
django-admin-charts

Release 0.23.0

Sep 28, 2020

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Keywords django, python, plot, graph, nvd3, d3, dashboard

Author Arezqui Belaid, Petr Dlouhý

Description Django-admin-tools-stats is a Django admin module that allow you to create easily charts on your dashboard based on specific models and criterias.

Contents:

CHAPTER 1

Introduction

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–

Create beautiful configurable charts from your models and display them on the `django-admin` index page or on `django-admin-tools` dashboard. The charts are based on models and criterias defined through admin interface and some chart parameters are configurable in live view.

This application is fork of `django-admin-tools-stats` which has been reworked to display all charts through Ajax and made work with plain `django-admin`. The `django-admin-tools` are supported but not needed.

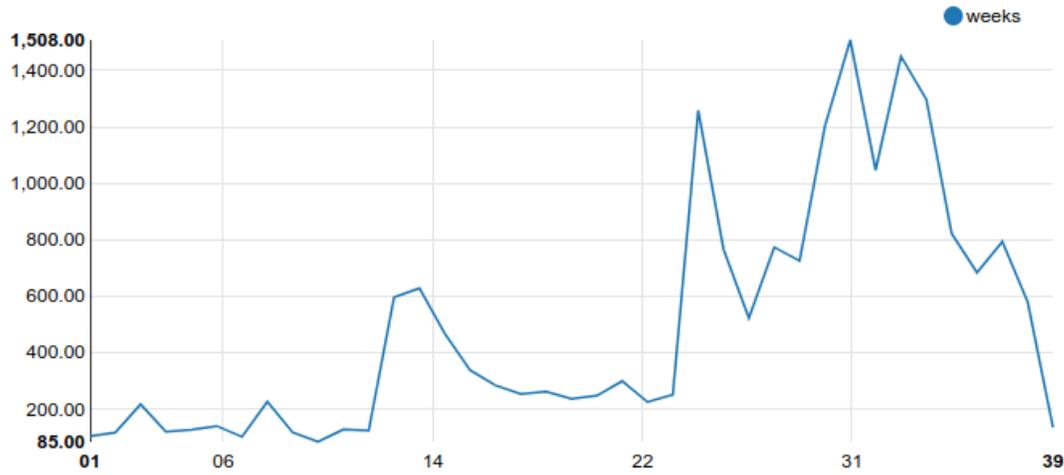
WAGTAIL IMAGES

Images

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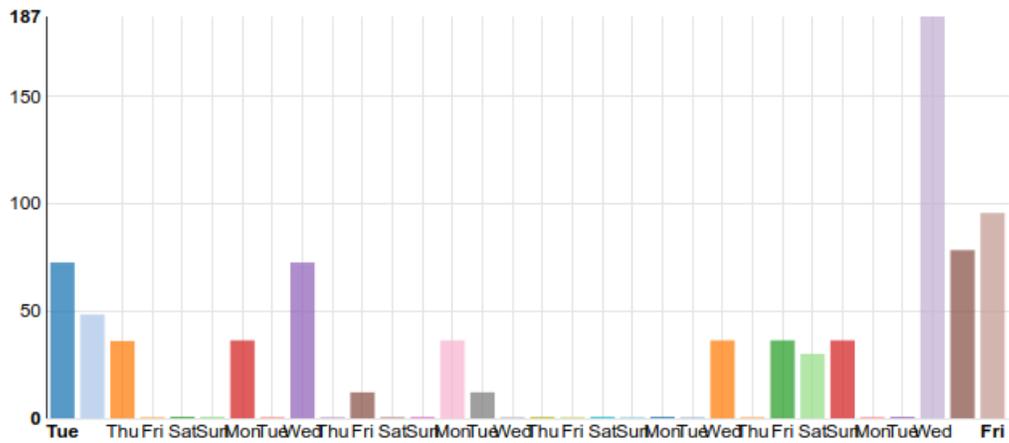
Registered users count

Scale: Since: Until: Chart:



Payment total amount

Scale: Since: Until: Chart:



CHAPTER 2

Requirements

Django>=2.0, Python>3.6

Install, upgrade and uninstall `django-admin-charts` with these commands:

```
$ pip install django-admin-charts
```

3.1 Basic setup for `django-admin`

Add `admin_tools_stats` (the Django admin charts application) & `django_nvD3` into `INSTALLED_APPS` in `settings.py`:

```
INSTALLED_APPS = (  
    'admin_tools_stats', # this must be BEFORE 'admin_tools' and 'django.contrib.  
    ↪admin'  
    'django_nvD3',  
    ...  
    'django.contrib.admin',  
)
```

Install the `nvD3` and `d3` javascript libraries. For installation with `django-bower` see section *Installation of javascript libraries with django-bower*. Set library paths if they differ from the `django-bower` defaults:

```
ADMIN_CHARTS_NVd3_JS_PATH = 'bow/nvd3/build/nv.d3.js'  
ADMIN_CHARTS_NVd3_CSS_PATH = 'bow/nvd3/build/nv.d3.css'  
ADMIN_CHARTS_D3_JS_PATH = 'bow/d3/d3.js'
```

Register chart views in your `urls.py`:

```
from django.urls import include, path  
urlpatterns = [  
    path('admin_tools_stats/', include('admin_tools_stats.urls')),  
]
```

Run migrations:

```
$ python manage.py migrate
```

Open admin panel, configure Dashboard Stats Criteria & Dashboard Stats respectively

4.1 Update from django-admin-tools-stats

Uninstall `django-admin-tools-stats`.

Follow `django-admin-charts` installation according to previous section. Especially pay attention to these steps:

- Move `admin_tools_stats` in `INSTALLED_APPS` before `admin_tools` and `django.contrib.admin`.
- Configure `urls.py`.

Change `DashboardCharts` to `DashboardChart` in dashboard definition (this is recommended even if dummy class is left for compatibility reasons).

Check any overridden template from `admin_tools_stats` or `DashboardChart(s)` class that might interfere with the changes.

4.2 Installation of javascript libraries with django-bower

Add `django-bower` to `INSTALLED_APPS` in `settings.py`:

```
INSTALLED_APPS = (  
    ...  
    'djangobower'  
)
```

Add the following properties to you `settings.py` file:

```
# Specifie path to components root (you need to use absolute path)  
BOWER_COMPONENTS_ROOT = os.path.join(PROJECT_ROOT, 'components')  
  
BOWER_INSTALLED_APPS = (  
    'd3#3.3.13',
```

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```
'nvd3#1.7.1',  
)
```

Add django-bower finder to your static file finders:

```
STATICFILES_FINDERS = (  
    ...  
    'djangubower.finders.BowerFinder',  
)
```

Run the following commands. These will download nvd3.js and its dependencies using bower and throw them in to you static folder for access by your application:

```
$ python manage.py bower_install  
$ python manage.py collectstatic
```

4.3 Usage with django-admin-tools

Configure admin_tools

Add following code to dashboard.py:

```
from admin_tools_stats.modules import DashboardChart, get_active_graph  
  
# append an app list module  
self.children.append(modules.AppList(  
    _('Dashboard Stats Settings'),  
    models=('admin_tools_stats.*', ),  
)  
)  
  
# Copy following code into your custom dashboard  
# append following code after recent actions module or  
# a link list module for "quick links"  
graph_list = get_active_graph()  
for i in graph_list:  
    kwargs = {}  
    kwargs['require_chart_jscss'] = True  
    kwargs['graph_key'] = i.graph_key  
  
    for key in context['request'].POST:  
        if key.startswith('select_box_'):  
            kwargs[key] = context['request'].POST[key]  
  
    self.children.append(DashboardChart(**kwargs))
```

You may also need to add some includes to your template admin base, see an example on the demo project:

```
demoproject/demoproject/templates/admin/base_site.html
```

CHAPTER 5

Running demo

Run following commands:

```
pip install -r requirements
python manage.py migrate
python manage.py loaddata demoproject/fixtures/auth_user.json
python manage.py loaddata demoproject/fixtures/test_data.json
python manage.py bower install
python manage.py runserver
```

And log in with username *admin* and password *admin* to the *localhost:8000/admin* site.

6.1 Dependencies

django-admin-charts is a django based application, the major requirements are:

- django-jsonfield
- django-nvd3
- django-bower

6.2 Contributing

If you've found a bug, add a feature or improve django-admin-charts and think it is useful then please consider contributing. Patches, pull requests or just suggestions are always welcome!

Source code: <http://github.com/PetrDlouhy/django-admin-charts>

Bug tracker: <https://github.com/PetrDlouhy/django-admin-charts/issues>

6.3 Documentation

Documentation is available on 'Read the Docs': <http://readthedocs.org/docs/django-admin-charts/>

6.4 License

django-admin-charts is licensed under MIT, see `MIT-LICENSE.txt`.

Contents:

7.1 Prerequisites

To fully understand this project, developers will need to have an advanced knowledge of:

- Django : <http://www.djangoproject.com/>
- Python : <http://www.python.org/>

7.2 Objects Description

7.2.1 DashboardStatsCriteria

To configure criteria for dashboard graphs

Attributes:

- `criteria_name` - Unique word .
- `criteria_fix_mapping` - JSON data key-value pairs.
- `dynamic_criteria_field_name` - Dynamic criteria field.
- `criteria_dynamic_mapping` - JSON data key-value pairs.
- `created_date` - record created date.
- `updated_date` - record updated date.

Name of DB table: `dash_stats_criteria`

7.2.2 DashboardStats

To configure graphs for dashboard

Attributes:

- `graph_key` - unique graph name.
- `graph_title` - graph title.
- `model_app_name` - App name of model.
- `model_name` - model name.
- `date_field_name` - Date field of `model_name`.
- `criteria` - many-to-many relationship.
- `is_visible` - enable/disable.
- `created_date` - record created date.
- `updated_date` - record updated date.

Name of DB table: `dashboard_stats`

7.3 Django-admin-tools-stats Modules

7.3.1 DashboardChart

Dashboard module with user registration charts.

7.3.2 DashboardCharts

Right now only dummy module with deprecation warning. We don't use module Groups any more.

7.4 Test Case Descriptions

7.4.1 How to run tests

1. Run full test suite:

```
$ python manage.py test --verbosity=2
```

2. Run AdminToolsStatsAdminInterfaceTestCase:

```
$ python manage.py test admin_tools_stats.AdminToolsStatsAdminInterfaceTestCase --  
↪verbosity=2
```

7.4.2 Test Case

AdminToolsStatsAdminInterfaceTestCase

Test cases for django-admin-tools-stats Admin Interface.

CHAPTER 8

Indices and tables

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