data entry.
- Sitemap support.
- Support for Python 2.6, 2.7 and Django 1.5 and 1.6.
- Travis CI unit tests.
- See `django-periodicals` in action at Googility.

CHAPTER 2

Installation

You can install from PyPi and manually add some packages or install from a GitHub checkout and use `pip` and a `requirement.txt` file.

2.1 Installing from PyPi

Simple to install from a package using `pip` which will install most of it's dependencies:

```
$ pip install django-periodicals
```

Install two packages/applications manually to get newer versions than are currently in PyPi:

```
$ pip install -e git://github.com/saschwarz/django-recaptcha.git#egg=django-recaptcha
```

```
$ pip install -e git://github.com/nemith/django-tagging.git@dev-django1.5#egg=django_tagging-dev
```

Continue installing with Install a Haystack Backend below.

2.2 Installing from GitHub

This lets you install all the requirements using `pip` and the `requirements.txt` file:

```
$ git clone https://github.com/saschwarz/django-periodicals.git
```

```
$ cd django-periodicals
```

```
$ pip install -r requirements.txt
```

```
$ python setup.py install
```

2.3 Install a Haystack Backend

Install a search backend for use by Haystack. To start install Whoosh:

```
$ pip install Whoosh
```

Try the Demo Project!

CHAPTER 3

Usage

`django-periodicals` integrates a couple other applications to provide it's features.

3.1 settings.py

Add `periodicals` and the other applications it uses to `INSTALLED_APPS`:

```
INSTALLED_APPS = (
    ...
    'haystack',
    'tagging',
    'captcha',
    'periodicals',
)
```

Configure your Haystack backend. Here is an example using Whoosh:

```
HAYSTACK_CONNECTIONS = {
    'default': {
        'ENGINE': 'haystack.backends.whoosh_backend.WhooshEngine',
        'PATH': os.path.join(os.path.abspath(os.path.dirname(__file__)), 'whoosh_periodicals_index'),
        'STORAGE': 'file',
        'POST_LIMIT': 128 * 1024 * 1024,
        'INCLUDE_SPELLING': True,
        'BATCH_SIZE': 100,
    },
}
```

Configure your reCAPTCHA keys - only used when users add links to Articles or Issues (this feature can be disabled):

```
RECAPTCHA_PRIVATE_KEY = "your-recaptcha-private-key"
RECAPTCHA_PUBLIC_KEY = "your-recaptcha-public-key"
```

Configure you Site in the Django Site application - only used when users add links to Articles or Issues *and* when you haven't disabled email notifications.

3.2 urls.py

Choose a URL prefix at which to base the application:

```
...
import periodicals

urlpatterns = patterns('',
    ...
    url(r'^admin/', include(admin.site.urls)),
    url(r'^periodicals/', include(periodicals.urls)),
)
```

3.3 Database Setup

```
$ python manage.py syncdb
```

3.3.1 Optional Settings

You can control the display format for Author, Periodical, and Issue instances and their URL slugs through the following `settings.py` values. The default values are shown below:

```
PERIODICALS_AUTHOR_FORMAT = "%(last_name)s, %(first_name)s %(middle_name)s %(postnomial)s"
PERIODICALS_AUTHOR_SLUG_FORMAT = "%(last_name)s %(first_name)s %(middle_name)s %(postnomial)s"

PERIODICALS_PERIODICAL_FORMAT = "%(name)s"
PERIODICALS_PERIODICAL_SLUG_FORMAT = "%(name)s"

PERIODICALS_ISSUE_FORMAT = "Vol. %(volume)s No. %(issue)s"
PERIODICALS_ISSUE_SLUG_FORMAT = "%(volume)s %(issue)s"
```

3.4 Disabling Adding/Displaying Links

By default visitors can add moderated links to each Issue or Article. Once approved via the admin they are displayed on the appropriate Issue/Article page. To disable this feature and the sections within pages displaying links add this to `settings.py`:

```
PERIODICALS_LINKS_ENABLED = False
```

By default when links are added an email is sent to managers configured for the Site in the Django admin. To disable this feature add this to `settings.py`:

```
PERIODICALS_EMAIL_NOTIFY = False
```

3.4.1 Entering Data

Use the Django admin pages for the Periodical application to enter data. It is easiest to proceed in this order:

1. Create a Periodical.
2. Create an Issue and select the created Periodical.

3. Create Articles and select the created Issue. Authors can be created at the same time or create one or more Author's beforehand.

3.4.2 Update Search Index

Since adding Articles will likely be an occasional operation `django-periodicals` expects the Haystack index to be updated manually. Once you've finished entering all the Articles for an Issue execute this command in your virtualenv when your site is lightly loaded:

```
$ python manage.py update_index
```

3.4.3 Sitemap Support

`django-periodicals` provides sitemap.xml support via django.contrib.sitemaps.

1. Install `django'contrib.sitemaps` in you `settings.py`:

```
INSTALLED_APPS = (
   'django.contrib.sitemaps',
    ...
    'haystack',
    'tagging',
    'captcha',
    'periodicals',
)
```

1. In your `urls.py` import the `sitemaps_at` method from `periodicals.sitemaps`, add the `sitemap.xml` regular expression and place the url location where you put the root of the periodicals application as the argument to `sitemaps_at`:

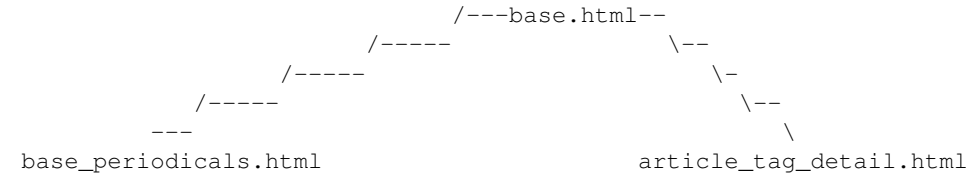
```
from periodicals.sitemaps import sitemaps_at


urlpatterns = patterns('',
    ...
    (r'^sitemap.xml$', 'django.contrib.sitemaps.views.sitemap', {'sitemaps': sitemaps_at('/periodical
)
```

3.4.4 Override Templates/Blocks

`django-periodicals` provides a full set of templates for displaying the data models and their relationships, searching and adding moderated links. So you can just use it right out of the box.

`django-periodicals` defines major template blocks: `title`, `breadcrumbs`, `innercontent` and `copyright` that you can incorporate into your own `base.html`. There are numerous CSS classes and container `divs` to give design layout options without needing to rewrite the templates.

Here is the template inheritance diagram:



```
        (adds search)                          author_detail.html
             |     ---                         author_list.html
             |        \---                     link_add.html
             |            \---                 link_success.html
             |                \----            search.html
             |                     \---        tags.html
             |                         \---
             |                             \
     base_periodical.html          periodical_list.html
(adds copyright per periodical)
             |
             |
     article_detail.html
     issue_detail.html
     issue_year.html
     links.html
     periodical_detail.html
     read_online.html
     series_detail.html
     series_list.html
```

You might override `base.html` in your existing "glue" application:

```
$ cd myapp

$ mkdir -p templates/periodicals/

$ emacs base.html
```

You might override it as follows to use your application's base template and to discard the `breadcrumbs` block from the `content` block.

```
{% extends myapp/base.html %}

{% block content %}
{% block innercontent %}{% endblock innercontent %}
{% block copyright %}{% endblock copyright %}
{% endblock content %}
```

CHAPTER 4

Try the Demo Project!

Check out `django-periodicals` as described in *Installing from GitHub*. There is a directory called `demo` in the checkout directory that contains a fully functional installation.

It is designed to show how to configured your project to use this application.

I also overrode the base.html template and added in some trivial Twitter Bootstrap styling so the pages wouldn't be unstyled. `django-periodicals` does not require the use of Bootstrap.

Follow these steps:

```
$ cd django-periodicals
$ virtualenv demoenv
$ source demoenv/bin/activate
$ pip install -r requirements-test.txt
$ pip install Django
$ cd demo
$ python manage.py syncdb
$ python manage.py loaddata demo_tagging.json
$ python manage.py loaddata demo_periodicals.json
$ python manage.py update_index
$ python manage.py runserver
```

So now you can visit the demo site at http://127.0.0.1:8000/.

CHAPTER 5

Contributing

Contributions are welcome, and they are greatly appreciated! Every little bit helps, and credit will always be given.

You can contribute in many ways:

5.1 Types of Contributions

5.1.1 Report Bugs

Report bugs at https://github.com/saschwarz/django-periodicals/issues.

If you are reporting a bug, please include:

- Your operating system name and version.
- Any details about your local setup that might be helpful in troubleshooting.
- Detailed steps to reproduce the bug.

5.1.2 Fix Bugs

Look through the GitHub issues for bugs. Anything tagged with "bug" is open to whoever wants to implement it.

5.1.3 Implement Features

Look through the GitHub issues for features. Anything tagged with "feature" is open to whoever wants to implement it.

5.1.4 Write Documentation

django-periodicals could always use more documentation, whether as part of the official django-periodicals docs, in docstrings, or even on the web in blog posts, articles, and such.

5.1.5 Submit Feedback

The best way to send feedback is to file an issue at https://github.com/saschwarz/django-periodicals/issues.

If you are proposing a feature:

- Explain in detail how it would work.
- Keep the scope as narrow as possible, to make it easier to implement.
- Remember that this is a volunteer-driven project, and that contributions are welcome :)

5.2 Get Started!

Ready to contribute? Here's how to set up *django-periodicals* for local development.

1. Fork the *django-periodicals* repo on GitHub.
2. Clone your fork locally:

   ```
   $ git clone git@github.com:your_name_here/django-periodicals.git
   ```

3. Install your local copy into a virtualenv. Assuming you have virtualenvwrapper installed, this is how you set up your fork for local development:

   ```
   $ mkvirtualenv django-periodicals
   $ cd django-periodicals/
   $ python setup.py develop
   ```

4. Create a branch for local development:

   ```
   $ git checkout -b name-of-your-bugfix-or-feature
   ```

Now you can make your changes locally.

5. When you're done making changes, check that your changes pass flake8 and the tests, including testing other Python versions with tox:

```
$ flake8 periodicals tests
    $ python setup.py test
$ tox
```

To get flake8 and tox, just pip install them into your virtualenv.

6. Commit your changes and push your branch to GitHub:

   ```
   $ git add .
   $ git commit -m "Your detailed description of your changes."
   $ git push origin name-of-your-bugfix-or-feature
   ```

7. Submit a pull request through the GitHub website.

5.3 Pull Request Guidelines

Before you submit a pull request, check that it meets these guidelines:

1. The pull request should include tests.

2. If the pull request adds functionality, the docs should be updated. Put your new functionality into a function with a docstring, and add the feature to the list in README.rst.
3. The pull request should work for Python 2.6, 2.7, and 3.3, and for PyPy. Check https://travis-ci.org/saschwarz/django-periodicals/pull_requests and make sure that the tests pass for all supported Python versions.

5.4 Tips

To run a subset of tests:

```
$ python -m unittest tests.test_periodicals
```

CHAPTER 6

Credits

6.1 Development Lead

- Steve Schwarz <steve@agilitynerd.com>

6.2 Contributors

None yet. Why not be the first?

CHAPTER 7

History

7.1 0.5.0 (2013-10-06)

- Migrated to Django 1.6 using class based views.