Creating a Web App with Django

**virtual environment**   
$ mkdir djangogirls  
$ cd djangogirls

$ python3 -m venv myvenv

**Start virtual environment**   
C:\Users\Name\djangogirls> myvenv\Scripts\activate

**Installing Django**

(myvenv) ~$ pip install --upgrade pip

(myvenv) ~$ pip install django~=1.10.0

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**Start Django project**

(myvenv) C:\Users\Name\djangogirls> django-admin.py startproject mysite .

djangogirls

├───manage.py

└───mysite

settings.py

urls.py

wsgi.py

\_\_init\_\_.py

**Setup blog database**(myvenv) ~/djangogirls$ python manage.py migrate

**Start webserver**

(myvenv) ~/djangogirls$ python manage.py runserver

**Check** <http://127.0.0.1:8000/>

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**Django models**

**Creating an application (blog)**

(myvenv) ~/djangogirls$ python manage.py startapp blog  
  
djangogirls

├── blog

│ ├── \_\_init\_\_.py

│ ├── admin.py

│ ├── apps.py

│ ├── migrations

│ │ └── \_\_init\_\_.py

│ ├── models.py

│ ├── tests.py

│ └── views.py

├── db.sqlite3

├── manage.py

└── mysite

├── \_\_init\_\_.py

├── settings.py

├── urls.py

└── wsgi.py

Edit mysite/settings.py

Edit blog/models.py

**Create tables for your models in the database**(myvenv) ~/djangogirls$ python manage.py makemigrations blog  
(myvenv) ~/djangogirls$ python manage.py migrate blog

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**Setup Django admin**

blog/admin.py

from django.contrib import admin

from .models import Post

admin.site.register(Post)

**Create superuser**

(myvenv) ~/djangogirls$ python manage.py createsuperuser

Username: admin

Email address: admin@admin.com

Password:

Password (again):

Superuser created successfully.

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**Deploy**

**Create Git repo**

$ git init

Create .gitignore

$ git add --all .

$ git commit -m "My Django Girls app, first commit"

**Pushing your code to GitHub**

**GitHub.com, name Repository name (my-first-blog)**

**Hook up the Git repository on your computer to the one up on GitHub:**$ git remote add origin https://github.com/<your-github-username>/my-first-blog.git

$ git push -u origin master

**Pulling your code down on PythonAnywhere**$ git clone https://github.com/<your-github-username>/my-first-blog.git

**Creating a virtualenv on PythonAnywhere**

PythonAnywhere command-line  
$ cd my-first-blog

$ virtualenv --python=python3.5 myvenv

Running virtualenv with interpreter /usr/bin/python3.5

[...]

Installing setuptools, pip...done.

$ source myvenv/bin/activate

(myvenv) $ pip install django~=1.10.0

Collecting django

[...]

Successfully installed django-1.10.4

### Creating the database on PythonAnywhere (mvenv) $ python manage.py migrate

Operations to perform:

[...]

Applying sessions.0001\_initial... OK

(mvenv) $ python manage.py createsuperuser

## Publishing our blog as a web app

**Goto pythonanywhere and add:**enter /home/<your-PythonAnywhere-username>/my-first-blog/myvenv/

**Configure the WSGI file:**

**Reload and view your webapp.  
  
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**Django URLs**

Edit mysite/urls.py

Edit blog/urls.py

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**Django views**

Edit blog/views  
def post\_list(request):  
 return render(request, 'blog/post\_list.html', {})

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**Introduction to HTML**

**Template**blog

└───templates

└───blog

blog/templates/blog/post\_list.html

**Deploy:**

$ git add --all .

$ git commit -m "Changed the HTML for the site."

$ git push