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# **django-qartez Documentation**

***Release 0.8***

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## Contents

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<b>1</b>	<b>Features</b>	<b>3</b>
<b>2</b>	<b>Prerequisites</b>	<b>5</b>
<b>3</b>	<b>Installation</b>	<b>7</b>
3.1	1. Install . . . . .	7
3.2	2. Add <i>qartez</i> to your <i>INSTALLED_APPS</i> . . . . .	7
<b>4</b>	<b>Usage and examples</b>	<b>9</b>
4.1	foo/sitemap.py . . . . .	9
4.2	urls.py . . . . .	10
4.3	foo/models.py . . . . .	11
4.4	foo/views.py . . . . .	12
4.5	foo/urls.py . . . . .	12
<b>5</b>	<b>License</b>	<b>13</b>
<b>6</b>	<b>Support</b>	<b>15</b>
<b>7</b>	<b>Author</b>	<b>17</b>
<b>8</b>	<b>Project documentation</b>	<b>19</b>
8.1	Release history and notes . . . . .	20
8.1.1	0.8 . . . . .	20
8.1.2	0.7.1 . . . . .	20
8.1.3	0.7 . . . . .	20
8.1.4	0.6 . . . . .	20
8.1.5	0.5 . . . . .	20
8.1.6	0.1 . . . . .	21
<b>9</b>	<b>Indices and tables</b>	<b>23</b>



The missing XML sitemaps for Django.



At the moment the following XML sitemaps are implemented:

- *qartez.sitemaps.ImagesSitemap*: XML images sitemaps according to the [specs](#).
- *qartez.sitemaps.StaticSitemap*: Sitemap for service pages. Add named patterns or URLs to the sitemap to have it nicely displayed in a separate service XML sitemap.
- *qartez.sitemaps.RelAlternateHreflangSitemap*: Sitemaps: rel="alternate" hreflang="x" implementation. Read the [specs](#).





## CHAPTER 2

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### Prerequisites

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- Django: 1.11, 2.0, 2.1, 2.2
- Python: 2.7, 3.5, 3.6, 3.7, 3.8



### 3.1 1. Install

Latest stable version on PyPI:

```
pip install django-qartez
```

Latest stable version from GitHub:

```
pip install https://github.com/barseghyanartur/django-qartez/archive/stable.tar.gz
```

### 3.2 2. Add *qartez* to your *INSTALLED\_APPS*

```
INSTALLED_APPS = (  
    # ...  
    'django.contrib.sitemaps',  
    'qartez',  
    # ...  
)
```



## CHAPTER 4

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### Usage and examples

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We have an imaginary foo app.

See the [example code](#).

#### 4.1 foo/sitemap.py

```
from django.contrib.sitemaps import Sitemap

from qartez.sitemaps import (
    ImagesSitemap, StaticSitemap, RelAlternateHreflangSitemap
)

from foo.models import FooItem

# ----- XML images sitemap part -----
# Dictionary to feed to the images sitemap.
foo_item_images_info_dict = {
    # Base queryset to iterate when procuding a site map
    'queryset': FooItem._default_manager.exclude(image=None),
    'image_location_field': 'image_url', # Image location (URL)
    'image_title_field': 'title', # Image title
    # An absolute URL of the page where image is shown
    'location_field': 'get_absolute_url'
}

# XML images sitemap.
foo_item_images_sitemap = {
    'foo_item_images': ImagesSitemap(foo_item_images_info_dict,
                                     priority=0.6),
}

# ----- Static sitemap part -----
```

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```

# Sitemap for service pages like welcome and feedback.
foo_static_sitemap = StaticSitemap(priority=0.1, changefreq='never')
foo_static_sitemap.add_named_pattern('foo.welcome')
foo_static_sitemap.add_named_pattern('foo.contact')

# ----- Normal sitemap part -----
# Normal Foo items sitemap.
class FooItemSitemap(Sitemap):
    changefreq = "weekly"
    priority = 1.0

    def location(self, obj):
        return obj.get_absolute_url()

    def lastmod(self, obj):
        return obj.date_published

    def items(self):
        return FooItem._default_manager.all()

# ----- Alternate hreflang sitemap part -----
# Alternate hreflang sitemap.
class ArticleSitemap(RelAlternateHreflangSitemap):
    # If you want to serve the links on HTTPS.
    protocol = 'https'

    def alternate_hreflangs(self, obj):
        return [('en-us', obj.alternative_object_url),]

    def items(self):
        return FooItem._default_manager.all()

```

## 4.2 urls.py

```

from foo.sitemap import foo_item_images_sitemap, foo_static_sitemap
from foo.sitemap import FooItemAlternateHreflangSitemap, FooItemSitemap

sitemaps = {
    'foo-items': FooItemSitemap,
    'foo-items-alternate-hreflang': FooItemAlternateHreflangSitemap,
    'foo-static': foo_static_sitemap
}

urlpatterns = [
    # Sitemaps
    (
        r'^sitemap\.xml$',
        'django.contrib.sitemaps.views.index',
        {'sitemaps': sitemaps},
    ),
    (
        r'^sitemap-foo-images\.xml$',
        'qartez.views.render_images_sitemap',
    ),

```

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```

        {'sitemaps': foo_item_images_sitemap},
    ),
]

```

Note, that it's necessary to add the `'template_name': 'qartez/rel_alternate_hreflang_sitemap.xml'` only in case if you are going to use the `qartez.RelAlternateHreflangSitemap`.

```

(
    r'^sitemap-(?P<section>.+)\.xml$',
    'django.contrib.sitemaps.views.sitemap',
    {
        'sitemaps': sitemaps,
        'template_name': 'qartez/rel_alternate_hreflang_sitemap.xml'
    }
),

```

In order to just get a better idea what kind of models and views are given in the example, see the code parts below.

## 4.3 foo/models.py

```

class FooItem(models.Model):
    title = models.CharField(_("Title"), max_length=100)
    slug = models.SlugField(_("Slug"), unique=True)
    body = models.TextField(_("Body"))
    date_published = models.DateTimeField(
        _("Date published"),
        blank=True,
        null=True,
        auto_now_add=True
    )

    # Image to be used for XML images sitemap.
    image = models.ImageField(
        _("Headline image"),
        blank=True,
        null=True,
        upload_to='foo-images'
    )

    # URL to be used for alternative hreflang attribute.
    alternative_url = models.URLField(
        _("Alternative URL"),
        blank=True,
        null=True
    )

    class Meta:
        verbose_name = _("Foo item")
        verbose_name_plural = _("Foo items")

    def __str__(self):
        return self.title

```

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```
def get_absolute_url(self):
    kwargs = {'slug': self.slug}
    return reverse('foo.detail', kwargs=kwargs)

# Shortcut to full image URL for XML images sitemap.
def image_url(self):
    return self.image.url if self.image else ''
```

## 4.4 foo/views.py

```
# Service welcome page
def welcome(request, template_name='foo/welcome.html'):
    context = {}
    return render_to_response(
        template_name,
        context,
        context_instance=RequestContext(request)
    )

# Service contact page
def contact(request, template_name='foo/contact.html'):
    context = {}
    return render_to_response(template_name, context, \
                              context_instance=RequestContext(request))
```

## 4.5 foo/urls.py

```
urlpatterns = patterns('foo.views',
    # ...
    # Contact URL
    url(r'^contact/$', view='contact', name='foo.contact'),
    # ...
    # Welcome URL
    url(r'^welcome/$', view='welcome', name='foo.welcome'),
    # ...
)
```



## CHAPTER 5

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### License

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GPL-2.0-only OR LGPL-2.1-or-later



## CHAPTER 6

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### Support

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For any issues contact me at the e-mail given in the *Author* section.



## CHAPTER 7

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Author

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Contents:

#### **Table of Contents**

- *django-qartez*
  - *Features*
  - *Prerequisites*
  - *Installation*
    - \* *1. Install*
    - \* *2. Add qartez to your INSTALLED\_APPS*
  - *Usage and examples*
    - \* *foo/sitemap.py*
    - \* *urls.py*
    - \* *foo/models.py*
    - \* *foo/views.py*
    - \* *foo/urls.py*
  - *License*
  - *Support*
  - *Author*
  - *Project documentation*
  - *Indices and tables*

## 8.1 Release history and notes

Sequence based identifiers are used for versioning (schema follows below):

`major.minor[.revision]`

- It's always safe to upgrade within the same minor version (for example, from 0.3 to 0.3.4).
- Minor version changes might be backwards incompatible. Read the release notes carefully before upgrading (for example, when upgrading from 0.3.4 to 0.4).
- All backwards incompatible changes are mentioned in this document.

### 8.1.1 0.8

2020-02-19

- Tested against Django 2.0, 2.1, 2.2.
- Drop support for Django versions prior 1.11.

### 8.1.2 0.7.1

2017-11-27

- Fixes in docs.

### 8.1.3 0.7

2017-11-27

- Django 1.8, 1.9, 1.10 and 1.11 support. Drop support for older Django versions.
- Minor fixes.
- Improved tests, PyTest test runner, coverage, introduce factories.

### 8.1.4 0.6

2014-10-12

- Django 1.7 support.
- Softened *six* requirements.

### 8.1.5 0.5

2013-09-09

- Python 3 support.



### 8.1.6 0.1

2013-02-04

- Initial.



## CHAPTER 9

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### Indices and tables

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- `genindex`
- `modindex`
- `search`