



Faversham Associates Ltd

Django

Basic Installation using Python 3
Version: 1.0.0

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This is the first of a series of documents blogging my attempts at setting up and using Django to create a Website. In this first document I am going to set up Django, later I am going to create a site called "breWorld.co.uk", because I own the domain name and like beer and brewing.

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1 Introduction

This is little more than note taking during my attempts to write a Website using Django. It is mainly for my benefit, but if it helps anyone else, all the better.

I already have Python 3, Apache2 and MySQL installed as well as pip and pip2, so I am not going to dwell on those subjects. There are links to some other documents **Faversham Associates Ltd** have created that discuss these further should anyone be interested. There are links to the above documents below: Section 6; *See Also*; page 5. ¹

2 Installing Django

There's quite a lot of info out there about the various different ways to install Django, this document is just going to concern itself with the way I did it and managed to get it to work. I am not saying it is the best way, just that it's what I did.

It seems to be generally recommended that one should install Django in a virtual environment using `virtualenv`. I didn't. I just wanted to 'get on with stuff'. This could well be a false economy of the 'oh, I'll come back and comment my code later' variety.

I am using Python 3 and pip3, instructions differ for other versions.

- To install Django:

```
$ pip3 install Django --user
```

- Many places `install django`, with a lower case 'D'. I don't know whether `pip3` is case sensitive or not or whether `Django` and `django` differ in any way?
- When I initially tried to install Django, I got a permissions problem, some people said use `sudo` to install it as the superuser, that didn't work. After some time I stumbled across using the `--user` option. The install proceeded successfully when I used this.

¹At first I am just going to be using the default webserver etc. I will plug in Apache and MySQL later on.



After the installation, to check the version of Django use:

```
$ django-admin --version
```

I was duly informed that I had version:

2.0

3 Creating a Project

With Django and all the other gubbins installed, I attempted to create my first project. I am calling my project 'Brewworld'.

- Create a project directory.

I created a main Django directory off of my standard development one.

```
$ mkdir Django
```

and one for the project.

```
$ cd Django
```

- Create the Brewworld project.

```
$ django-admin startproject brewworld
```

This created a directory **brewworld** with some Python files in it and another sub-directory also called **brewworld**.

- Bootstrap the database.

(I am not quite sure what this does at this stage, but I just followed orders.)

Change to the (first) **<projectname>** directory:

```
$ cd brewworld
```

Run **migrate.py** in this directory:

```
$ python3 manage.py migrate
```

- Create the administrative user for the project.

```
$ python3 manage.py createsuperuser
```

During this process I was asked to supply the user name, email address and password. I used:

User: gavin

Email: gavin.bungay@favershamassociates.com

Password: <xxxxx@xxxxxxF>



4 Granting Access

Before you can test your project, you have to grant access to it.

- Modifying ALLOWED_HOST Setting

This setting is in the `<projectname>/<projectname>/settings.py` file.

For me this was:

```
$ brewworld/brewworld/settings.py
```

I amended the file and added `$ ALLOWED_HOSTS` directive to read:

```
$ ALLOWED_HOSTS = ['localhost']
```

- Opening Port 8000 in your firewall.

```
$ sudo ufw allow 8000
```

5 Opening the Site

To open the project in a browser:

- Start the Development Server

```
$ python3 manage.py runserver 0.0.0.0:8000
```

- Open the site in a browser

In a browser enter the URL as amended in the `ALLOWED_HOSTS` directive followed by `:8000` in your web browser:

```
localhost:8000
```

If everything has worked, you should see a screen like:

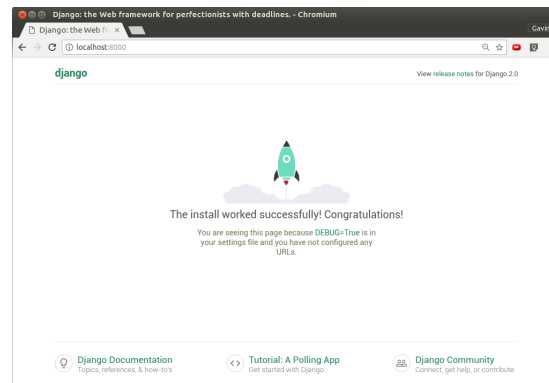


Figure 1: Django - First time longon screen

Add admin to the URL to go to the administration page:

localhost:8000/admin

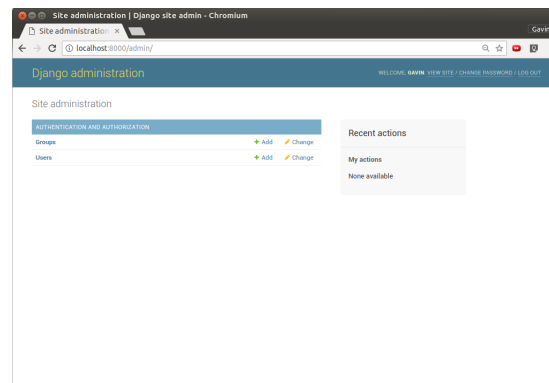


Figure 2: Django - Admin screen

6 See Also

'<http://www.favershamassociates.com/Documents/lamp.pdf> - LAMP, Using Apache, MySQL and Python on Linux'

'<http://www.favershamassociates.com/Documents/py-mysql.pdf> - Python and MySQL, Connecting to a MySQL database using mysqlclient'

'<http://www.favershamassociates.com/Documents/mysql.pdf> - Using MySQL, A brief introduction'



7 Copyright

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