django-fluent-pages Documentation

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Contents

This module provides a page tree, where each node type can be a different model. This allows you to structure your site CMS tree as you see fit. For example:

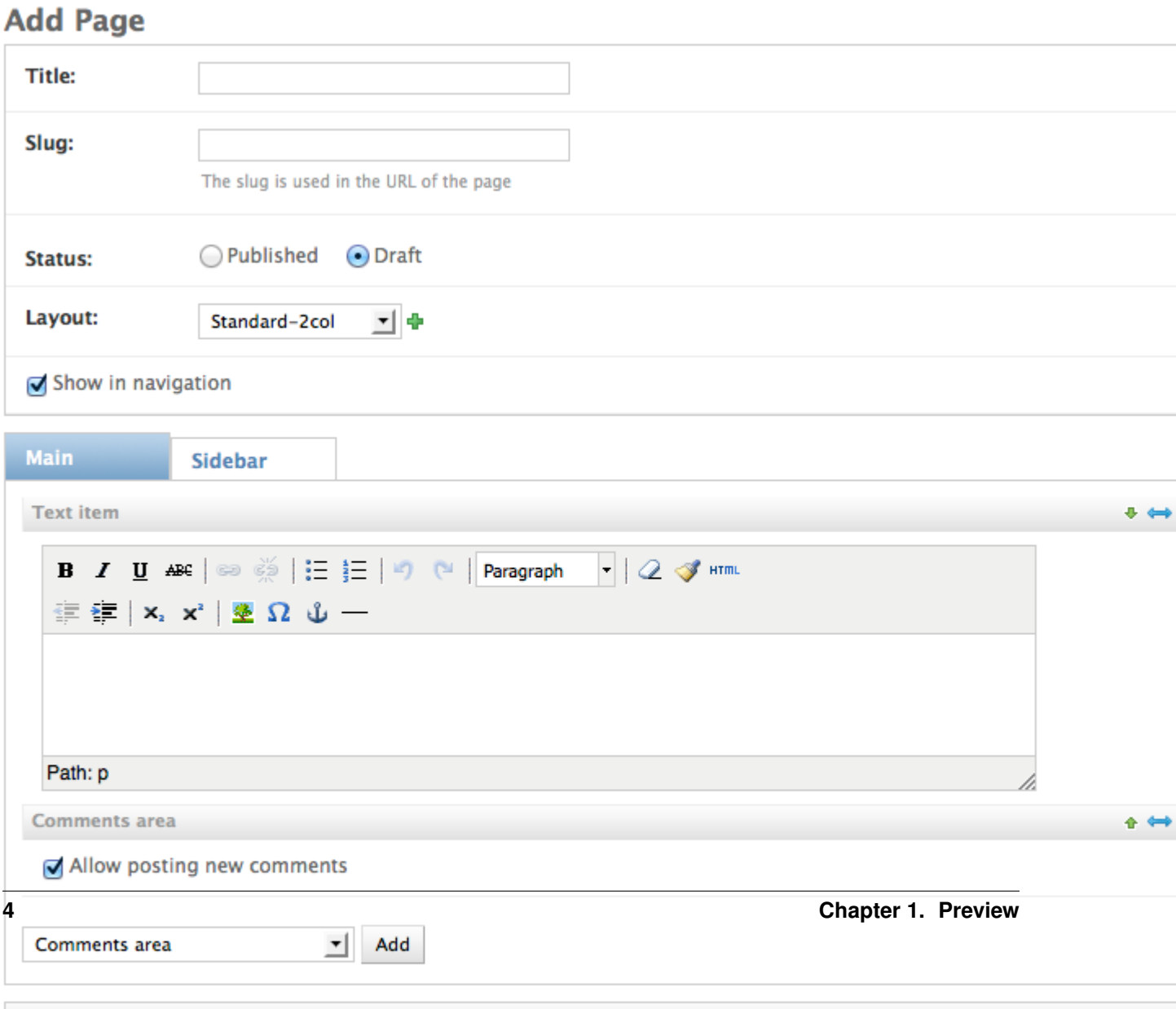
- Build a tree of flat pages, with a WYSIWYG editor.
- Build a tree with widget-based pages, by integrating django-fluent-contents.
- Build a tree structure of RST pages, by defining a `RstPage` type.
- Build a tree of a *homepage*, *subsection*, and *article* node, each with custom fields like professional CMSes have.

Each node type can have it's own custom fields, attributes, URL patterns and rendering.

In case you're building a custom CMS, this module might just be suited for you, since it provides the tree for you, without bothering with anything else. The actual page contents is defined via page type plugins. To get up and running quickly, consult the *quick-start guide*. The chapters below describe the configuration of each specific plugin in more detail.

CHAPTER 1

Preview



CHAPTER 2

Getting started

Quick start guide

Installing django-fluent-pages

Make sure you have the base packages installed:

```
pip install Django
pip install django-fluent-pages
```

This command installs the base dependencies. As you add more of the *Bundled Page Type Plugins*, additional packages may be required. This is explained in the documentation for each plugin.

Tip: For optional dependency management, it is strongly recommended that you run the application inside a *virtualenv*.

Starting a project

For a quick way to have everything configured at once, use our template:

```
mkdir example.com
django-admin.py startproject "myexample" "example.com" -e "py,rst,example,gitignore" -
↪-template="https://github.com/edoburu/django-project-template/archive/django-fluent.
↪zip"
```

And install it's packages:

```
mkvirtualenv example.com
pip install -r example.com/requirements.txt
```

Otherwise, continue with the instructions below:

Basic Settings

In your existing Django project, the following settings need to be added to `settings.py`:

```
INSTALLED_APPS += (
    'fluent_pages',
    'mptt',
    'parler',
    'polymorphic',
    'polymorphic_tree',

    # And optionally add the desired page types with their dependencies:

    # - flat pages
    'fluent_pages.pagetypes.flatpage',
    'django_wysiwyg',

    # - redirect nodes
    'fluent_pages.pagetypes.redirectnode',
    'any_urlfield',  # optional but recommended
)
```

The following applications are used here:

- The main `fluent_pages` package that you always need.
- The main dependencies.
- A selection of page type plugins, and their dependencies.

Since some extra page types are used here, make sure their dependencies are installed:

```
pip install django-fluent-pages[flatpage,redirectnode]
```

Afterwards, you can setup the database:

```
./manage.py migrate  # use 'syncdb' for Django 1.6 and below
```

Note: Each page type is optional. Only the `fluent_pages` application is required, allowing to write custom models and plugins. Since a layout with the *flatpage* and *redirectnode* page types provides a good introduction, these are added here.

Each plugin is easily swappable for other implementations, exactly because everything is optional! You can use a different page type, or invert new page types with custom fields. It makes the CMS configurable in the way that you see fit.

URL configuration

The following needs to be added to `urls.py`:

```
urlpatterns += patterns('',
    url(r'', include('fluent_pages.urls'))
)
```

See also:

- To add sitemaps support, see the *Sitemaps integration* documentation about that.

- Multilingual support may also require changes, see *Multilingual support*.

Template structure

The page output is handled by templates. When creating large websites, you'll typically have multiple page templates. That's why it's recommended to have a single base template for all pages. This can expose the SEO fields that are part of every HTML page. As starting point, the following structure is recommended:

```
templates/
   base.html
   pages/
      base.html
      default.html
      ...
```

Now, create a `pages/base.html` template:

```
{% extends "base.html" %}

{% block full-title %}{% if page.meta_title %}{{ page.meta_title }}{% else %}{{ block.
↪super }}{% endif %}{% endblock %}
{% block meta-keywords %}{{ page.meta_keywords }}{% endblock %}
{% block meta-description %}{{ page.meta_description }}{% endblock %}

{% block extrahead %}{{ block.super }}{% if page.meta_robots %}
    <meta name="robots" content="{{ page.meta_robots }}" />
{% endif %}{% endblock %}
```

These blocks should appear in your `base.html` template off course.

Your site `base.html` template could look something like this:

```
{% load fluent_pages_tags %}
<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8" />
  <meta name="keywords" content="{% block meta-keywords %}{% endblock %}" />
  <meta name="description" content="{% block meta-description %}{% endblock %}" />
  <title>{% block full-head-title %}{% block head-title %}Untitled{% endblock %} | My␣
↪site{% endblock %}</title>
  {% block extrahead %}{% endblock %}
</head>
<body>
    <header>
        {% render_menu %}
    </header>

    <section id="contents">
        <div id="main">
            <h1>{{ page.title }}</h1>

            {% render_breadcrumb %}

            {% block main %}{% endblock %}
        </div>
    </section>
```

```
</body>
</html>
```

This base template does the following:

- Expose the placeholders for SEO fields.
- Add a main menu using `{% render_menu %}`
- Add a breadcrumb using `{% render_breadcrumb %}`

Tip: Whether `page.title` should be included is your own decision. You can also let clients enter the `<h1>` in the WYSIWYG page content, and reserve `page.title` for menu titles alone. This works really well in practise.

Adding page content

This package is very flexible when it comes to choosing page content. There are several page type plugins available:

- `fluent_pages.pagetypes.flatpage` - a simple page with WYSIWYG text box.
- `fluent_pages.pagetypes.fluentpage` - a page with flexible content blocks.
- *Other known page types*, such as a FAQ index or Blog index page.

The tree can also contain other node types, e.g.:

- `fluent_pages.pagetypes.redirectnode` - a redirect.
- `fluent_pages.pagetypes.text` - a plain text file, e.g. to add a humans.txt file.
- or any *custom page type* you create.

See also:

In this quick-start manual, we'll discuss the most important options briefly below. See the *Bundled Page Type Plugins* for the full documentation about each page type.

Using the flatpage plugin

The *Flat page* page type displays a simple WYSIWYG text box. To use it, install the packages and desired plugins:

```
pip install django-fluent-pages[flatpage]
pip install django-tinymce
```

Tip: You can also use CKEditor, Redactor or an other WYSIWYG editor, but for convenience TinyMCE is used as example. See the documentation of the *The flatpage page type* for details.

Add the following settings:

```
INSTALLED_APPS += (
    'fluent_pages.pagetypes.flatpage',
    'django_wysiwyg',
    'tinymce',
)

DJANGO_WYSIWYG_FLAVOR = "tinymce"    # or "tinymce_advanced"
```

```
FLUENT_TEXT_CLEAN_HTML = True
FLUENT_TEXT_SANITIZE_HTML = True
```

Make sure the database tables are created:

```
./manage.py migrate
```

To render the output properly, create a `fluent_pages/base.html` file so the *Flat page* pages can map the block names to the ones you use in `base.html`:

```
{% extends "pages/base.html" %}

{% block head-title %}{% block title %}{% endblock %}{% endblock %}

{% block main %}{% block content %}{% endblock %}{% endblock %}
```

Using the fluentpage plugin

The *Fluent page* page type can fill parts of the page with flexible content blocks. To use it, install the packages and desired plugins:

```
pip install django-fluent-pages[fluentpage]
pip install django-fluent-contents[text,code,markup]
```

Configure the settings:

```
INSTALLED_APPS += (
    'fluent_pages',
    'fluent_contents',

    # Page types
    'fluent_pages.pagetypes.fluentpage',
    'fluent_pages.pagetypes.flatpage',
    'fluent_pages.pagetypes.redirectnode',

    # Several content plugins
    'fluent_contents.plugins.text',                # requires django-wysiwyg
    'fluent_contents.plugins.code',                # requires pygments
    'fluent_contents.plugins.gist',
    'fluent_contents.plugins.googledocsviewer',
    'fluent_contents.plugins.iframe',
    'fluent_contents.plugins.markup',
    'fluent_contents.plugins.rawhtml',
)

FLUENT_MARKUP_LANGUAGE = 'reStructuredText'        # can also be markdown or textile
```

Make sure the database tables are created:

```
./manage.py migrate
```

The template can be filled with the "placeholder" tags from django-fluent-contents:

```
{% extends "mysite/base.html" %}
{% load placeholder_tags %}
```

```
{% block main %}
    <section id="main">
        <article>
            {% block pagetitle %}<h1 class="pagetitle">{{ page.title }}</h1>{%
↪endblock %}
            {% page_placeholder "main" role='m' %}
        </article>

        <aside>
            {% page_placeholder "sidebar" role='s' %}
        </aside>
    </section>
{% endblock %}
```

Testing your new shiny project

Congrats! At this point you should have a working installation. Now you can just login to your admin site and see what changed.

Configuration

A quick overview of the available settings:

```
FLUENT_PAGES_BASE_TEMPLATE = "fluent_pages/base.html"

FLUENT_PAGES_TEMPLATE_DIR = TEMPLATE_DIRS[0]

FLUENT_PAGES_RELATIVE_TEMPLATE_DIR = True

FLUENT_PAGES_DEFAULT_IN_NAVIGATION = True

FLUENT_PAGES_KEY_CHOICES = ()

# Advanced
FLUENT_PAGES_PREFETCH_TRANSLATIONS = False
FLUENT_PAGES_FILTER_SITE_ID = True
FLUENT_PAGES_PARENT_ADMIN_MIXIN = None
FLUENT_PAGES_CHILD_ADMIN_MIXIN = None
ROBOTS_TXT_DISALLOW_ALL = DEBUG
```

Template locations

FLUENT_PAGES_BASE_TEMPLATE

The name of the base template. This setting can be overwritten to point all templates to another base template. This can be used for the *Flat page* page type.

FLUENT_PAGES_TEMPLATE_DIR

The template directory where the "Layouts" model can find templates. By default, this is the first path in `TEMPLATE_DIRS`. It can also be set explicitly, for example:

```
FLUENT_PAGES_TEMPLATE_DIR = os.path.join(SRC_DIR, 'frontend', 'templates')
```

FLUENT_PAGES_RELATIVE_TEMPLATE_DIR

Whether template paths are stored as absolute or relative paths. This defaults to relative paths:

```
FLUENT_PAGES_RELATIVE_TEMPLATE_DIR = True
```

Preferences for the admin

FLUENT_PAGES_DEFAULT_IN_NAVIGATION

This defines whether new pages have the "Show in Navigation" checkbox enabled by default. It makes sense for small sites to enable it, and for larger sites to disable it:

```
FLUENT_PAGES_DEFAULT_IN_NAVIGATION = False
```

FLUENT_PAGES_KEY_CHOICES

Pages can be "tagged" to be easily found in the page tree. Example value:

```
FLUENT_PAGES_KEY_CHOICES = (
    # Allow to tag some pages, so they can be easily found by templates.
    ('search', _("Search")),
    ('contact', _("Contact")),
    ('terms', _("Terms and Conditions")),
    ('faq', _("FAQ page")),
    ('impactmap', _("Impact map")),
)
```

When this value is defined, a "Page identifier" option appears in the "Publication settings" fieldset.

Pages which are marked with an identifier can be found using `Page.objects.get_for_key()`.

Performance optimizations

FLUENT_PAGES_PREFETCH_TRANSLATIONS

Enable this to prefetch all translations at a regular page. This is useful to display a language choice menu:

```
FLUENT_PAGES_PREFETCH_TRANSLATIONS = True
```

SEO settings

ROBOTS_TXT_DISALLOW_ALL

When using `RobotsTxtView`, enable this setting for beta websites. This makes sure such site won't be indexed by search engines. Off course, it's recommended to add HTTP authentication to such site, to prevent accessing the site at all.

Advanced admin settings

FLUENT_PAGES_FILTER_SITE_ID

By default, each `Site` model has it's own page tree. This enables the multi-site support, where you can run multiple instances with different sites. To run a single Django instance with multiple sites, use a module such as django-multisite.

You can disable it using this by using:

```
FLUENT_PAGES_FILTER_SITE_ID = False
```

FLUENT_PAGES_PARENT_ADMIN_MIXIN / FLUENT_PAGES_CHILD_ADMIN_MIXIN

By setting this value, this module will insert your class in the admin. This can be used to override methods, or provide integration other third party applications such as django-guardian.

- The "parent admin" handles the list display for pages.
- The "child admin" handles the edit and delete views for pages.

Example setting:

```
FLUENT_PAGES_PARENT_ADMIN_MIXIN = 'apps.auth_utils.page_admin.
↪FluentPagesParentAdminMixin'
FLUENT_PAGES_CHILD_ADMIN_MIXIN = 'apps.auth_utils.page_admin.
↪FluentPagesChildAdminMixin'
```

Your project needs to provide those classes, and can implement or override admin methods there.

Advanced language settings

The language settings are copied by default from the *django-parler* variables. If you have to provide special settings (basically fork the settings), you can provide the following values:

```
FLUENT_DEFAULT_LANGUAGE_CODE = PARLER_DEFAULT_LANGUAGE_CODE = LANGUAGE_CODE

FLUENT_PAGES_DEFAULT_LANGUAGE_CODE = FLUENT_DEFAULT_LANGUAGE_CODE
FLUENT_PAGES_LANGUAGES = PARLER_LANGUAGES
```

The template tags

The template tags provide a way to include a menu, or breadcrumb in the website. Load the tags using:

```
{% load fluent_pages_tags %}
```

The breadcrumb

The breadcrumb of the current page can be rendered using:

```
{% render_breadcrumb %}
```

It's possible to render the breadcrumb using a custom template:

```
{% render_breadcrumb template="fluent_pages/parts/breadcrumb.html" %}
```

The breadcrumb template could look like:

```
{% if breadcrumb %}
<ul>
{% for item in breadcrumb %}
  <li{% if forloop.last %} class="last"{% endif %}><a href="{{ item.url }}">{{ item.
↪title }}</a></li>
{% endfor %}
</ul>
{% endif %}
```

The menu

The menu of the site can be rendered using:

```
{% render_menu %}
```

The number of levels can be limited using the `depth` parameter:

```
{% render_menu depth=1 %}
```

Custom menu template

The template parameter offers a way to define your own menu layout. For example:

```
{% render_menu max_depth=1 template="fluent_pages/parts/menu.html" %}
```

The menu template could look like:

```
{% load mptt_tags %}
{% if menu_items %}
  <ul>
    {% recursetree menu_items %}
    <li class="{% if node.is_active or node.is_child_active %}active{% endif %}{% if␣
↪node.is_draft %} draft{% endif %}">
      <a href="{{ node.url }}">{{ node.title }}</a>
      {% if children %}<ul>{{ children }}</ul>{% endif %}
    </li>{% endrecursetree %}
  </ul>
{% else %}
  <!-- Menu is empty -->
{% endif %}
```

The `node` variable is exposed by the `{% recursetree %}` tag. It's a `PageNavigationNode` object.

To use a different template, either override the `fluent_pages/parts/menu.html` template in your project, or use the `template` variable (recommended). For example, for a Bootstrap 3 project, you can use the following template:

```
{% load mptt_tags %}
{% if menu_items %}
```

```
<ul class="nav navbar-nav">
  {% recursetree menu_items %}
  <li class="{% if node.is_active or node.is_child_active %}active{% endif %}">
    {% if children %}
      <a href="{{ node.url }}" class="dropdown-toggle" data-toggle="dropdown" role=
↪"button" aria-haspopup="true" aria-expanded="false">{{ node.title }} <span class=
↪"caret"></span></a>
      <ul class="dropdown-menu" role="menu">{{ children }}</ul>
    {% else %}
      <a href="{{ node.url }}">{{ node.title }}</a>
    {% endif %}
  </li>{% endrecursetree %}
</ul>
{% else %}
  <!-- Menu is empty -->
{% endif %}
```

Rendering side menu's

You can render a subsection of the menu using use the `parent` keyword argument. It expects a page object, URL path or page ID of the page you want to start at. Combined with the `template` argument, this gives

```
{% render_menu parent=page max_depth=1 template="partials/side_menu.html" %}
{% render_menu parent='/documentation/' max_depth=1 %}
{% render_menu parent=8 max_depth=1 %}
```

Advanced features

Fetching 'site' and 'page' variables

The templates receive a `site` and `page` variable by default. In case the template is rendered outside the regular loop, these fields can be fetched:

```
{% get_fluent_page_vars %}
```

Locating custom page type views

When a custom page type provides additional views, these can be fetched using:

```
{% load appurl_tags %}

{% appurl "my_viewname" %}

{% appurl "my_viewname" arg1 arg2 %}

{% appurl "my_viewname" kwarg1=value kwargs2=value %}
```

These tags locate the page in the page tree, and resolve the view URL from there.

Sitemaps integration

The pages can be included in the sitemap that `django.contrib.sitemaps` provides. This makes it easier for search engines to index all pages.

Add the following in `urls.py`:

```
from fluent_pages.sitemaps import PageSitemap
from fluent_pages.views import RobotsTxtView

sitemaps = {
    'pages': PageSitemap,
}

urlpatterns += patterns('',
    url(r'^sitemap.xml$', 'django.contrib.sitemaps.views.sitemap', {'sitemaps':␣
↪sitemaps}),
    url(r'^robots.txt$', RobotsTxtView.as_view()),
)
```

The `django.contrib.sitemaps` should be included in the `INSTALLED_APPS` off course:

```
INSTALLED_APPS += (
    'django.contrib.sitemaps',
)
```

The pages should now be visible in the `sitemap.xml`.

A sitemap is referenced in the `robots.txt` URL. When using the bundled `RobotsTxtView` in the example above, this happens by default.

The contents of the `robots.txt` URL can be overwritten by overriding the `robots.txt` template. Note that the `robots.txt` file should point to the sitemap with the full domain name included:

```
Sitemap: http://full-website-domain/sitemap.xml
```

For more details about the `robots.txt` URL, see the documentation at http://www.robotstxt.org/ and https://support.google.com/webmasters/answer/6062608?hl=en&rd=1

Note: When using Nginx, verify that `robots.txt` is also forwarded to your Django application.

For example, when using `location = /robots.txt { access_log off; log_not_found off; }`, the request will not be forwarded to Django because this replaces the standard `location / { .. }` block.

Multilingual support

This package supports creating content in multiple languages. This feature is based on django-parler. Historical anecdote: django-parler was created to make this CMS multilingual.

The enable multiple languages, configuring django-parler is sufficient.

Configuration

```
LANGUAGES = (
    ('en', _("Global Site")),
    ('en-us', _("US Site")),
    ('it', _('Italian')),
    ('nl', _('Dutch')),
    ('fr', _('French')),
    ('es', _('Spanish')),
)

PARLER_DEFAULT_LANGUAGE_CODE = 'en'  # defaults to LANGUAGE_CODE

SITE_ID = None

PARLER_LANGUAGES = {
    None: (
        # Default SITE_ID, all languages
        {'code': lang[0]} for lang in LANGUAGES
    ),
    2: (
        # SITE_ID 2: only english/french
        {'code': 'en',}
        {'code': 'fr',}
    ),
    'default': {
        # This is applied to each entry in this setting:
        'hide_untranslated': False,
        'hide_untranslated_menu_items': False,
        # 'fallback': 'en'  # set by PARLER_DEFAULT_LANGUAGE_CODE
    }
}
```

There are two extra values that can be used:

- `hide_untranslated`: if set to `True`, untranslated pages are not accessible.
- `hide_untranslated_menu_items`: is set to `True`, untranslated pages are not visible in the menu.

These values can be used in the "default" section, or in each dictionary entry per site.

Accessing content

There are several ways to expose translated content. One way is adding a subpath in the URL by using `i18n_patterns()`:

Using i18n_patterns

Add the following to `settings.py`:

```
MIDDLEWARE_CLASSES += (
    'django.middleware.locale.LocaleMiddleware',  # or your own override/replacement
)
```

Add to `urls.py`:

```
from django.conf.urls import patterns, url
from django.conf.urls.i18n import i18n_patterns
from django.contrib import admin
from fluent_pages.sitemaps import PageSitemap

sitemaps = {
    # Place sitemaps here
    'pages': PageSitemap,
}

admin.autodiscover()

urlpatterns = patterns('',
    # All URLs that should not be prefixed with the country code,
    # e.g. robots.txt or django admin.
) + i18n_patterns('',
    # All URLS inside the i18n_patterns() get prefixed with the country code:
    # Django admin
    url(r'^admin/', include(admin.site.urls)),

    # SEO API's per language
    url(r'^sitemap.xml$', 'django.contrib.sitemaps.views.sitemap', {'sitemaps':␣
↪sitemaps}),

    # CMS modules
    url(r'', include('fluent_pages.urls')),
)
```

Using custom middleware

Nothing prevents you from writing custom middleware that sets the frontend language. For example:

Add the following to `settings.py`:

```
LANGUAGE_CODE = 'en'  # default, e.g. for the admin
FRONTEND_LANGUAGE_CODE = 'de'

MIDDLEWARE_CLASSES += (
    'mysite.middleware.FrontendLanguageMiddleware',
)
```

The custom middleware code:

```
from django.conf import settings
from django.core.urlresolvers import reverse_lazy
from django.utils import translation


class FrontendLanguageMiddleware(object):
    """
    Change the active language when visiting a frontend page.
    """
    def __init__(self):
        # NOTE: not locale aware, assuming the admin stays at a single URL.
        self._admin_prefix = reverse_lazy('admin:index', prefix='/')

    def process_request(self, request):
```

```
        if request.path_info.startswith(str(self._admin_prefix)):
            return  # Excluding the admin

        if settings.FRONTEND_LANGUAGE_CODE != settings.LANGUAGE_CODE:
            translation.activate(settings.FRONTEND_LANGUAGE_CODE)
```

This could even include detecting the sub-domain, and setting the language accordingly.

All queries that run afterwards read the active language setting, and display the content is the given language.

You can take this further and make Django aware of the sub-domain in it's URLs by overriding `ABSOLUTE_URL_OVERRIDES` in the settings. The `Page` provides a `default_url` attribute for this specific use-case. You'll also have to override the sitemap, as it won't take absolute URLs into account.

Management Commands

The following management commands are provided for administrative utilities:

make_language_redirects

When a language is unmaintained at the site, use this command to generate the URL redirects. The command outputs a script for the web server (currently only in Nginx format).

Options:

- `--from=language`: the old language
- `--to=language`: the new language
- `--format=nginx`: the format
- `--site=id`: the site for which redirects are created.

Example:

```
python manage.py make_language_redirects --from=it --to=en --format=nginx --site=1
```

rebuild_page_tree

In the unlikely event that the page tree is broken, this utility repairs the tree. This happened in earlier releases (before 1.0) when entire trees were moved in multi-lingual sites.

It regenerates the MPTT fields and URLs.

Options:

- `-p` / `--dry-run`: tell what would happen, but don't make any changes.
- `-m` / `--mptt-only`: only regenerate the MPTT fields, not the URLs of the tree.

Example:

```
python manage.py rebuild_page_tree
```

prefix_pagetypes

This adds prefixes to the `ContentType` names in the database, to easily recognize the custom page types. This happens by default during migrations.

```
python manage.py prefix_pagetypes
```

CHAPTER 3

Using the page type plugins

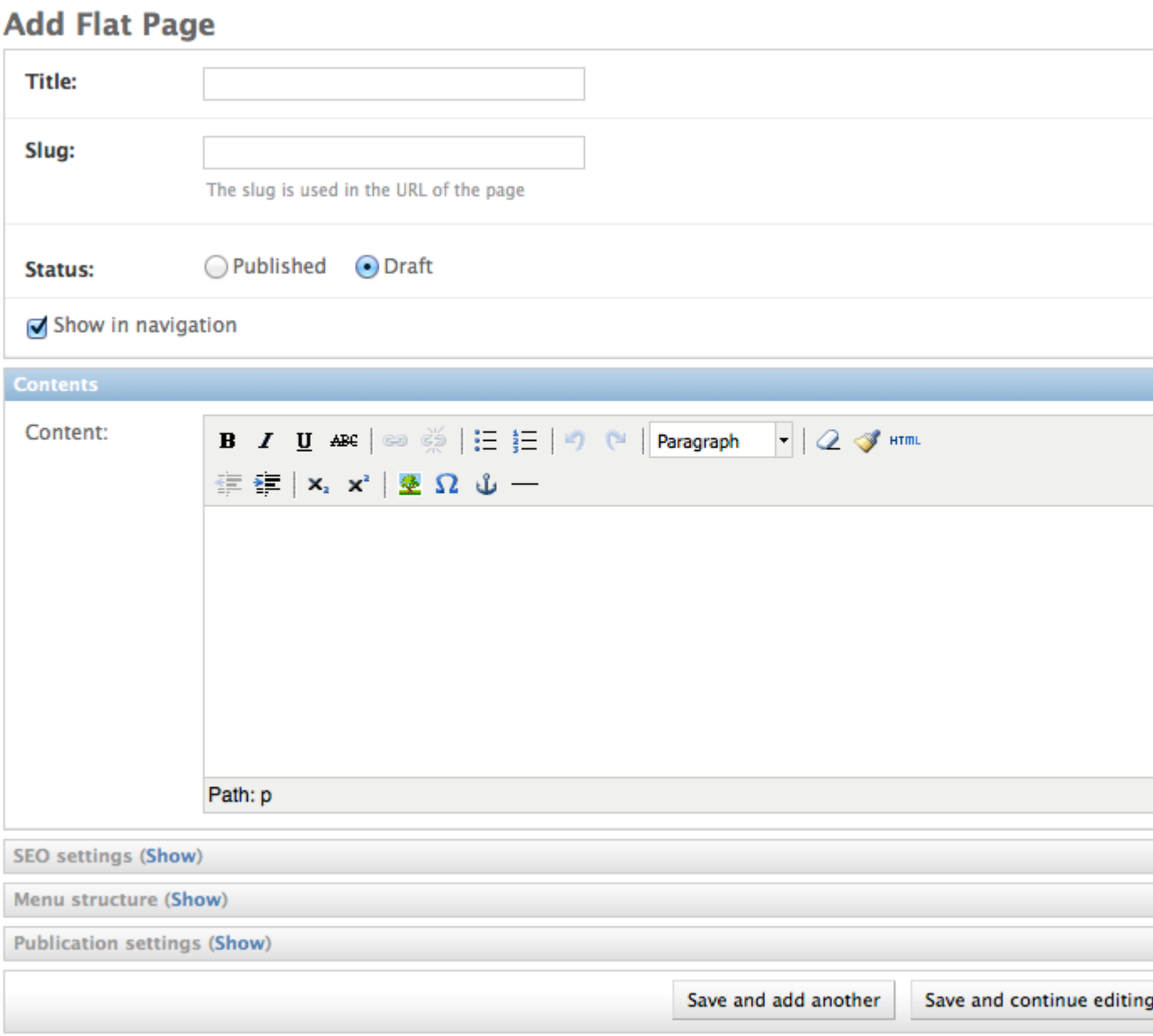
Bundled Page Type Plugins

This module ships has a set of plugins bundled by default, as they are useful for a broad range of web sites. The plugin code also serves as an example and inspiration to create your own modules, so feel free browse the source code of them.

The available plugins are:

The flatpage page type

The *flatpage* provides a simple page type with a WYSIWYG ("What You See is What You Get") editor.



The WYSIWYG editor is provided by django-wysiwyg, making it possible to switch to any WYSIWYG editor of your choice.

Note: This page type may seem a bit too simply for your needs. However, in case additional fields are needed, feel free to create a different page type yourself. This page type can serve as canonical example.

Installation

Install the dependencies via *pip*:

```
pip install django-fluent-pages[flatpage]
```

This installs the django-wysiwyg package.

Add the following settings to `settings.py`:

```
INSTALLED_APPS += (
    'fluent_pages.pagetypes.flatpage',
    'django_wysiwyg',
)
```

Using CKEditor

To use CKEditor, install django-ckeditor:

```
pip install django-ckeditor
```

Add the following settings to `settings.py`:

```
INSTALLED_APPS += (
    'ckeditor',
)

DJANGO_WYSIWYG_FLAVOR = "ckeditor"
```

Using TinyMCE

To use TinyMCE, install django-tinymce:

```
pip install django-tinymce
```

Add the following settings to `settings.py`:

```
INSTALLED_APPS += (
    'tinymce',
)

DJANGO_WYSIWYG_FLAVOR = "tinymce"    # or "tinymce_advanced"
```

Using Redactor

To use Redactor, tell django-wysiwyg where to find the static files. This is done on purpose to respect the commercial license.

```
DJANGO_WYSIWYG_FLAVOR = "redactor"
DJANGO_WYSIWYG_MEDIA_URL = "/static/vendor/imperavi/redactor/"
```

Template layout

To integrate the output of the page into your website design, overwrite `fluent_pages/base.html`. The following blocks have to be mapped to your website theme base template:

- **title**: the sub title to display in the `<title>` tag.
- **content**: the content to display in the `<body>` tag.
- **meta-description** - the `value` of the meta-description tag.

- **meta-keywords** - the `value` for the meta-keywords tag.

In case your website base template uses different names for those blocks, create a `fluent_pages/base.html` file to map the names:

```
{% extends "pages/base.html" %}

{% block head-title %}{% block title %}{% endblock %}{% endblock %}

{% block main %}{% block content %}{% endblock %}{% endblock %}
```

Further output tuning

The name of the base template can also be changed using the *FLUENT_PAGES_BASE_TEMPLATE* setting. The page type itself is rendered using `fluent_pages/pagetypes/flatpage/default.html`, which extends the `fluent_pages/base.html` template.

Configuration settings

The following settings are available:

```
DJANGO_WYSIWYG_FLAVOR = "yui_advanced"

FLUENT_TEXT_CLEAN_HTML = True
FLUENT_TEXT_SANITIZE_HTML = True
```

DJANGO_WYSIWYG_FLAVOR

The `DJANGO_WYSIWYG_FLAVOR` setting defines which WYSIWYG editor will be used. As of django-wysiwyg 0.5.1, the following editors are available:

- **ckeditor** - The CKEditor, formally known as FCKEditor.
- **redactor** - The Redactor editor (requires a license).
- **tinymce** - The TinyMCE editor, in simple mode.
- **tinymce_advanced** - The TinyMCE editor with many more toolbar buttons.
- **yui** - The YAHOO editor (the default)
- **yui_advanced** - The YAHOO editor with more toolbar buttons.

Additional editors can be easily added, as the setting refers to a set of templates names:

- django_wysiwyg/**flavor**/includes.html
- django_wysiwyg/**flavor**/editor_instance.html

For more information, see the documentation of django-wysiwyg about extending django-wysiwyg.

FLUENT_TEXT_CLEAN_HTML

If `True`, the HTML tags will be rewritten to be well-formed. This happens using either one of the following packages:

- html5lib

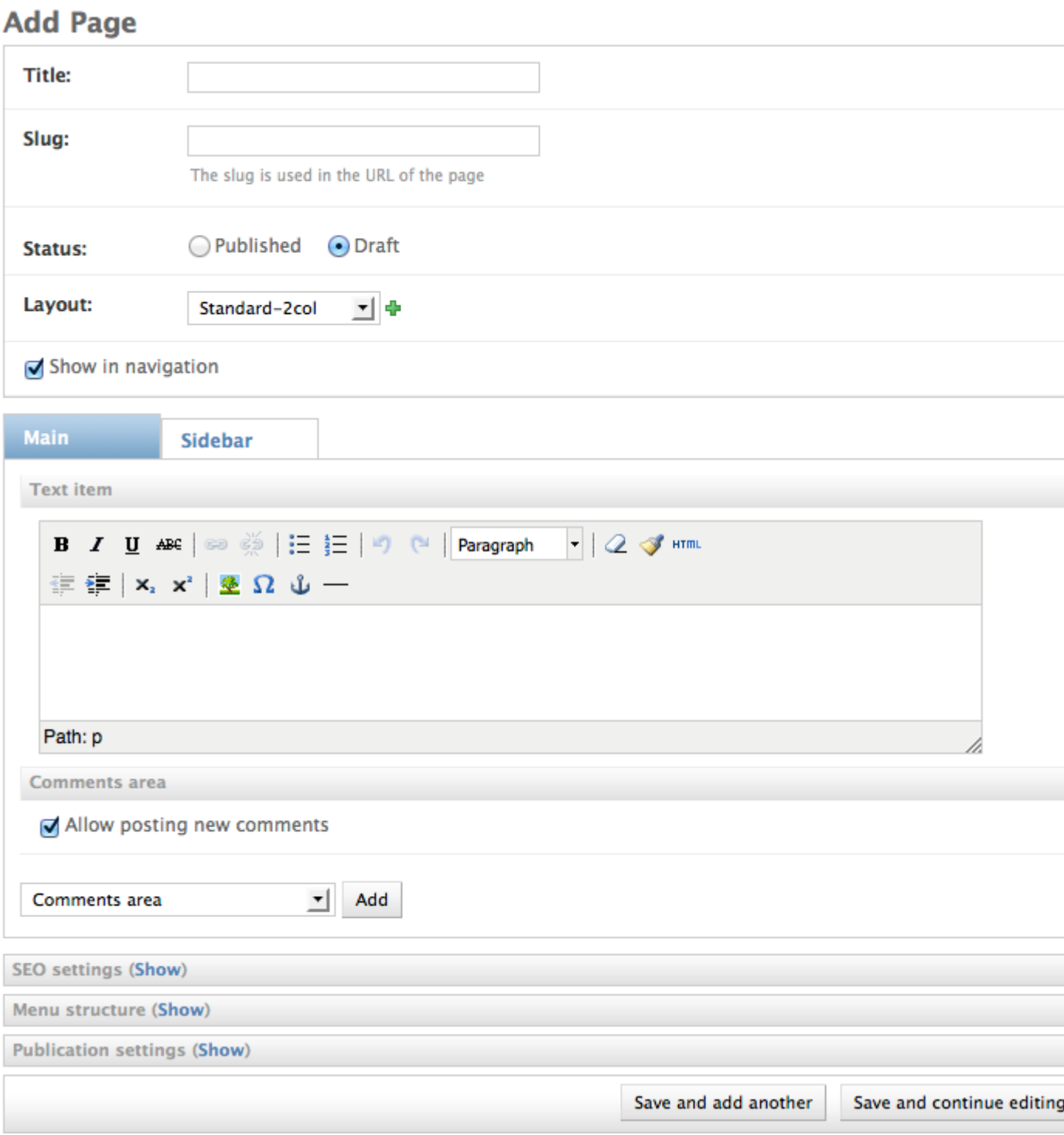
- pytidylib

FLUENT_TEXT_SANITIZE_HTML

if `True`, unwanted HTML tags will be removed server side using html5lib.

The fluentpage page type

The *fluentpage* provides a page type where parts of the page can be filled with flexible content blocks.



This feature is provided by django-fluent-contents.

The combination of *django-fluent-pages* and *django-fluent-contents* provides the most flexible page layout. It's possible to use a mix of standard plugins (e.g. *text*, *code*, *forms*) and customly defined plugins to facilitate complex website designs. See the documentation of django-fluent-contents for more details.

Installation

Install the dependencies via *pip*:

```
pip install django-fluent-pages[fluentpage]
pip install django-fluent-contents[text]
```

This installs the django-fluent-contents package.

Add the following settings to `settings.py`:

```
INSTALLED_APPS += (
    'fluent_pages.pagetypes.fluentpage',
    'fluent_contents',

    # The desired plugins for django-fluent-contents, e.g:
    'fluent_contents.plugins.text',
    'django_wysiwyg',
)
```

Template design

To render the page, include the tags that django-fluent-contents uses to define placeholders. For example:

```
{% extends "mysite/base.html" %}
{% load placeholder_tags %}

{% block main %}
    <section id="main">
        <article>
            {% block pagetitle %}<h1 class="pagetitle">{{ page.title }}</h1>{%
↪endblock %}
            {% page_placeholder "main" role='m' %}
        </article>

        <aside>
            {% page_placeholder "sidebar" role='s' %}
        </aside>
    </section>
{% endblock %}
```

These placeholders will be detected and displayed in the admin pages.

Place the template in the template folder that *FLUENT_PAGES_TEMPLATE_DIR* points to. By default, that is the first path in `TEMPLATE_DIRS`.

Configuration

The page type itself doesn't provide any configuration options, everything can be fully configured by configuring django-fluent-contents. See the documentation of each of these bundled content plugins to use them:

- The code plugin
- The commentsarea plugin
- The disquscommentsarea plugin
- The formdesignerlink plugin

- The gist plugin
- The googledocsviewer plugin
- The iframe plugin
- The markup plugin
- The oembeditem plugin
- The rawhtml plugin
- The sharedcontent plugin
- The text plugin
- The twitterfeed plugin

Creating new plugins

A website with custom design elements can be easily editable by creating custom plugins.

Creating new plugins is not complicated at all, and simple plugins can can easily be created within 15 minutes.

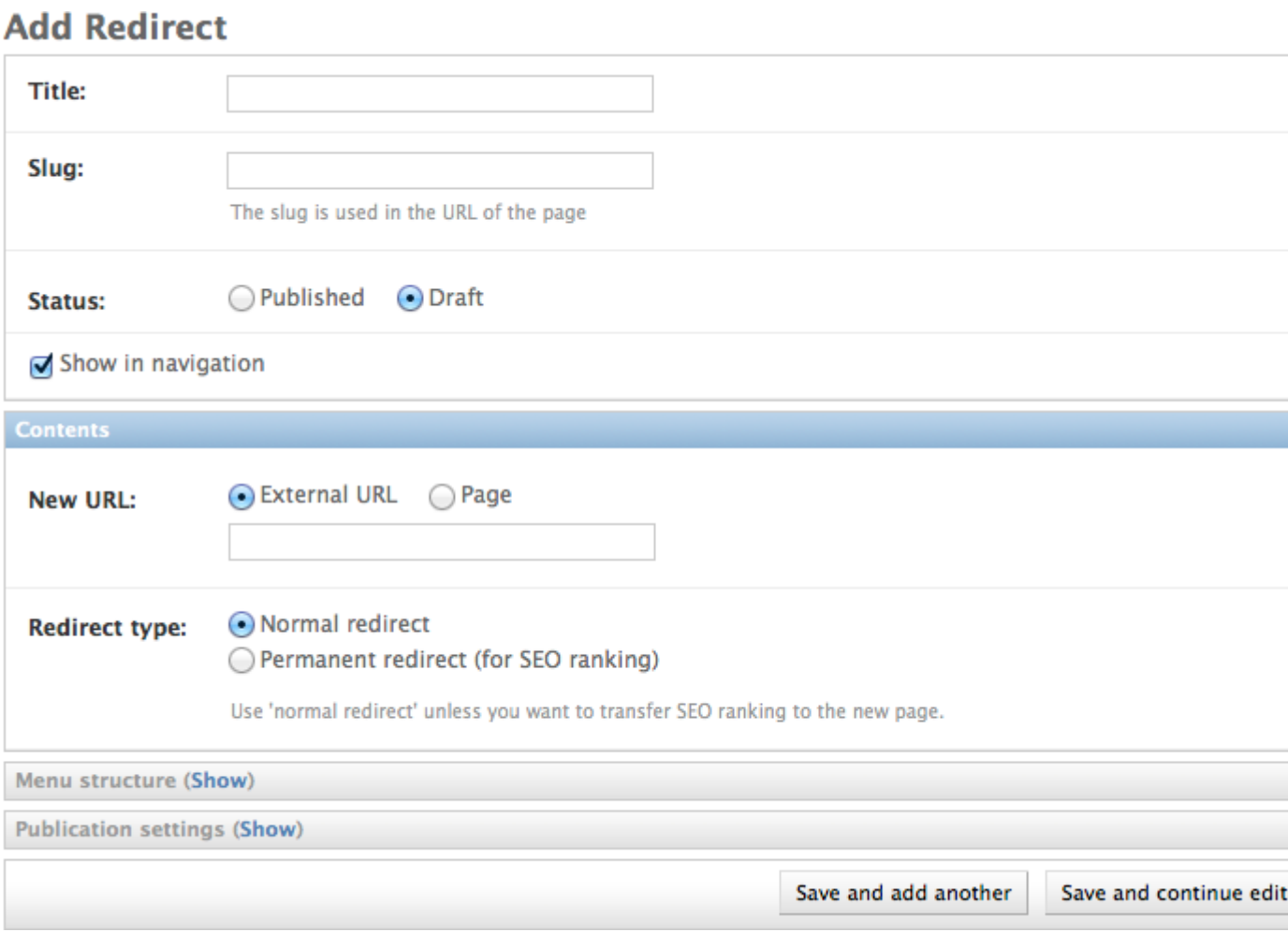
The documentation of django-fluent-contents explains how to create new plugins in depth.

Advanced features

This module also provides the `FluentPageBase` and `FluentPageAdmin` classes, which can be used as base classes for *custom page types* that also use the same layout mechanisms.

The redirectnode page type

The *redirectnode* allows adding a URL path that redirects the website visitor.



Installation

Install the dependencies via *pip*:

```
pip install django-fluent-pages[redirectnode]
```

This installs the django-any-urlfield package.

Add the following settings to `settings.py`:

```
INSTALLED_APPS += (
    'fluent_pages.pagetypes.redirectnode',
    'any_urlfield',
)
```

Configuration

This page type works out of the box.

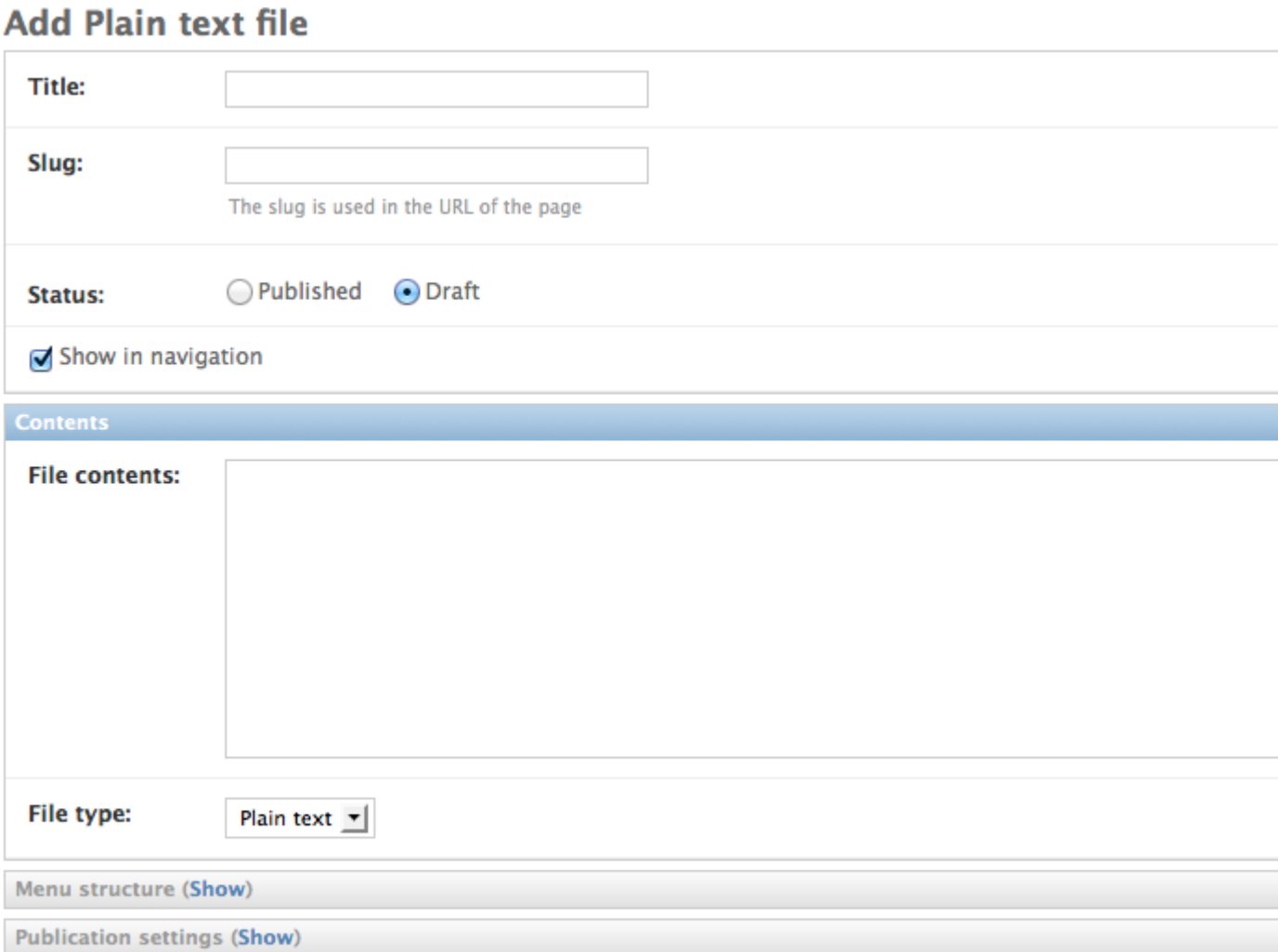
By default, the admin can choose between an "External URL" and "Page". Other models can also be included too, as long as they have a `get_absolute_url` method. Register the respective models to django-any-urlfield:

```
from any_urlfield.models import AnyUrlField
AnyUrlField.register_model(Article)
```

See the `any_urlfield.models` documentation for details.

The textfile page type

The *textfile* allows adding a URL node that displays plain text.



This page type serves as simple demo, and can also be used to add a custom `robots.txt`, humans.txt file or `README` file to the page tree.

Note: Currently, it's still required to use the "Override URL" field in the form to include a file extension, as the "Slug" field does not allow this.

Installation

Add the following settings to `settings.py`:

```
INSTALLED_APPS += (
    'fluent_pages.pagetypes.textfile',
)
```

Other known page types

Blog page

The django-fluent-blogs module provides a "Blog page" type, which can be used to include a "Blog" in the page tree.

To integrate it with this module, configure it using:

```
INSTALLED_APPS += (
    'fluent_blogs',
    'fluent_blogs.pagetypes.blogpage',
)
```

See the documentation of django-fluent-blogs for details.

FAQ page

The django-fluent-faq module provides a "FAQ page" type, which displays a list of FAQ questions and categories.

To integrate it with this module, configure it using:

```
INSTALLED_APPS += (
    'fluent_faq',
    'fluent_faq.pagetypes.faqpage',
)
```

See the documentation of django-fluent-faq for details.

Open ideas

Other page types can also be written, for example:

- a "Portfolio" page type.
- a "Split test" page type.
- a "Flat page" with reStructuredText content.
- a "Web shop" page type.
- a "Subsite section" page type.

See the next chapter, *Creating new page types* to create such plugins.

Creating new page types

This module is specifically designed to easily add custom page types.

Typically, a project consists of some standard modules, and perhaps one or two custom types. Creating these is easy, as shown in the following sections:

Example plugin code

A plugin is a standard Django/Python package. As quick example, let's create a webshop page.

The plugin can be created in your Django project, in a separate app which can be named something like `pagetypes.shoppage` or `mysite.pagetypes`.

Example code

For the `pagetypes.shoppage` package, the following files are needed:

- `__init__.py`, naturally.
- `models.py` for the database model.
- `page_type_plugins.py` for the plugin definition.

models.py

The models in `models.py` needs to inherit from the `Page` class, the rest is just standard Django model code.

```
from django.db import models
from fluent_pages.models import Page
from myshop.models import ProductCategory


class ProductCategoryPage(Page):
    product_category = models.ForeignKey(ProductCategory)

    class Meta:
        verbose_name = 'Product category page'
        verbose_name_plural = 'Product category pages'
```

This `Page` class provides the basic fields to integrate the model in the tree.

page_type_plugins.py

The `page_type_plugins.py` file can contain multiple plugins, each should inherit from the `PageTypePlugin` class.

```
from django.conf.urls import patterns, url
from fluent_pages.extensions import PageTypePlugin, page_type_pool
from .models import ProductCategoryPage


@page_type_pool.register
class ProductCategoryPagePlugin(PageTypePlugin):
```

```
    """
    A new page type plugin that binds the rendering and model together.
    """
    model = ProductCategoryPage
    render_template = "products/productcategorypage.html"

    # Custom URLs
    urls = patterns('myshop.views',
        url('^(?P<slug>[^/]+)/$', 'product_details'),
    )
```

The plugin class binds all parts together; the model, metadata, and rendering code. Either the `get_response()` function can be overwritten, or a `render_template` can be defined.

The other fields, such as the `urls` are optional.

productcategorypage.html

The default `get_response()` code renders the page with a template.

This can be used to generate the HTML:

```
{% extends "pages/base.html" %}

{% block headtitle %}{{ page.title }}{% endblock %}

{% block main %}
  <p>
    Contents of the category: {{ page.product_category }} ({{ page.product_category.
↪products.count }} products).
  </p>

  <div id="products">
      ....
  </div>
{% endblock %}
```

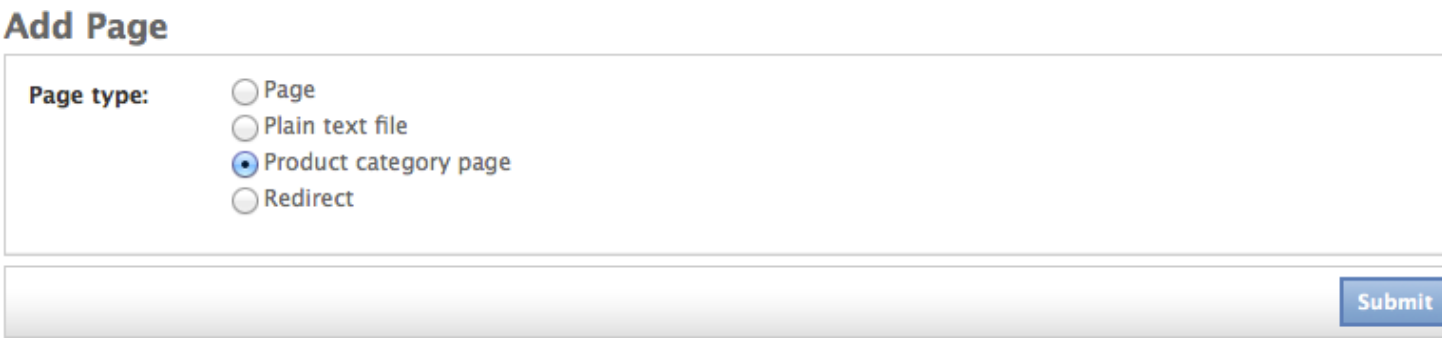
Note how the `page` variable is available, and the extra `product_category` field can be accessed directly.

Wrapping up

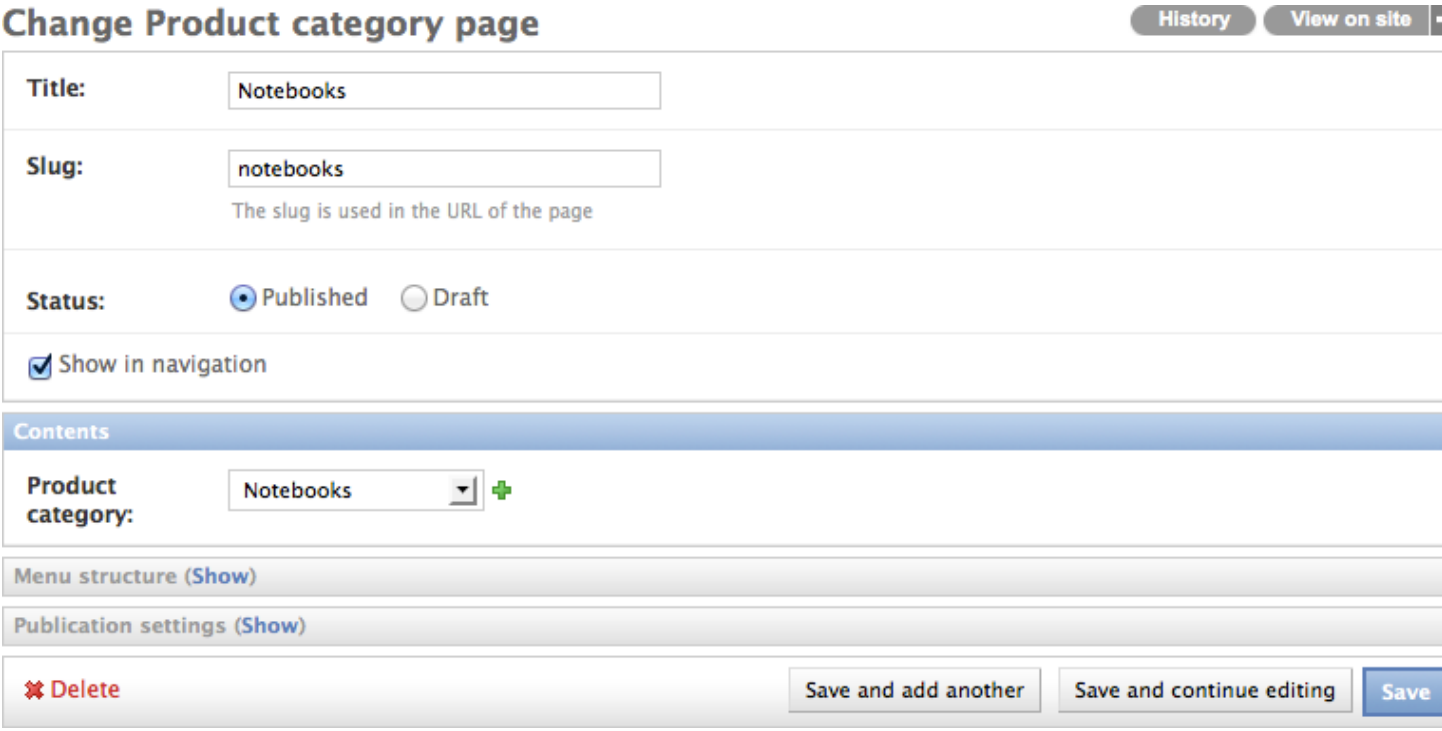
The plugin is now ready to use. Don't forget to add the `pagetypes.shoppage` package to the `INSTALLED_APPS`, and create the tables:

```
./manage.py syncdb
```

Now, the plugin will be visible in the "Add page" dialog:



After adding it, the admin interface will be visible:



The appearance on the website depends on the site's CSS theme, of course.

This example showed how a new plugin can be created within 5-15 minutes! To continue, see *Customizing the frontend rendering* to implement custom rendering.

Customizing the frontend rendering

As displayed in the *Example plugin code* page, a page type is made of two classes:

- A model class in `models.py`.
- A plugin class in `page_type_plugins.py`.

The plugin class renders the model instance using:

- A custom `get_response()` method.
- The `render_template` attribute, `get_render_template()` method and optionally `get_context()` method.

Simply stated, a plugin provides the "view" of the "page".

Simple rendering

To quickly create plugins with little to no effort, only the `render_template` needs to be specified. The template code receives the model object via the `instance` variable.

To switch the template depending on the model, the `get_render_template()` method can be overwritten instead. For example:

```
@page_type.register
class MyPageType(PageTypePlugin):
    # ...

    def get_render_template(self, request, page, **kwargs):
        return page.template_name or self.render_template
```

To add more context data, overwrite the `get_context` method.

Custom rendering

Instead of only providing extra context data, the whole `get_response()` method can be overwritten as well.

The *textfile* and *redirectnode* page types use this for example:

```
def get_response(self, request, redirectnode, **kwargs):
    response = HttpResponseRedirect(redirectnode.new_url)
    response.status_code = redirectnode.redirect_type
    return response
```

The standard `get_response()` method basically does the following:

```
def get_response(self, request, page, **kwargs):
    render_template = self.get_render_template(request, page, **kwargs)
    context = self.get_context(request, page, **kwargs)
    return self.response_class(
        request = request,
        template = render_template,
        context = context,
    )
```

- It takes the template from `get_render_template()`.
- It uses the context provided by `get_context()`.
- It uses `response_class()` class to output the response.

Note: The `PageTypePlugin` class is instantiated once, just like the `ModelAdmin` class. Unlike the Django class based views, it's not possible to store state at the local instance.

Customizing the admin interface

The admin rendering of a page type is fully customizable.

```
@page_type_pool.register
class ProductCategoryPagePlugin(PageTypePlugin):
    """"""
```

```
    A new page type plugin that binds the rendering and model together.
    """
    model = ProductCategoryPage
    render_template = "products/productcategorypage.html"

    model_admin = ProductCategoryPageAdmin
```

The admin class needs to inherit from one of the following classes:

- `fluent_pages.admin.PageAdmin`
- `fluent_pages.admin.HtmlPageAdmin` - in case the model extends from `HtmlPage`
- `fluent_pages.pagetypes.fluentpage.admin.FluentPageAdmin` - in case the model extends from `FluentPageBase`

The admin can be used to customize the "add" and "edit" fields for example:

```
from django.contrib import admin
from fluent_pages.admin import PageAdmin

class ProductCategoryPageAdmin(PageAdmin):
    raw_id_fields = PageAdmin.raw_id_fields + ('product_category',)
```

The "list" page is never used, as this is rendered by the main `PageAdmin` class.

Customizing fieldsets

To deal with model inheritance, the fieldsets are not set in stone in the `fieldsets` attribute. Instead, the fieldsets are created dynamically using the the `base_fieldsets` value as starting point. Any unknown fields (e.g. added by derived models) will be added to a separate "Contents" fieldset.

The default layout of the `PageAdmin` class is:

```
base_fieldsets = (
    PageAdmin.FIELDSET_GENERAL,
    PageAdmin.FIELDSET_MENU,
    PageAdmin.FIELDSET_PUBLICATION,
)
```

The default layout of the `HtmlPageAdmin` is:

```
base_fieldsets = (
    HtmlPageAdmin.FIELDSET_GENERAL,
    HtmlPageAdmin.FIELDSET_SEO,
    HtmlPageAdmin.FIELDSET_MENU,
    HtmlPageAdmin.FIELDSET_PUBLICATION,
)
```

The title of the custom "Contents" fieldset is configurable with the `extra_fieldset_title` attribute.

Customizing the form

Similar to the `base_fieldsets` attribute, there is a `base_form` attribute to use for the form.

Inherit from the `PageAdminForm` class to create a custom form, so all base functionality works.

Adding custom URLs

Page types can provide custom URL patterns. These URL patterns are relative to the place where the page is added to the page tree.

This feature is useful for example to:

- Have a "Shop" page type where all products are sub pages.
- Have a "Blog" page type where all articles are displayed below.

To use this feature, provide a URLconf or an inline `patterns()` list in the page type plugin.

Basic example

To have a plugin with custom views, add the `urls` attribute:

```
@page_type_pool.register
class ProductCategoryPagePlugin(PageTypePlugin):
    # ...

    urls = patterns('myshop.views',
        url('^(?P<slug>[^/]+)/$', 'product_details'),
    )
```

The view is just a plain Django view:

```
from django.http import HttpResponse
from django.shortcuts import get_object_or_404, render
from myshop.models import Product

def product_details(request, slug):
    product = get_object_or_404(Product, slug=slug)
    return render(request, 'products/product_details.html', {
        'product': product
    })
```

Other custom views can be created in the same way.

Resolving URLs

The URLs can't be resolved using the standard `reverse()` function unfortunately. The main reason is that it caches results internally for the lifetime of the WSGI container, meanwhile pages may be rearranged by the admin.

Hence, a *`app_reverse()`* function is available. It can be used to resolve the product page:

```
from fluent_pages.urlresolvers import app_reverse

app_reverse('product_details', kwargs={'slug': 'myproduct'})
```

In templates, there is an `appurl` tag which accomplishes the same effect:

```
{% load appurl_tags %}

<a href="{% appurl 'product_details' slug='myproduct' %}">My Product</a>
```

See also:

The example application in the source demonstrates this feature.

Compatibility with regular URLconf

An application can provide a standard `urls.py` for regular Django support, and still support page type URLs too. For this special case, the *`mixed_reverse()`* function is available. It attemps to resolve the view in the standard URLconf first, and falls back to *`app_reverse()`* if the view is not found there.

A `mixedurl` template tag has to be included in the application itself. Use the following code as example:

```
@register.tag
def mixedurl(parser, token):
    if 'fluent_pages' in settings.INSTALLED_APPS:
        from fluent_pages.templatetags.appurl_tags import appurl
        return appurl(parser, token)
    else:
        from django.templatetags.future import url
        return url(parser, token)
```

See also:

The django-fluent-blogs application uses this feature to optionally integrate the blog articles to the page tree.

Integration with fluent-contents

The bundled *fluent page type* provides a page type where parts of the page can be filled with flexible content blocks. This feature can be used in your custom page types as well. The `fluent_pages.integration.fluent_contents` package provides all classes to make this integration painless.

Note: The support for those flexible blocks is provided by the stand-alone django-fluent-contents package, which is an optional dependency. Both *fluent-pages* and *fluent-contents* are stand-alone packages, which you can mix and match freely with other software.

Example case: donation page

In some pages, the user is guided through several steps. At each step, staff members have to be able to enter CMS page content.

This can be handled in a smart way by exposing all situations through a single page.

In this simple example, a "Donation Page" was created as custom page type. This allowed editing the opening view, and "thank you view" as 2 separate area's.

models.py

```
from fluent_pages.integration.fluent_contents.models import FluentContentsPage

class DonationPage(FluentContentsPage):
    """
    It has a fixed template, which can be used to enter the contents for all wizard␣
↪steps.
```

```
    """
    class Meta:
        verbose_name = _("Donation Page")
        verbose_name_plural = _("Donation Pages")
```

admin.py

```
from fluent_pages.integration.fluent_contents.admin import FluentContentsPageAdmin

class DonationPageAdmin(FluentContentsPageAdmin):
    """
    Admin for "Donation Page" in the CMS.
    """
    # This template is read to fetch the placeholder data, which displays the tabs.
    placeholder_layout_template = 'pages/donation.html'
```

page_type_plugins.py

```
from django.conf.urls import url
from fluent_pages.extensions import page_type_pool
from fluent_pages.integration.fluent_contents.page_type_plugins import␣
↪FluentContentsPagePlugin
from .admin import DonationPageAdmin
from .models import DonationPage
from .views import DonationSuccessView


@page_type_pool.register
class DonationPagePlugin(FluentContentsPagePlugin):
    """
    Custom page type for the donation page

    This page type can be inserted somewhere within the page tree,
    and all it's wizard sub-pages will be read from it.
    """
    model_admin = DonationPageAdmin
    model = DonationPage

    urls = [
        # root = donation starting page (handled as standard page)
        url(r'^step1/', DonationStep1View.as_view(), name='donation-step1'),
        url(r'^step2/', DonationStep2View.as_view(), name='donation-step2'),
        url(r'^thank-you/', DonationSuccessView.as_view(), name='donation-success'),
    ]
```

views.py

```
from django.views.generic import TemplateView
from fluent_pages.views import CurrentPageTemplateMixin


```

```
class DonationViewBase(CurrentPageTemplateMixin):
    # There is no need to redeclare the template here,
    # it's auto selected from the plugin/admin by CurrentPageTemplateMixin.
    #template_name = 'pages/donation.html'
    render_tab = ''

    def get_context_data(self, **kwargs):
        context = super(DonationViewBase, self).get_context_data(**kwargs)
        context['render_tab'] = self.render_tab
        return context

class DonationStep1(DonationViewBase, FormView):
    """
    Success page
    """
    view_url_name = 'donation-step1'    # for django-parler's {% get_translated_url %}
    render_tab = 'step1'                # for the template
    template_name = ""

    # ...

class DonationSuccessView(DonationViewBase, TemplateView):
    """
    Success page
    """
    view_url_name = 'donation-success'
    render_tab = 'success'
    template_name = ""
```

templates/pages/donation.html

```
{% extends "pages/base.html" %}{% load fluent_contents_tags %}
{% comment %}
  This template implements a sort-of "wizard" like view.
  By exposing all variations in the placeholders,
  the CMS view will display tabs for each option.
{% endcomment %}

{% block main %}
    <div class="constrained-subtle">
        <div class="container">

            {% if not render_tab %}
              {% page_placeholder "donation-intro" title="Donation intro" role="m"␣
↪fallback=True %}
            {% elif render_tab == 'step1' %}
              {% page_placeholder "donation-step1" title="Step 1" role="s"␣
↪fallback=True %}
            {% elif render_tab == 'success' %}
              {% page_placeholder "donation-success" title="Success page" role="s"␣
↪fallback=True %}
            {% endif %}

          </div>
        </div>
    </div>
```

```
{% endblock %}
```

This template leverages the features of django-fluent-contents. Each step can now be filled in by an staff member with CMS content. Even the form can now be added as a "Content plugin". By using FLUENT_CONTENTS_PLACEHOLDER_CONFIG, the allowed plugin types can be limited per step. For example:

```
FLUENT_CONTENTS_PLACEHOLDER_CONFIG = {
    # ...

    # The 'pages/donation.html' template:
    'donation-intro': {
        'plugins': (
            'DonateButtonPlugin', 'TextPlugin',
        ),
    },
    'donation-step1': {
        'plugins': (
            'DonationForm1Plugin', 'TextPlugin',
        ),
    },
    'giveone-success': {
        'plugins': (
            'ThankYouPlugin',
            'TextPlugin',
            'RawHtmlPlugin',  # For social media embed codes
        ),
    },
})
```

CHAPTER 4

API documentation

Low-level API's

This package provides internal API's, so projects can use those to query the tree or even prefill it.

Note: When using the Python shell, make sure the activate a language first.

```
from django.conf import settings
from django.utils.translations import activate

activate(settings.LANGUAGE_CODE)
```

Query pages

When you query the general `Page` or `UrlNode` model, the pages are returned in their specific type.

```
>>> from fluent_pages.models import Page
>>> Page.objects.published()
<Queryset [<FluentPage: Homepage>, <BlogPage: Blog>, <FluentPage: Contact>]>
```

To filter the results, use one of these methods:

- `parent_site()` - select a different site.
- `get_for_path()` - find the node for a path.
- `best_match_for_path()` - find the node starting with

Tip: Finding pages by ID

When *FLUENT_PAGES_KEY_CHOICES* is set, specific pages can be fetched using `Page.objects.get_for_key()`.

Creating pages

The tree can hold different page types. Always create the specific type needed, for example:

```
from django.contrib.auth import get_user_model
from fluent_pages.pagetypes.flatpage.models import FlatPage

User = get_user_model()
admin = User.objects.get(active=True, username='admin')

page = FlatPage.objects.create(
    # Standard fields
    title="Flat test",
    slug="flat-test",
    status=FlatPage.PUBLISHED,
    author=admin,

    # Type specific fields:
    content="This page is created via the API!"
)
```

Now the page will appear too:

```
>>> from fluent_pages.models import Page
>>> Page.objects.published()
<Queryset [<FluentPage: Homepage>, <BlogPage: Blog>, <FluentPage: Contact>,
↪<FlatPage: Flat test>]>
```

The same approach can be used for other page types. Review the model API to see which fields can be used:

- `FlatPage` (provide `content` and optionally, `template_name`).
- `RedirectNode` (provide `new_url` and optionally, `redirect_type`).
- `TextFile` (provide `content` and optionally, `content_type`).

Pages with visible HTML content also inherit from `HtmlPage`, which makes the `meta_keywords`, `meta_description` and optional `meta_title` available too.

Fluent content pages

A similar way can be used for pages with block content. This uses the django-fluent-contents and django-parler API's too:

```
from django.contrib.auth import get_user_model
from fluent_pages.pagetypes.fluentpage.models import FluentPage
from fluent_contents.plugins.textitem.models import TextItem
from fluent_contents.plugins.oembeditem.models import OEmbedItem

User = get_user_model()
admin = User.objects.get(active=True, username='admin')

page = FluentPage.objects.language('en').create(
```

```
    # Standard fields
    title="Fluent test",
    slug="fluent-test",
    status=FluentPage.PUBLISHED,
    author=admin,
)

# Create the placeholder
placeholder = page.create_placeholder('main')

# Create the content items
TextItem.objects.create_for_placeholder(placeholder, text="Hello, World!")
OEmbedItem.objects.create_for_placeholder(placeholder, embed_url="https://vimeo.com/
↪channels/952478/135740366")

# Adding another language:
page.create_translation('nl')
TextItem.objects.create_for_placeholder(placeholder, language_code="nl", text="Hello,␣
↪World NL!")
OEmbedItem.objects.create_for_placeholder(placeholder, language_code="nl", embed_url=
↪"https://vimeo.com/channels/952478/135740366")
```

The `.language('en')` is not required, as the current language is selected. However, it's good to be explicit in case your project is multilingual. When no language code is given to `create_for_placeholder()`, it uses the current language that the parent object (i.e. the page) has.

API documentation

fluent_pages.adminui

The `PageAdmin` class

The `PageAdminForm` class

The `HtmlPageAdmin` class

fluent_pages.adminui.utils

fluent_pages.extensions

The `PageTypePlugin` class

The `PageTypePool` class

The `page_type_pool` attribute

`fluent_pages.extensions.`**`page_type_pool`**

The global plugin pool, a instance of the `PluginPool` class.

Other classes

fluent_pages.integration.fluent_contents

The `FluentContentsPageAdmin` class

The `FluentContentsPage` class

The `FluentContentsPagePlugin` class

fluent_pages.models

The `UrlNode` class

The `Page` class

The `HtmlPage` class

The `PageLayout` class

The `UrlNodeManager` class

fluent_pages.models.navigation

The `NavigationNode` class

The `PageNavigationNode` class

fluent_pages.templatetags.appurl_tags

fluent_pages.templatetags.fluent_pages_tags

Template tags to request fluent page content in the template. Load this module using:

```
{% load fluent_pages_tags %}
```

The `render_breadcrumb` tag

Render the breadcrumb of the site, starting at the current `page`. This function either uses the default template, or a custom template if the `template` argument is provided.

```
{% render_breadcrumb template="fluent_pages/parts/breadcrumb.html" %}
```

The `render_menu` tag

Render the menu of the site. The `max_depth`, `parent` and `template` arguments are optional.

```
{% render_menu max_depth=1 parent="/documentation/" template="fluent_pages/parts/menu.
↪html" %}
```

The `get_fluent_page_vars` tag

Introduces the `site` and `page` variables in the template. This can be used for pages that are rendered by a separate application.

```
{% get_fluent_page_vars %}
```

fluent_pages.sitemaps

The `PageSitemap` class

fluent_pages.urlresolvers

URL Resolving for dynamically added pages.

`fluent_pages.urlresolvers.`**`app_reverse`**(*viewname*, *args=None*, *kwargs=None*, *multiple=False*, *ignore_multiple=False*, *current_page=None*, *language_code=None*)

Locate an URL which is located under a page type.

`fluent_pages.urlresolvers.`**`mixed_reverse`**(*viewname*, *args=None*, *kwargs=None*, *current_app=None*, *current_page=None*, *language_code=None*, *multiple=False*, *ignore_multiple=False*)

Attempt to reverse a normal URLconf URL, revert to *app_reverse()* on errors.

`fluent_pages.urlresolvers.`**`clear_app_reverse_cache`**()

Clear the cache for the *app_reverse()* function. This only has to be called when doing bulk update/delete actions that circumvent the individual model classes.

Other classes

exception `fluent_pages.urlresolvers.`**`MultipleReverseMatch`**

Raised when an *app_reverse()* call returns multiple possible matches.

exception `fluent_pages.urlresolvers.`**`PageTypeNotMounted`**

Raised when the *app_reverse()* function can't find the required plugin in the page tree.

fluent_pages.views

The `CurrentPageMixin` class

The `CurrentPageTemplateMixin` class

The `RobotsTxtView` class

Deprecated modules

fluent_pages.pagetypes.fluentpage.admin

The `FluentPageAdmin` class

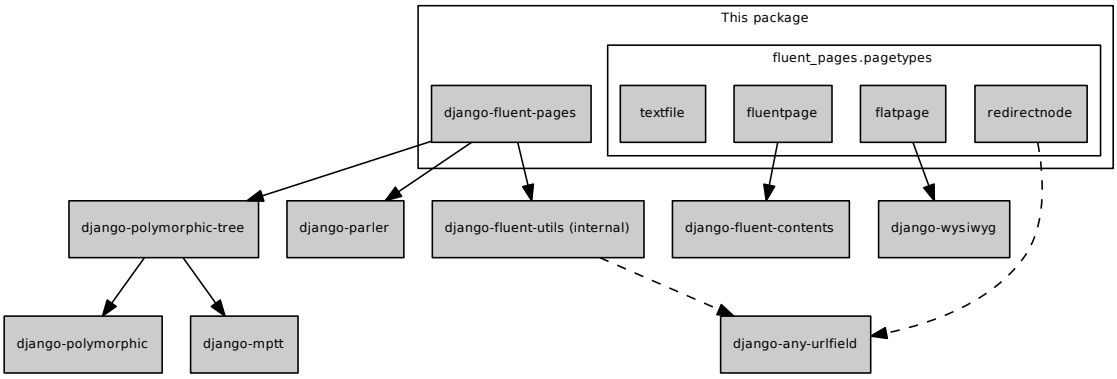
fluent_pages.pagetypes.fluentpage.models

The `AbstractFluentPage` class

The `FluentPage` class

Package dependencies

This is a quick overview of all used Django packages:



The used packages are:

django-any-urlfield: An URL field which can also point to an internal Django model.

django-fluent-contents: The widget engine for flexible block positions.

django-fluent-utils: Internal utilities for code sharing between django-fluent modules.

django-mptt: The structure to store tree data in the database.

Note that *django-fluent-pages* doesn't use a 100% pure MPTT tree, as it also stores a `parent_id` and `_cached_url` field in the database. These fields are added for performance reasons, to quickly resolve parents, children and pages by URL.

django-parler: Translation support for all models.

django-polymorphic: Polymorphic inheritance for Django models, it lets queries return the derived models by default.

django-polymorphic-tree The tree logic, where each node can be a different model type.

django-wysiwyg: A flexible WYSIWYG field, which supports various editors.

Changelog

Version 1.1.1 (2017-02-24)

- Fixed `native_str` usage in the admin template resolving.

- Fixed more Django 1.10 issues with reverted default managers in abstract models. This also fixes the django-fluent-blogs admin page for the `BlogPage` model on Django 1.10.

Version 1.1 (2017-02-18)

- Added `child_types` and `can_be_root` options to limit the allowed model types in the plugin. This allows limiting which child types can be used by plugins!
- Added support for `{% appurl .. as varname %}`.
- Added `ParentTranslationDoesNotExist` exception to improve error handling
- Fixed Django 1.10 issue for the `FluentPage` type with an invalid default manager in the admin.
- Fix multiple fallback languages support in `rebuild_page_tree`.
- Fixed migration string types for Python 3.
- Fixed using `os.path.sep` in `FLUENT_PAGES_TEMPLATE_DIR`
- Fixed recursion bug in `RedirectNodeAdmin`.
- Dropped Python 2.6 and Django 1.6 support

Note: Creating child nodes in a language that doesn't yet exist for the parent node is no longer supported.

While past versions tried to resolve such situation with fallback URLs, it turns out to be very prone to bugs when moving page brances or changing the translated parent slug slugs.

Version 1.0.1 (2016-08-07)

- Fixed bug that broke Django 1.7 support.
- Avoid installing django-mptt 0.8.5, which breaks pickling deferred querysets.

Version 1.0 (2016-08-07)

This release provides compatibility with newer package versions. Many fixes add to the stability of this release, especially when extending it with custom page types.

Major features:

- Django 1.9 support.
- Django 1.10 support is underway (it awaits fixes in our dependencies)
- Support for multiple fallback languages.
- Nicer slug previews in the admin.
- Menu template improvements:
- Added `is_child_active` variable to fix menu highlights.
- Added `draft` and `active` CSS classses.
- The `fluent_pages.pagetypes.textfile` content can be translated.
- Old unmaintained languages can be redirected with the `make_language_redirects` command.

- Dropped Django 1.4, 1.5 and Python 3.2 support.
- **Backwards incompatible:** The `FluentPageBase` class is now removed, use `AbstractFluentPage` instead.

Note: Make sure to add the `slug_preview` package to your `INSTALLED_APPS`.

django-mptt 0.8.5 has a bug that prevents pickling deferred querysets, hence this version is explicitly excluded as requirement. Use version 0.8.4 instead.

Changes in 1.0b3 (2016-05-17)

- Dropped Django 1.5 support.
- Fixed displaying new empty translation page.
- Fixed page moving bug due to old caches on previous errors.

Changes in 1.0b3 (2016-05-17)

- Fixed showing "View on site" link for draft pages, since staff has access to it.
- Fixed `node.is_child_active` for selected parent menu's.
- Fixed applying `FLUENT_PAGES_FILTER_SITE_ID` setting in the admin.
- Improved `RobotsTxtView` to handle `i18n_patterns()` automatically.

Changes as of 1.0b2 (2016-02-23)

- Fixed published admin icon for Django 1.9
- Fixed truncating long `db_table` names.
- Added `class="active"` in the default menu template for menu's where a child item is active.
- Added automatic configuration for django-staff-toolbar.

Changes as of version 1.0b1 (2015-12-30)

- Added Django 1.9 support
- Added translation support to the `fluent_pages.pagetypes.textfile` type, to translate the content (but not the type).
- Added `draft` CSS class to unpublished menu items that are only visible for staff members.
- Added `FluentPagesConfig` to use Django 1.7 appconfigs.
- Added multiple fallback language support for django-parler 1.5.
- Added `make_language_redirects` management command for redirecting an unmaintained language to another.
- Added `is_child_active` variable in `PageNavigationNode` for menu templates.
- Added django-slug-preview for nicer slug appearance in the admin.

- Improve error messages when URLs can't be created.
- Improve performance of `PageSitemap` for sites with a lot of pages.
- Temporary fix: Block moving pages to untranslated sub nodes, until a design decision can be made how to handle this.
- Temporary fix: Hide subpages when searching in the admin, to avoid errors with partial MPTT trees.
- Fixed Django 1.8 issues in the "Change Page" view.
- Fixed migrations to prevent Django from creating additional ones when settings change.
- Fixed silent behavior of using `.parent_site()` too late in an already filtered queryset.
- Fixed unicode handling in `rebuild_page_tree`.
- Fixed importing `mixed_reverse_lazy()` from django settings.
- Fixed showing pages when there is no translation is created yet.
- Fixed JavaScript event binding for dynamic related-lookup fields.
- Fixed `welcome.json` fixture
- Dropped Django 1.4 and Python 3.2 support.
- **Backwards incompatible:** The `FluentPageBase` class is now removed, use `AbstractFluentPage` instead.

Version 0.9 (2015-04-13)

- Added Django 1.8 support
- Non-published pages can now be seen by staff members
- Fix initial migrations on MySQL with InnoDB/utf8 charset.
- Fix missing `robots.txt` in the PyPI package.
- Fix behavior of `Page.objects.language(..).get_for_path()` and `best_match_for_path()`, use the currently selected language. This is similar to django-parler's `TranslatableModel.objects.language(..).create(..)` support.
- Fix skipping mount-points in `app_reverse()` when the root is not translated.
- **Backwards incompatible** with previous beta releases: split the `fluent_pages.integration.fluent_contents` package. You'll need to import from the `.models.`, `.admin` and `.page_type_plugins` explicitly. This removes many cases where projects suffered from circular import errors.

Released in 0.9c1 (2015-01-19)

- Fix deleting pages which have SEO fields filled in (the `HtmlPageTranslation` model).
- Fix `UrlNode.DoesNotExist` exception when using `{% render_breadcrumb %}` on 404 pages.
- Change `slug` size to 100 characters.
- Added `RobotsTxtView` for easier sitemaps integration
- Added `FluentContentsPage.create_placeholder(slot)` API.
- Added `--mptt-only` option to `manage.py rebuild_page_tree` command.

- Added lazy-resolver functions: `app_reverse_lazy()` / `mixed_reverse_lazy()`.

Released in 0.9b4 (2014-11-06)

- Fix South migrations for flexible `AUTH_USER_MODEL`

Released in 0.9b3 (2014-11-06)

- Added preliminary Django 1.7 support, migrations are not fully working yet.
- Added translation support for the SEO fields (meta keywords/description/title) and redirect URL.
- All base models are proxy models now; there will be no more need to update south migrations in your own apps.
- Added `fluent_pages.integration.fluent_contents` to simplify creating custom
- Added `CurrentPageMixin` and `CurrentPageTemplateMixin` for custom views.
- Added `HtmPage.meta_robots` property to automatically add `noindex` to pages outside the sitemaps.
- Added `in_sitemaps` flag, which is now false for the `RedirectNode` by default. pagetypes that reuse the django-fluent-contents integration that the `fluent_pages.pagetypes.fluentpage` has.
- Fixed stale translated `ContentItem` objects from django-fluent-contents when deleting a translation of a page.
- Fixed support for: future >= 0.13.
- Fixed support for: django-polymorphic >= 0.6.
- Fixed support for: django-parler >= 1.2.
- API: use `FluentContentsPage` instead of `AbstractFluentPage`.

Upgrade notices:

Due to Django 1.7 support, the following changes had to be made:

- `fluent_pages.admin` is renamed to `fluent_pages.adminui`.
- South 1.0 is now required to run the migrations (or set `SOUTH_MIGRATION_MODULES` for all plugins).

Secondly, there were database changes to making the SEO-fields translatable. Previously, the SEO fields were provided by abstract models, requiring projects to upgrade their apps too.

All translated SEO fields are now managed in a single table, which is under the control of this app. Fortunately, this solves any future migration issues for changes in the `HtmlPage` model.

If your page types inherited from `HtmlPage`, `FluentContentsPage` or it's old name `FluentPage`, you'll have to migrate the data of your apps one more time. The bundled pagetypes have two migrations for this: `move_seo_fields` and `remove_untranslatad_fields`. The first migration moves all data to the `HtmlPageTranslation` table (manually added to the datamigration). The second migration can simply by generated with `./manage.py schemamigration <yourapp> --auto "remove_untranslatad_fields"`.

If you have overridden `save_translation()` in your models, make sure to check for `translation.related_name`, as both the base object and derived object translations are passed through this method now.

The `SeoPageMixin` from 0.9b1 was removed too, instead inherit directly from `HtmlPage`.

Released in 0.9b2 (2014-06-28)

- Added Python 3 support!
- Added `key` field to allow linking to specific user-created pages (e.g. a Terms and Conditions page). This feature is only visible when `FLUENT_PAGES_KEY_CHOICES` is configured.
- Fix support for `i18n_patterns()` in the `override_url` field.
- Added `hide_untranslated_menu_items` setting in `FLUENT_PAGES_LANGUAGES` / `PARLER_LANGUAGES`.
- Added `page` variable for menu items in `PageNavigationNode`.
- Add "change Override URL permission" flag. South users: run `manage.py syncdb --all` to create the permission
- Fix resolving pages under their fallback language URL when a translated URL does exist.
- Fix exception in `PageNavigationNode.has_children`.
- Fix moving pages in the admin list (changes were undone).
- Fix missing "ct_id" GET parmeter for Django 1.6 when filtering in the admin (due to the `_changelist_filters` parameter).
- Updated dependencies to their Python 3 compatible versions.
- Optimize queries for rendering menu's
- nodes without children no need a query in `PageNavigationNode.children`.
- avoid polymorphic behavior for child menu nodes (unless the parent node was polymorphic).

Released in 0.9b1 (2014-04-14)

- Added multisite support.
- Added multilingual support, using django-parler.
- Added hooks for patching the admin; `FLUENT_PAGES_PARENT_ADMIN_MIXIN` and `FLUENT_PAGES_CHILD_ADMIN_MIXIN`. Note that using this feature is comparable to monkey-patching, and future compatibility can't be fully guanteed.
- Added "Can change Shared fields" permission for all page types.
- Added "Can change Page layout" permission for `fluent_pages.pagetypes.fluentpage`.
- Allow `formfield_overrides` to contain field names too.
- API: added `SeoPageMixin` model with `meta_title`, `meta_keywords` and `meta_description` fields.
- API: renamed `FluentPageBase` to `AbstractFluentPage`.
- API: added `get_view_response` to the `PageTypePlugin` class, allow adding middleware to custom views.
- API: **Backwards incompatible:** when inheriting from the abstract `HtmlPage` model, your app needs a South migration.
- Fixed calling `reverse()` on the resolved page urls.
- Dropped Django 1.3 and 1.4 support.

Upgrade notices:

- When using custom page types that inherit from inherited from `HtmlPage`, `FluentPageBase` or `FluentContentsPage`, please add a South migration to your application to handle the updated fields.
- The `keywords` field was renamed to `meta_keywords`.
- The `description` field was renamed to `meta_description`.
- The `meta_title` field was added.
- The South `rename_column` function can be used in the migration:

```
db.rename_column('your_model_table', 'keywords', 'meta_keywords')
db.rename_column('your_model_table', 'description', 'meta_description')
```

- API: renamed `FluentPageBase` to `FluentContentsPage`. The old name is still available.

Version 0.8.7 (2014-12-30)

- Add support of django-polymorphic 0.6.
- Add `page` variable for menu items in `PageNavigationNode`.

Version 0.8.6 (2014-01-21)

- Add `FLUENT_PAGES_DEFAULT_IN_NAVIGATION` setting to change the "in navigation" default value.
- Fix django-mptt 0.6 support.
- Fix using *{% appurl %}* for modules with multiple results.
- Widen "modification date" column, to support other languages.

Version 0.8.5 (2013-08-15)

- Added intro page for empty sites.
- Support Django 1.6 transaction management.
- Fix NL translation of "Slug".
- Fix the @admin redirect for application URLs (e.g. `/page/app-url/@admin` should redirect to `/page/app-url/`).
- Fix URL dispatcher for app urls when a URL prefix is used (e.g. `/en/..`)
- Fix Django 1.5 custom user model support in migrations

Version 0.8.4 (2013-05-28)

- Fix running at Django 1.6 alpha 1
- Remove filtering pages by SITE_ID in `PageChoiceField` as there is no proper multi-site support yet.
- Remove `X-Object-Type` and `X-Object-Id` headers as Django 1.6 removed it due to caching issues.

Version 0.8.3 (2013-05-15)

- Fix circular imports for some setups that import `fluent_pages.urlresolvers` early.
- Fix initial south migrations, added missing dependencies.
- Fix using `{% render_menu %}` at 404 pages.

Version 0.8.2 (2013-04-25)

- Add `parent` argument to `{% render_menu %}`, to render sub menu's.
- Add `page`, `site` variable in template of `{% render_breadcrumb %}`.
- Add `request`, `parent` (the parent context) variables to templates of `{% render_breadcrumb %}` and `{% render_menu %}`.
- Bump version requirement of django-mptt to 0.5.4, earlier versions have bugs.
- Fix `{% get_fluent_page_vars %}` to skip the django-haystack `page` variable.
- Fix `{% get_fluent_page_vars %}` when a `site` variable is already present.
- Fix unit test suite in Django 1.3

Version in 0.8.1 (2013-03-07)

- Add "Flat page" page type.
- Add support for django-any-urlfield.
- Add `X-Object-Type` and `X-Object-Id` headers to the response in development mode (similar to django.contrib.flatpages).
- Add Django 1.5 Custom User model support.
- Added lots of documentation.
- Moved the template tag parsing to a separate package, django-tag-parser.
- Improve error messages on initial project setup.
- Improve ability to extend the page change_form template.
- Improve layout of *keywords* and *description* fields in the admin.
- Fixed 500 error on invalid URLs with unicode characters.
- Fixed `app_reverse()` function for Django 1.3.
- Fixed `appurl` tag for template contexts without *page* variable.
- Fixed `NavigationNode.is_active` property for sub menu nodes.
- Fixed `NavigationNode.parent` property for root node.
- Fixed `runtests.py` script.
- Fixed `Page.objects.best_match_for_path()` for pages without a slash.
- Fixed generated URL path for "file" node types in sub folders.
- Fix Django dependency in `setup.py`, moved from `install_requires` to the `requires` section.
- Bump version of django-polymorphic-tree to 0.8.6 because it fixes issues with moving pages in the admin.

Version 0.8.0 (2012-11-21)

First public release

- Support for custom page types.
- Optional integration with django-fluent-contents.
- Refactored tree logic to django-polymorphic-tree.
- Unit tests included.

CHAPTER 5

Indices and tables

- genindex
- modindex
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Python Module Index

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Index