

## ----- 1 - Introduction -----

In this file I will describe briefly what I have done to achieve my first blog in Python, but before that let me put a little description about the project;

The blog is consisted of two Models (Post and Comment: a Post could has 0/\* Comments), the user should authenticate using his login/password to access then:

- Insert a post - Only a logged-in user can create a post
- Listing posts - All users can see the posts
- Add Comment - Anyone can write reviews

The blog is coded with Python programming language and Django as the framework.

## ----- 2 - Installation -----

1 - Download Python 3.4.3 from <https://www.python.org/downloads/> and install the environment.

2 - Install the required packages (setup tools 18.0.1) for Python from

<https://pypi.python.org/pypi/setuptools>

- Using Windows 8(which includes PowerShell 3) it's possible to install with one simple PowerShell command. Start up PowerShell with administrative privileges and paste those commands:

```
> (Invoke-WebRequest https://bootstrap.pypa.io/ez_setup.py).Content | python -  
> (Invoke-WebRequest https://bootstrap.pypa.io/ez_setup.py).Content | python --user  
> (Invoke-WebRequest https://bootstrap.pypa.io/ez_setup.py).Content | py -3 -
```

3 - Download Django 1.8.2 Web Framework from <https://www.djangoproject.com/download/>, I have used the first option: Get the latest official version by installing it with pip:

```
> pip install Django==1.8.2
```

### ----- 3 - Deployment -----

Due to that it was my first blog (It was really interesting actually), I followed the tutorial in the

Django Official web site documentation (<https://docs.djangoproject.com/>), It was a good detailed tutorial that helped me greatly.

The steps needed to create the blog:

#### 1 - Create a Django project

```
$ django-admin startproject myBlog
```

- The hierarchy should be like this:

```
myBlog/  
  manage.py  
  myBlog/  
    __init__.py  
    settings.py  
    urls.py  
    wsgi.py
```

2 - Like the 'code first approach in asp.net', python create a version of the database and any necessary tables by migrating the database settings in myBlog/settings.py

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

3 - Start you server by running the following command:

```
$ python manage.py runserver
```

Then access <http://127.0.0.1:8000/> with the web browser.

#### 4 - Creating models:

A-First create the directory polls (which will house the poll application) by typing this command

```
$ python manage.py startapp polls
```

B-Modify the polls/models.py by:

```
polls/models.py

from django.db import models

class Post(models.Model):

    post_text = models.CharField(max_length=200)

    pub_date = models.DateTimeField('date published')

class Comment(models.Model):

    post = models.ForeignKey(Post)

    comment_text = models.CharField(max_length=200)
```

C-Edit the mysite/settings.py file, and change the INSTALLED\_APPS setting to include the string 'polls'.

```
INSTALLED_APPS = (

    'django.contrib.admin',

    'django.contrib.auth',

    'django.contrib.contenttypes',

    'django.contrib.sessions',

    'django.contrib.messages',

    'django.contrib.staticfiles',

    'polls',

)
```

5 - To include the polls app.

```
$ python manage.py makemigrations polls
```

6 - I am really interested in the Admin site, that why I was delighted to see that Django automatically generate a coherent good structured admin site.

A-First you must create an admin user for your site

```
$ python manage.py createsuperuser
```

(I have created an admin with the following Username: admin, password: 0000)

b- Some changes must be made in polls/admin.py to include the two models (Post and comment)

```
from django.contrib import admin

from .models import Post, Comment

class CommentInline(admin.TabularInline):

    model = Comment

    extra = 30

class PostAdmin(admin.ModelAdmin):

    list_display = ('post_text', 'pub_date', 'was_published_recently')

    fields = ['pub_date', 'post_text']

    list_filter = ['pub_date']

    search_fields = ['post_text']

admin.site.register(Post, PostAdmin)

admin.site.register(Comment)
```

C-Now everything should be in place, you can either create/modify/delete a post or a comment, notice that you must identify the post before creating a comment(Foreign Key), also I have included some modifications like the Post list filter and the search filter.

First, you must improve the polls/models.py code by giving the Post a few attributes:

```
class Post(models.Model):

    post_text = models.CharField(max_length=200)

    pub_date = models.DateTimeField('date published')

    def __str__(self):

        return self.post_text

    def was_published_recently(self):

        return self.pub_date >= timezone.now() - datetime.timedelta(days=1)

    was_published_recently.admin_order_field = 'pub_date'

    was_published_recently.boolean = True

    was_published_recently.short_description = 'Published recently?'
```

7 - Now with the final part, which is the simple user views, you can easily create a user in the admin Dashboard. Then create a file urls.py under myBlog\polls that will include the view URL.

I have created 5 views:

-Index: Hello World

-Results: return a post by its id

-List\_posts: Return all the posts in the database.

-List comments: Return all the comments in the database.

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#### 4 – Conclusion

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I have done my best to show in this project that I could help with the best I can in the development of your honorable company and I am really willing to develop my skills and gain more experience in Python Programming Language. I am enthusiastic about this opportunity and I am certain that I will find professionals that take their job seriously and pleased to be lead by them.