
Django Test Tools Documentation

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Contents:

Simple tests tools to make testing faster and easier. Most of the tools are to do a quick scaffolding for tests.

The tools presume a naming convention:

- **Tests:** Are named with the convention **TestCaseModelName**. For a model named *Poll* the test would be generated as the testing class would be *TestCasePoll*
- **Factories:** Are named with the convention **ModelName**. For a model named *Poll* the test would be generated as the testing class would be *PollFactory*
- **Serializers:** Are named with the convention **TestCaseSerializer**. For a model named *Poll* the test would be generated as the testing class would be *PollSerializer*

Compatibility matrix:

Python version	Django 1.11.x	Django 2.2.x	Django 3.0.x
3.7	x	x	x
3.6	x	x	x

1.1 Documentation

The full documentation is at <https://django-test-tools.readthedocs.io>.

1.2 Quickstart

Install Django Test Tools:

```
pip install django-test-tools
```

In your settings.py file add it to your *INSTALLED_APPS*

```
INSTALLED_APPS = (  
    ...  
    'django_test_tools.apps.DjangoTestToolsConfig',  
    ...  
)
```

Create an output folder in the root folder of you project, name it what ever you want, and add the settings variable **TEST_OUTPUT_PATH** pointing to it.

```
import environ  
  
ROOT_DIR = (  
    environ.Path(__file__) - 3  
) # (my_project/config/settings/base.py - 3 = alpha_clinic/  
APPS_DIR = ROOT_DIR.path("my_project")  
TEST_OUTPUT_PATH = ROOT_DIR.path("output").root
```

1.3 Features

1.3.1 Factory Generator

To create [Factory Boy](#) style factories.

For a django project named `polling_app` with an app name `poll` the following command will generate the scaffolding for the tests for all the models in th app `polls`.

```
$ python manage.py generate_factories polling_app.polls
```

For the following models

```
class OperatingSystem(models.Model):  
    name = models.CharField(max_length=20)  
    version = models.CharField(max_length=5)  
    licenses_available = models.IntegerField()  
    cost = models.DecimalField(decimal_places=2, max_digits=7)  
  
    class Meta:  
        unique_together = ('name', 'version')  
  
class Server(models.Model):  
    PRODUCTION = 'PROD'  
    DEVELOPMENT = 'DEV'  
    USE_CHOICES = ((PRODUCTION, 'Prod'),  
                  (DEVELOPMENT, 'Dev'))  
    name = models.CharField(max_length=20, unique=True)
```

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```

notes = models.TextField()
virtual = models.BooleanField()
ip_address = models.GenericIPAddressField()
created = models.DateTimeField()
online_date = models.DateField()
operating_system = models.ForeignKey(OperatingSystem, related_name='servers', on_
↪delete=models.CASCADE)
server_id = models.CharField(max_length=6)
use = models.CharField(max_length=4, choices=USE_CHOICES, default=DEVELOPMENT)
comments = models.TextField(null=True, blank=True)

```

running `python manage.py generate_factories example.servers > ./output/factories.py` will create the following factories

```

import string

from random import randint
from pytz import timezone

from django.conf import settings

from factory import Iterator
from factory import LazyAttribute
from factory import SubFactory
from factory import lazy_attribute
from factory.django import DjangoModelFactory, FileField
from factory.fuzzy import FuzzyText, FuzzyInteger
from faker import Factory as FakerFactory

from example.servers.models import OperatingSystem, Server

faker = FakerFactory.create()

class OperatingSystemFactory(DjangoModelFactory):
    class Meta:
        model = OperatingSystem

    name = LazyAttribute(lambda x: faker.text(max_nb_chars=20))
    version = LazyAttribute(lambda x: faker.text(max_nb_chars=5))
    licenses_available = LazyAttribute(lambda o: randint(1, 100))
    cost = LazyAttribute(lambda x: faker.pydecimal(left_digits=5, right_digits=2,
↪positive=True))

class ServerFactory(DjangoModelFactory):
    class Meta:
        model = Server

    name = LazyAttribute(lambda x: faker.text(max_nb_chars=20))
    notes = LazyAttribute(lambda x: faker.paragraph(nb_sentences=3, variable_nb_
↪sentences=True))
    virtual = Iterator([True, False])
    ip_address = LazyAttribute(lambda o: faker.ipv4(network=False))
    created = LazyAttribute(lambda x: faker.date_time_between(start_date="-1y", end_
↪date="now",
                                                                    tzinfo=timezone(settings.
↪TIME_ZONE)))

```

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```
online_date = LazyAttribute(lambda x: faker.date_time_between(start_date="-1y", ↵
↵end_date="now",
                                                                    tzinfo=timezone(settings.
↵TIME_ZONE)))
operating_system = SubFactory(OperatingSystemFactory)
server_id = LazyAttribute(lambda x: FuzzyText(length=6, chars=string.digits).
↵fuzz())
use = Iterator(Server.CHOICES, getter=lambda x: x[0])
comments = LazyAttribute(lambda x: faker.paragraph(nb_sentences=3, variable_nb_
↵sentences=True))
```

Important the use attribute is created incorrectly. **When you use choices you need to manually change it to USE_CHOICES.**

```
use = Iterator(Server.USE_CHOICES, getter=lambda x: x[0])
```

1.3.2 Model Test Case Generator

```
$ python manage.py generate_model_test_cases project.app
```

1.3.3 Serializer Generator

```
$ python manage.py generate_serializers project.app -s ModelSerializer
```

1.4 Running Tests

Does the code actually work?

```
source <YOURVIRTUALENV>/bin/activate
(myenv) $ pip install tox
(myenv) $ tox
```

1.5 Pushing code to Pypi

1. Setup environment

```
source ./venv/bin/activate
```

2. Updated version. Instead of patch you could also use **major** or **minor** depending on the level of the release.

```
$ make patch
```

3. Check the `.travis.yml` to make sure the versions of Django are the latests. Check in <https://www.djangoproject.com/download/> for the latest versions.
4. Check `setup.py` for Django and Python versions.
5. Close the git-flow release manually.

6. Push to repo, Travis CI should deploy to pypi

```
make travis-push
```

1.6 Credits

Tools used in rendering this package:

- [Cookiecutter](#)
- [cookiecutter-djangopackage](#)

CHAPTER 2

Installation

At the command line:

```
$ easy_install django-test-tools
```

Or, if you have virtualenvwrapper installed:

```
$ mkvirtualenv django-test-tools  
$ pip install django-test-tools
```


To use Django Test Tools in a project, add it to your *INSTALLED_APPS*:

```
pip install django-test-tools
```

In your *settings.py* file add it to your *INSTALLED_APPS*

```
INSTALLED_APPS = (  
    ...  
    'django_test_tools.apps.DjangoTestToolsConfig',  
    ...  
)
```

Create an output folder in the root folder of you project, name it what ever you want, and add the settings variable **TEST_OUTPUT_PATH** point to it.

```
import environ  
  
ROOT_DIR = (  
    environ.Path(__file__) - 3  
) # (my_project/config/settings/base.py - 3 = alpha_clinic/  
APPS_DIR = ROOT_DIR.path("my_project")  
TEST_OUTPUT_PATH = ROOT_DIR.path("output").root
```

django_test_tools package

4.1 Subpackages

4.1.1 django_test_tools.doc_utils package

Submodules

django_test_tools.doc_utils.folder_structure module

```
django_test_tools.doc_utils.folder_structure.create_folder_structure(doc_base_folder,  
                                                                    project_name)  
django_test_tools.doc_utils.folder_structure.get_module_files(folder)  
django_test_tools.doc_utils.folder_structure.write_template(data, folder, out-  
                                                            put_file, template)
```

Module contents

4.1.2 django_test_tools.flake8 package

Submodules

django_test_tools.flake8.parsers module

```
class django_test_tools.flake8.parsers.Flake8Parser
```

```
    Bases: object
```

```
    3 E124 closing bracket does not match visual indentation 6 E127 continuation line over-indented for visual  
    indent 11 E128 continuation line under-indented for visual indent 2 E221 multiple spaces before operator 1  
    E222 multiple spaces after operator 10 E225 missing whitespace around operator 6 E231 missing whitespace  
    after ';' 2 E251 unexpected spaces around keyword / parameter equals 4 E261 at least two spaces before inline
```

comment 4 E262 inline comment should start with '#' 8 E265 block comment should start with '# ' 4 E266 too many leading '#' for block comment 2 E271 multiple spaces after keyword 5 E302 expected 2 blank lines, found 1 7 E303 too many blank lines (3) 2 E402 module level import not at top of file 8 E501 line too long (123 > 120 characters) 17 F401 'django.contrib.admin' imported but unused 25 F405 'env' may be undefined, or defined from star imports: .base 1 F811 redefinition of unused 'RemarksManager' from line 3 7 F841 local variable 'response' is assigned to but never used 2 W293 blank line contains whitespace 6 W391 blank line at end of file

parse_summary (*filename*)

write_summary (*source_filename*, *target_filename*)

class `django_test_tools.flake8.parsers.RadonParser`

Bases: `object`

config/settings/test.py LOC: 61 LLOC: 12 SLOC: 23 Comments: 23 Single comments: 22 Multi: 4 Blank: 12
- Comment Stats

(C % L): 38% (C % S): 100% (C + M % L): 44%

**** Total **** LOC: 2149 LLOC: 894 SLOC: 1311 Comments: 335 Single comments: 310 Multi: 128 Blank: 400
- Comment Stats

(C % L): 16% (C % S): 26% (C + M % L): 22%

parse_totals (*filename*)

write_totals (*source_filename*, *target_filename*)

Module contents

4.1.3 `django_test_tools.generators` package

Submodules

`django_test_tools.generators.model_test_gen` module

class `django_test_tools.generators.model_test_gen.AppModelsTestCaseGenerator` (*app*)

Bases: `object`

class `django_test_tools.generators.model_test_gen.ModelTestCaseGenerator` (*model*)

Bases: `object`

`django_test_tools.generators.serializer_gen` module

class `django_test_tools.generators.serializer_gen.AppSerializerGenerator` (*app*,

se-

ri-

al-

izer_class='ModelSeriali

Bases: `object`

class `django_test_tools.generators.serializer_gen.SerializerGenerator` (*model*,

se-

rial-

izer_class='ModelSerializer')

Bases: `object`

Module contents

4.1.4 django_test_tools.git package

Submodules

django_test_tools.git.helpers module

class django_test_tools.git.helpers.GenericCVS

Bases: object

classmethod commit(*message*)

classmethod is_usable()

class django_test_tools.git.helpers.Git

Bases: *django_test_tools.git.helpers.GenericCVS*

Option Description of Output %H Commit hash %h Abbreviated commit hash %T Tree hash %t Abbreviated tree hash %P Parent hashes %p Abbreviated parent hashes %an Author name %ae Author email %ad Author date (format respects the `-date=option`) %ar Author date, relative %cn Committer name %ce Committer email %cd Committer date %cr Committer date, relative %s Subject

classmethod add_path(*path*)

classmethod assert_nondirty()

classmethod latest_tag_info()

report ()

classmethod tag(*name, message*)

Module contents

4.1.5 django_test_tools.management package

Subpackages

django_test_tools.management.commands package

Submodules

django_test_tools.management.commands.generate_factories module

class django_test_tools.management.commands.generate_factories.Command(*stdout=None, stderr=None, no_color=False, force_color=False*)

Bases: *django.core.management.base.BaseCommand*

\$ python manage.py generate_factories project.app

add_arguments (*parser*)

Entry point for subclassed commands to add custom arguments.

handle (**args, **options*)

The actual logic of the command. Subclasses must implement this method.

class `django_test_tools.management.commands.generate_factories.ModelFactoryGenerator` (*model*)
Bases: `object`

`django_test_tools.management.commands.generate_model_test_cases` module

class `django_test_tools.management.commands.generate_model_test_cases.Command` (*stdout=None, stderr=None, no_color=False, force_color=False*)

Bases: `django.core.management.base.BaseCommand`

\$ `python manage.py`

add_arguments (*parser*)

Entry point for subclassed commands to add custom arguments.

handle (**args, **options*)

The actual logic of the command. Subclasses must implement this method.

`django_test_tools.management.commands.generate_serializers` module

class `django_test_tools.management.commands.generate_serializers.Command` (*stdout=None, stderr=None, no_color=False, force_color=False*)

Bases: `django.core.management.base.BaseCommand`

\$ `python manage.py generate_serializers project.app -s ModelSerializer`

add_arguments (*parser*)

Entry point for subclassed commands to add custom arguments.

handle (**args, **options*)

The actual logic of the command. Subclasses must implement this method.

`django_test_tools.management.commands.parse_qc_files` module

class `django_test_tools.management.commands.parse_qc_files.Command` (*stdout=None, stderr=None, no_color=False, force_color=False*)

Bases: `django.core.management.base.BaseCommand`

\$ `python manage.py`

add_arguments (*parser*)

Entry point for subclassed commands to add custom arguments.

handle (**args, **options*)

The actual logic of the command. Subclasses must implement this method.

Module contents

Module contents

4.2 Submodules

4.3 `django_test_tools.app_manager` module

```
class django_test_tools.app_manager.DjangoAppManager
    Bases: object

    get_app (app_name)

    get_app_data (app_name)
        Read application data converts into a dictionary

        Parameters app_name – Application name

        Returns Dictionary with application data

    get_installed_apps ()

    get_model (app_name, model_name)

    get_project_apps (project_name)
```

4.4 `django_test_tools.apps` module

```
class django_test_tools.apps.DjangoTestToolsConfig (app_name, app_module)
    Bases: django.apps.config.AppConfig

    name = 'django_test_tools'

    ready ()
        Override this method in subclasses to run code when Django starts.
```

4.5 `django_test_tools.assert_utils` module

```
class django_test_tools.assert_utils.AssertionWriter (**kwargs)
    Bases: object

    This class generates assertions using Django practice of putting actual value first and then expected value.

    add_regular_expression (name, pattern, **kwargs)

    write_assert_list (dictionary_list, variable_name, **kwargs)
        Function to generate assertions for a dictionary or list content. :param kwargs: :param dictionary_list:
        :param variable_name: :return:

django_test_tools.assert_utils.write_assert_list (filename, dictionary_list, variable_name)

    Function to generate assertions for a dictionary or list content. :param filename: :param dictionary_list:
    :param variable_name: :return:
```

Note: Deprecated: Use `assert_utils.write_assertions` instead

`django_test_tools.assert_utils.write_assertions` (*dictionary_list*, *variable_name*, ***kwargs*)

Writes assertions using Django practice of putting actual value first and then expected value to a file. If no filename is supplied it will generate a file in the settings.TEST_OUTPUT_PATH folder with the **variable_name** and the current date. By default key named created and modified will be excluded.

Parameters

- **dictionary_list** – <list> or <dict> dictionary or list of values
- **variable_name** – <str> name of the variable
- **kwargs** – filename <str>String. Full path to the output file.
- **kwargs** – excluded_keys <list>list of strings. List with keys to exclude
- **kwargs** – type_only <boolean> Check only for types instead of values. Default false

Returns filename string.

4.6 django_test_tools.excel module

class `django_test_tools.excel.ExcelAdapter`

Bases: object

classmethod `convert_to_dict` (*filename*, *sheet_name=None*)

Reads an Excel file and converts every row into a dictionary. All values are converted to strings. Assumes first row contains the name of the attributes.

Parameters

- **filename** – <str> Excel filename
- **sheet_name** – <str> Name of the sheet

Returns <list> A list of dictionaries.

classmethod `convert_to_list` (*filename*, *sheet_name=None*, *has_header=True*)

Reads an Excel file and converts every row into a dictionary. All values are converted to strings. Assumes first row contains the name of the attributes.

Parameters

- **filename** – <str> Excel filename
- **sheet_name** – <str> Name of the sheet

Returns <list> A list of dictionaries.

4.7 django_test_tools.file_utils module

class `django_test_tools.file_utils.TemporaryFolder` (*base_name*, *delete_on_exit=True*)

Bases: object

write (*filename*, *content*)

`django_test_tools.file_utils.add_date` (*filename*, ***kwargs*)

Adds to a filename the current date and time in ‘%Y%m%d_%H%M’ format. For a filename /my/path/myexcel.xlsx the function would return /my/path/myexcel_20170101_1305.xlsx. If the file already exists the function will add seconds to the date to attempt to get a unique name.

The function will detect if another file exists with the same name if it exist it will append seconds to the filename. For example if file /my/path/myexcel_20170101_1305.xlsx already exist the function will return /my/path/myexcel_20170101_130521.xlsx.

Parameters

- **filename** – string with fullpath to file or just the filename
- **kwargs** – dictionary. `date_position`: suffix or prefix, `extension`: string to replace extension

Returns string with full path string including the date and time

`django_test_tools.file_utils.compare_file_content (*args, **kwargs)`

`django_test_tools.file_utils.create_dated (filename)`

Based on the filename will create a full path filename including the date and time in ‘%Y%m%d_%H%M’ format. The path to the filename will be set in the `TEST_OUTPUT_PATH` settings variable.

If the `TEST_OUTPUT_PATH` folder doesn’t exist the function will create it.

Parameters filename – base filename. `my_excel_data.xlsx` for example

Returns string, full path to file with date and time in the `TEST_OUTPUT_PATH` folder

`django_test_tools.file_utils.hash_file (filename, algorithm='sha1', block_size=65536)`

Creates a unique hash for a file.

Parameters

- **filename** – String with the full path to the file
- **algorithm** – String Algorithm to create the hash
- **block_size** – int for the size of the block while reading the file

Returns string the hash for the file

`django_test_tools.file_utils.json_serial (obj)`

JSON serializer for objects not serializable by default json code taken from: <https://stackoverflow.com/questions/11875770/how-to-overcome-datetime-datetime-not-json-serializable>

`django_test_tools.file_utils.parametrized (dec)`

Need to study this code. Got it from <http://stackoverflow.com/questions/5929107/python-decorators-with-parameters>

Parameters dec –

Returns

`django_test_tools.file_utils.serialize_data (data, output_file=None, format='json', **kwargs)`

Quick function to serialize a data to file. The data keys will be saved in an alphabetical order for consistency purposes. If no `output_file` is supplied the function will created a dated file in the settings.`TEST_OUTPUT_PATH` folder. if the `output_file` is a folder the dated file will be created on the supplied folder with the serialized date. if the `output_file` is a file the data will be serialized to thar file

Parameters

- **data** – Dictionary or list to serialize
- **format** – Format to serialize to. Currently json is the only one supported
- **output_file** – File to output the data to
- **kwargs** –

`django_test_tools.file_utils.shorten_path` (*path*, *level=2*, *current_level=1*)

This method shortens the path by eliminating the folders on top.

```
filename = '/user/documents/personal/file.txt'
shortened = shorten_path(filename)
self.assertEqual(shortened, 'personal/file.txt')
```

Parameters

- **path** – string full path for the filename
- **level** – int, number of levels to show.
- **current_level** – int, recursing level.

Returns string shortened path

`django_test_tools.file_utils.temporary_file` (**args*, ***kwargs*)

`django_test_tools.file_utils.temporary_files` (**args*, ***kwargs*)

4.8 `django_test_tools.mixins` module

class `django_test_tools.mixins.JWTTestMixin`

Bases: object

delete_with_token (*url*, *access_token*)

get_access_token (*user*)

get_with_token (*url*, *access_token*)

put_with_token (*url*, *access_token*, *data*)

class `django_test_tools.mixins.TestCommandMixin`

Bases: object

This mixin helps capture the output of a command written with the `stdout.write()` method and the `stderr.write`

```
class TestYourCommand(TestCommandMixin, TestCase):

    def test_your_command_action(self):
        call_command('your_command', 'your_argument', stdout=self.content,
↳stderr=self.error_content)
        results = self.get_results()
        self.assertEqual(23, len(results))
```

get_errors ()

get_results (*content=None*)

setUp ()

class `django_test_tools.mixins.TestFixtureMixin` (*app_name=None*, ***kwargs*)

Bases: object

This a mixin to add to test cases to easily access fixtures. It assumes the the you have a package for your tests named **tests** and your **fixtures** are in a folder named **fixtures** within your tests package and that you have settings variable named **APPS_DIR** pointing tou your applications folder (this is created by Cookiecutter by default). Your tests package should look like this.

|— clinics

```
| |— __init__.py | |— admin.py | |— apps.py | |— exceptions.py | |— forms.py | |— migrations
| |— models.py | |— tests | |— __init__.py | |— factories.py | |— fixtures | |— |
data.json | | | |— model_data.txt | |— test_forms.py | |— test_models.py | |— urls.py | |—
views.py
```

For the above example

```
class TestClinicAdapter(TestFixtureMixin, TestCase):

    def setUp(self) -> None:
        self.app_name = 'clinics'

    def test_parse(self):
        clinics_dictionary = self.get_fixture_json('data.json')
        ...

    def test_read(self):
        filename = self.get_fixture_fullpath('model.txt')
        ...
```

app_name = None

get_fixture_fullpath (*fixture_filename*)

Get full patch for the fixture file

Parameters *fixture_filename* – <str> name of the fixture file

Returns <str> full path to fixture file

get_fixture_json (*fixture_filename*)

Reads a file and returns the json content.

Parameters *fixture_filename* – <str> filename

Returns <dict> With the file content

class `django_test_tools.mixins.TestOutputMixin`

Bases: `object`

clean_output = True

clean_output_folder (*dated_filename*)

get_csv_content (*filename, delimiter=',', encoding='utf-8'*)

get_excel_content (*filename, sheet_name=None*)

Reads the content of an excel file and returns the content as a list of row lists. :param filename: string full path to the filename :param sheet_name: string. Name of the sheet to read if None will read the active sheet :return: a list containing a list of values for every row.

get_txt_content (*filename, encoding='utf-8'*)

4.9 django_test_tools.models module

4.10 django_test_tools.urls module

4.11 django_test_tools.utils module

class django_test_tools.utils.SpanishDate

Bases: object

parse (*str_date*)

to_string (*m_date*)

class django_test_tools.utils.Timer

Bases: object

Class to measure time elapsed

Example:

```
def test_performance(self):
    with Timer() as stopwatch:
        web_service = WebserviceUtil()
        web_service.consume_date(12)
        elapsed_milliseconds = stopwatch.elapsed*1000
        logger.debug('Elapsed: {} ms'.format(elapsed_milliseconds))
    self.assertTrue(elapsed_milliseconds <= 500)
```

get_elapsed_time ()

get_elapsed_time_str ()

reset ()

running

start ()

stop ()

django_test_tools.utils.add_date_to_filename (*filename*, ***kwargs*)

Adds to a filename the current date and time in ‘%Y%m%d_%H%M’ format. For a filename /my/path/myexcel.xlsx the function would return /my/path/myexcel_20170101_1305.xlsx. If the file already exists the function will add seconds to the date to attempt to get a unique name.

param filename string with fullpath to file or just the filename

param kwargs dictionary. date_position: suffix or prefix, extension: string to replace extension

return string with full path string including the date and time

Note: Deprecated: Should use django_test_tools.file_utils.add_date() function

class django_test_tools.utils.cd (*newPath*)

Bases: object

Context manager for changing the current working directory

`django_test_tools.utils.convert_to_snake_case` (*camel_case*)

Converts a CamelCase name to snake case. ..code-block:: python

```
camel_case = 'OperatingSystemLongName'
snake_case = convert_to_snake_case(camel_case)
self.assertEqual(snake_case, 'operating_system_long_name')
```

Parameters `camel_case` – string. Camel case name

Returns string. Snake case name

`django_test_tools.utils.create_output_filename_with_date` (*filename*)

Based on the filename will create a full path filename includn the date and time in ‘%Y%m%d_%H%M’ format. The path to the filename will be set in the TEST_OUTPUT_PATH settings variable.

param filename base filename. my_excel_data.xlsx for example

return string, full path to file with date and time in the TEST_OUTPUT_PATH folder

Note: Deprecated: Should use `django_test_tools.file_utils.create_dated()` function

`django_test_tools.utils.daterange` (*start_date*, *end_date*)

DEPRECATED use `utils.weekdays()` function instead :param start_date: :param end_date: :return:

`django_test_tools.utils.datetime_to_local_time` (*date_time*)

Converts a naive date to a time zoned date based in hte setting.TIME_ZONE variable. If the date has already a time zone it will localize the date. :param date_time: <date> or <datetime> to be localized :return: localized non naive datetime

`django_test_tools.utils.deprecated` (*func*)

This is a decorator which can be used to mark functions as deprecated. It will result in a warning being emitted when the function is used.

from: https://wiki.python.org/moin/PythonDecoratorLibrary#CA-92953dfd597a5cffc650d5a379452bb3b022cdd0_7

`django_test_tools.utils.dict_compare` (*d1*, *d2*)

`django_test_tools.utils.force_date_to_datetime` (*unconverted_date*, *tzinfo*=<UTC>)

`django_test_tools.utils.load_json_file` (*filename*)

`django_test_tools.utils.parse_spanish_date` (*str_date*)

`django_test_tools.utils.versiontuple` (*v*)

`django_test_tools.utils.weekdays` (*start_date*, *end_date*)

Returns a generator with the dates of the week days between the start and end date

```
start_date = datetime.date(2016, 10, 3) # Monday
end_date = datetime.date(2016, 10, 7) # Friday
days = list(weekdays(start_date, end_date))
self.assertEqual(5, len(days))
```

Parameters

- **start_date** – date. Start date
- **end_date** – date. End date

4.12 Module contents

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/luiserberrocal/django-test-tools/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 Test Tools could always use more documentation, whether as part of the official Django Test Tools 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/luiscerrocal/django-test-tools/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-test-tools* for local development.

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

```
$ git clone git@github.com:your_name_here/django-test-tools.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-test-tools
$ cd django-test-tools/
$ 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 django_test_tools 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/luisberrocal/django-test-tools/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_django_test_tools
```


6.1 Development Lead

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6.2 Contributors

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7.1 0.1.0 (2017-04-26)

- First release on PyPI.

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