

# DJANGO 1.8

## THE HOT NEW SUFF

[Anton Pirker](#) for [Django Meetup Vienna](#), April 2015

# FACTS

- Released April 1st, 2015
- Long Term Support (LTS)
- Python 2.7+ and 3.2+

# **IT IS A BIG RELEASE**

## **THE RELEASE NOTES INCLUDE:**

- 126 new features
- 58 backwards incompatible changes
- 56 deprecated features
- 27 removed features

# NEW FEATURES

# **MULTIPLE TEMPLATE ENGINE SUPPORT**

- Built in: Django, Jinja2
- One project can have multiple template engines

new features 1 - 6

# NEW DATATYPES

- UUIDField (native Postgres 'uuid' data type)
- DurationField (native Postgres 'interval' data type)

new features 2 - 6

# MODULE FOR POSTGRES SPECIFIC FEATURES

ArrayField, HStoreField, Range Fields, and unaccent lookup

<https://docs.djangoproject.com/en/1.8/ref/contrib/postgres/>

new features 3 - 6

# QUERY EXPRESSIONS

```
# How many chairs are needed for
# each company to seat all employees?
company = Company.objects.filter(
    num_employees__gt=F('num_chairs')).annotate(
        chairs_needed=F('num_employees') - F('num_chairs')).first()

company.num_employees
# 120

company.num_chairs
# 50

company.chairs_needed
# 70
```

**<https://docs.djangoproject.com/en/1.8/ref/models/expressions/>**

new features 4 - 6



# CONDITIONAL EXPRESSIONS

let you use if ... elif ... else logic within filters, annotations, aggregations, and updates

```
# Get the discount for each Client based on the account type
Client.objects.annotate(
    discount=Case(
        When(account_type=Client.GOLD, then=Value('5%')),
        When(account_type=Client.PLATINUM, then=Value('10%')),
        default=Value('0%'),
        output_field=CharField(),
    ),
).values_list('name', 'discount')

# [('Jane Doe','0%'), ('James Smith','5%'), ('Jack Black','10%')]
```

**<https://docs.djangoproject.com/en/1.8/ref/models/conditional-expressions/>**

new features 5 - 6

# DATABASE FUNCTIONS

- Coalesce
- Concat
- Length
- Lower / Upper
- Substr

**<https://docs.djangoproject.com/en/1.8/ref/models/database-functions/>**

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**DEPRECATED**

# URL PATTERNS

Old way:

```
urlpatterns = patterns('',
    url('^$', 'myapp.views.myview'),
    url('^other/$', 'myapp.views.otherview'),
)

urlpatterns = patterns('myapp.views',
    url('^$', 'myview'),
    url('^other/$', 'otherview'),
)
```

New way:

```
from django.conf.urls import url
from myapp import views

urlpatterns = [
    url('^$', views.myview),
    url('^other/$', views.otherview),
]
```

deprecated 1 - 3

# TEMPLATE CONFIG

Instead of

```
TEMPLATE_DIRS = ...  
TEMPLATE_LOADERS = ...  
TEMPLATE_CONTEXT_PROCESSORS = ...
```

Use this now

```
TEMPLATES = [  
    {  
        'BACKEND': 'django.template.backends.django.DjangoTemplates',  
        'APP_DIRS': True,  
    },  
]
```

**<https://docs.djangoproject.com/en/1.8/ref/settings/#std:setting-TEMPLATES>**

deprecated 2 - 3





# {% SSI %} TEMPLATE TAGS

Replace with

```
{% include "foo/bar.html" %}
```

**<https://docs.djangoproject.com/en/1.8/ref/templates/builtins/#include>**

deprecated 3 - 3

**REMOVED**

# REMOVED

- `django.contrib.comments`
- `TransactionMiddleware`
- Support for the Python Imaging Library (PIL) module is removed
- The session key `django_language` is no longer read for backwards compatibility.
- `CACHE_MIDDLEWARE_ANONYMOUS_ONLY`

removed †

**FINITO**

**DOWNLOAD DJANGO 1.8:**

[www.djangoproject.com/download](http://www.djangoproject.com/download)

**RELEASE NOTES:**

<https://docs.djangoproject.com/en/1.8/releases/1.8/>

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