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# **django-billjobs Documentation**

***Release 0.6.9***

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*A django billing app for coworking space*

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**Note: Warning: I maintain this project 2/3 times a year.**

If you start a new coworking space as a french non-profit organization, this project could help you on the first time. Otherwise, it must be wiser to use another piece of software.

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# CHAPTER 1

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## What is django-billjobs ?

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Django-billjobs is a django app to manage coworkers and create their invoices. It uses [Django admin site](#) to manage coworkers account, services the space is providing and manage coworkers invoices.





## CHAPTER 2

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### Features

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**Account and Profile :** from Django admin site you can create, update, delete coworkers account and their profile. As [Django-billjobs](#) is using [Django authentication system](#) you can also use *groups*.

**Services :** A service can be access to the coworking space for a month, a day, or whatever you want. It is just something with a name, a description and a unit price. We keep it simple, really !

**Billing :** You affect one or more services to one account. It creates an invoice and you can download a pdf of it.

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**Note:** No tax management. This project is coming from non-profit organisation in France. We do not need to manage VAT for services.

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```
pip install django-billjobs
```

in your django settings file:

```
INSTALLED_APPS = (  
    'django.contrib.admin',  
    'django.contrib.auth',  
    'django.contrib.contenttypes',  
    'django.contrib.sessions',  
    'django.contrib.messages',  
    'django.contrib.staticfiles',  
    'billjobs',  
)
```

```
django-admin migrate  
django-admin createsuperuser  
django-admin runserver
```

## 3.1 Getting Started

[Django-billjobs](#) is a Django reusable app that you can install with [pip](#). We recommend you follow those steps to setup a new project for your coworking space :

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**Note:** If you update to version v0.8.0 you need to read [Migration to v0.8.x](#)

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### 3.1.1 Create virtualenv

You need Python version 3.5 at least, [virtualenv](#) and [mkvirtualenv](#) installed in your system. We let you read their own respective documentation. Let's create a virtualenv with your coworking space name

```
[ioo@billjobs ~/]$ mkvirtualenv my-space-name
Using base prefix '/usr'
New python executable in ~/.virtualenv/my-space-name/bin/python3
Also creating executable in ~/.virtualenv/my-space-name/bin/python
Installing setuptools, pip, wheel...done.
virtualenvwrapper.user_scripts creating ~/.virtualenv/my-space-name/bin/predeactivate
virtualenvwrapper.user_scripts creating ~/.virtualenv/my-space-name/bin/postdeactivate
virtualenvwrapper.user_scripts creating ~/.virtualenv/my-space-name/bin/preactivate
virtualenvwrapper.user_scripts creating ~/.virtualenv/my-space-name/bin/postactivate
virtualenvwrapper.user_scripts creating ~/.virtualenv/my-space-name/bin/get_env_
↪ details

(my-space-name) [ioo@billjobs ~/django-billjobs]$
```

Everything is ok, your virtualenv should be activated as you can see above with the name between parenthesis.

### 3.1.2 Install Django-billjobs

Most of the time, Django-billjobs is up to date with the latest Django version. You can check which version we actually support in the [travis.yml](#) file. You can install Django-billjobs directly, all requirements as Django, reportlab will be installed in the same time.

```
(my-space-name) [ioo@billjobs ~/my-space-name]$ pip install Django-billjobs
Collecting Django-billjobs
Collecting django>1.9 (from Django-billjobs)
  Using cached Django-1.11-py2.py3-none-any.whl
Collecting reportlab==3.4.0 (from Django-billjobs)
  Using cached reportlab-3.4.0-cp36-cp36m-manylinux1_x86_64.whl
[...]
Installing collected packages: pytz, django, djangorestframework, olefile, pillow, ↵
↪ reportlab, Django-billjobs
Successfully installed Django-billjobs-1.0.0 django-1.11 djangorestframework-3.6.2 ↵
↪ olefile-0.44 pillow-4.1.0 pytz-2017.2 reportlab-3.4.0
```

### 3.1.3 Create your django project

Now everything is installed you can create a django project.

```
(my-space-name) [ioo@billjobs ~/]$ mkdir my-space-name
(my-space-name) [ioo@billjobs ~/]$ cd my-space-name/
(my-space-name) [ioo@billjobs ~/my-space-name]$ django-admin startproject myspacename ↵
↪ .
```

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**Note:** You notice the dot at the end of django-admin startproject command, right ? If not you only have a myspace-name folder that contains another directory with the same name.

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### 3.1.4 Configure your virtualenv

You need to add the project path to your virtualenv:

```
(my-space-name) [ioo@billjobs ~/my-space-name]$ add2virtualenv .
Warning: Converting "." to "home/ioo/my-space-name"
```

Configure the settings path add those lines in postactivate and predeactivate files:

```
# ~/.virtualenv/my-space-name/bin/postactivate
#!/bin/bash
# This hook is sourced after this virtualenv is activated.
export DJANGO_SETTINGS_MODULE=myspacename.settings
```

```
# ~/.virtualenv/my-space-name/bin/predeactivate
#!/bin/bash
# This hook is sourced before this virtualenv is deactivated.
unset DJANGO_SETTINGS_MODULE
```

Now deactivate and reactivate the virtualenv to get your changes working.

```
(my-space-name) [ioo@billjobs ~/my-space-name]$ deactivate
[ioo@billjobs ~/my-space-name]$ workon my-space-name
(my-space-name) [ioo@billjobs ~/my-space-name]$
```

### 3.1.5 Configure your Django project

You need to enable Django-billjobs in your django project settings, as well as Django REST Framework with the token authentication to use the API with your client app.

```
# myspacename/settings.py
INSTALLED_APPS = (
    'django.contrib.admin',
    'django.contrib.auth',
    'django.contrib.contenttypes',
    'django.contrib.sessions',
    'django.contrib.messages',
    'django.contrib.staticfiles',
    'billjobs',
)
```

Before running and playing with your application, you need to create a database.

```
(my-space-name) [ioo@billjobs ~/my-space-name]$ django-admin migrate
Operations to perform:
  Apply all migrations: admin, auth, authtoken, billjobs, contenttypes, sessions
Running migrations:
  Applying contenttypes.0001_initial... OK
  Applying auth.0001_initial... OK
  Applying admin.0001_initial... OK
  Applying admin.0002_logentry_remove_auto_add... OK
  Applying contenttypes.0002_remove_content_type_name... OK
  Applying auth.0002_alter_permission_name_max_length... OK
  Applying auth.0003_alter_user_email_max_length... OK
  Applying auth.0004_alter_user_username_opts... OK
  Applying auth.0005_alter_user_last_login_null... OK
  Applying auth.0006_require_contenttypes_0002... OK
  Applying auth.0007_alter_validators_add_error_messages... OK
  Applying auth.0008_alter_user_username_max_length... OK
```

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```
Applying authtoken.0001_initial... OK
Applying authtoken.0002_auto_20160226_1747... OK
Applying billjobs.0001_initial... OK
Applying billjobs.0002_service_is_available_squashed_0005_bill_issuer_address_
→default... OK
Applying billjobs.0006_add_billin_address_and_migrate_data... OK
Applying billjobs.0007_change_service_description_field_max_len... OK
Applying sessions.0001_initial... OK
```

The database is empty, so you need to create a first user with admin permissions to access the backend.

```
(my-space-name) [ioo@billjobs ~/my-space-name]$ django-admin createsuperuser
Username (leave blank to use 'ioo'): admin
Email address: admin@billjobs.org
Password:
Password (again):
Superuser created successfully.
```

Last, you need to include *billjobs.urls* to browse the application with your web browser.

```
# myspacename/urls.py
from django.urls import include, path, re_path
from billjobs.admin import admin_site
import billjobs

urlpatterns = [
    re_path(r'^billjobs/', include('billjobs.urls')),
    path('admin/', admin_site.urls),
]
```

Now you can run the local server and play with django-billjobs

```
(my-space-name) [ioo@billjobs ~/my-space-name]$ django-admin runserver
Performing system checks...
System check identified no issues (0 silenced).
April 24, 2017 - 15:46:07
Django version 1.11, using settings 'myspacename.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CONTROL-C.
```

To browse the admin interface <http://localhost:8000/admin>

## 3.2 Settings

You must add those settings in your own project *settings.py* to customize the invoice and slack integration. Have a look to *billjobs/settings* to see default settings and how to write them.

### 3.2.1 BILLJOBS\_DEBUG\_PDF

Boolean.

For development only, this settings help you to view limit of the invoice pdf document.

By default this settings is based on *DEBUG* value in your own *settings.py*

### 3.2.2 BILLJOBS\_BILL\_LOGO\_PATH

String.

Add your own logo to your invoice.

Default is a logo path to billjobs static folder.

### 3.2.3 BILLJOBS\_BILL\_LOGO\_WIDTH and BILLJOBS\_BILL\_LOGO\_HEIGHT

Integer.

Define width and height of the logo in the invoice. Do not add unit to size. It is managed by *reportlab* lib.

Default value is 100 for the width and 80 for the height. We recommend you adapt your logo to those sizes.

### 3.2.4 BILLJOBS\_BILL\_ISSUER

Text HTML.

Add your invoice information.

### 3.2.5 BILLJOBS\_BILL\_PAYMENT\_INFO

Text HTML.

Display information to user on the ways to pay you !

### 3.2.6 BILLJOBS\_FORCE\_SUPERUSER

Boolean.

Force during signup the user to be set as a superuser and access.

Default is False.

### 3.2.7 BILLJOBS\_FORCE\_USER\_GROUP

String.

Force during signup to add the newly user to a particular group. Only one group is possible.

Default is None.

### 3.2.8 BILLJOBS\_SLACK\_TOKEN

String.

[Legacy token](#) for slack API. This token is used so send a slack invitation to the email address of the newly signup user. If you want to send a message to a channel after signup is successful you must add this setting.

Default is False.

### 3.2.9 BILLJOBS\_SLACK\_CHANNEL

String.

Add channel name in the form of **#channel\_name** or use channel id you can find in slack url for example:

```
https://workspace.slack.com/messages/CHANNEL_ID
```

We recommend channel id to avoid errors.

Default is False.

## 3.3 Contributing

### 3.3.1 Clone repository

```
git clone https://github.com/ioO/billjobs.git
```

### 3.3.2 Create a virtualenv with python 3 binary

Billjobs works from **python 3.4 to 3.6**.

Read [virtualenv documentation](#)

```
mkvirtualenv django-billjobs --python=/path/to/python3.5  
add2virtualenv path/to/django-billjobs
```

### 3.3.3 Install dependencies

```
pip install -r requirements.txt
```

### 3.3.4 Sample settings

The *core/* folder contains sample settings for development. Use **DJANGO\_SETTINGS\_MODULE** environment variables.

In your virtualenv *bin/postactivate*

```
export DJANGO_SETTINGS_MODULE=core.settings
```

In your virtualenv *bin/postdeactivate*

```
unset DJANGO_SETTINGS_MODULE
```

### 3.3.5 Database

Development use sqlite3 engine.



```
django-admin migrate
```

### 3.3.6 Git workflow

Create a feature branch when you develop a new feature, a hotfix and at the end rebase it with **master** branch.

```
git checkout -b new_feature
# do your commits
git checkout master
git pull
git checkout new_feature
git rebase master
git checkout master
git merge --no-ff new_feature
```

### 3.3.7 Fixtures

You can use development fixtures

```
django-admin loaddata billjobs/fixtures/dev_*
```

If you setup a super user it will be deleted by fixtures data.

- Login : bill
- Password : jobs

## 3.4 Migration to v0.8.x

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**Note:** This migration guide concerns all versions before v0.8.0 you update to version v0.8.x or higher

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Django-billjobs version v0.8.x use Django v2.x version. Some Django functions are removed or going to be deprecated. You must do some updates in your django project to get the app running.

### 3.4.1 Settings

Using Django v2.x need changes in your *settings.py* file:

```
- MIDDLEWARE_CLASSES=(
+ MIDDLEWARE=(
-     'django.contrib.auth.middleware.SessionAuthenticationMiddleware',
```

### 3.4.2 URLConfs

Django module for url changes. Some functions will be deprecated too:

```
-from django.conf.urls import include, url
+from django.urls import include, path, re_path
from core import settings
from billjobs.admin import admin_site
admin_site.site_header = 'Coworking space administration'

urlpatterns = [
-    url(r'^billjobs/', include('billjobs.urls')),
-    url(r'^admin/', include(admin_site.urls)),
+    re_path(r'^billjobs/', include('billjobs.urls')),
+    path('admin/', admin_site.urls),
```

## 3.5 Indices and tables

- [genindex](#)
- [modindex](#)
- [search](#)