**Dajngo API hosting using Apache and Ubuntu**

1. In the linux server we need a non-root user with sudo privileges configured
2. Install python3.6.8
3. Run the following commands in the terminal

* sudo apt-get update
* sudo apt-get install python3-pip apache2 libapache2-mod-wsgi-py3
* sudo apt-get install libpq-dev

1. Now copy our django application to the server location(let us assume that the path is “serverpath/face\_detection”)
2. Install virtual environment if needed. With some of the python version it will be there by default. With python3.6.8 it will installed default
3. Go to the application directory “serverpath/face\_detection” and create a virtual environment using command sudo python3.6 -m venv facedetectiondevenv. This will create a directory called facedetectionenv within your face\_detection directory. Inside, it will install a local version of Python and a local version of pip. We can use this to install and configure an isolated Python environment for our project.
4. Before we install our project’s Python requirements, we need to activate the virtual environment. You can do that by typing:

* source facedetectionenv/bin/activate

1. Now install all the packages in the requirements.txt using the following command

## pip install -r requirements.txt

1. Apply the database changes using django migrations. Use the following commands

* ./manage.py migrate

1. Finally test our project by starting up the Django development server with this command:

* ./manage.py runserver 0.0.0.0:8000

1. In your web browser, visit your server’s domain name or IP address followed by :8000:

* <http://server_domain_or_IP:8000>/admin
* You can see the default django index page
* Now the application is working properly in django. Now you can exit the terminal to stop run locally by Cntrl + C or exit() command.

1. Please give full permission for the document root(face\_detection\_dev or face\_detection\_qa) using the following command

sudo chmod -R 777 directory\_name

1. Now configure the Apache. To configure the WSGI pass, we’ll need to edit the default virtual host file. Using any editor open the configuration file.

* sudo nano /etc/apache2/sites-available/000-default.conf

1. We can keep the directives that are already present in the file. We just need to add some additional items.
2. Add the following in the configuration file. The path used should be the actual path here. That is /home/sammy should be replaced with the proper values. Replace all the path specified in the configuration with actual path. Please refer the virtual host created for dev environment

<VirtualHost \*:80>

. . .

<Directory /home/sammy/face\_detection/face\_detection>

<Files wsgi.py>

Require all granted

</Files>

</Directory>

WSGIDaemonProcess face\_detection python-home=/home/sammy/face\_detection/facedetectionenv python-path=/home/sammy/face\_detection

WSGIProcessGroup face\_detection

WSGIScriptAlias / /home/sammy/face\_detection/face\_detection/wsgi.py

</VirtualHost>

Please visit the following link for reference

<https://www.digitalocean.com/community/tutorials/how-to-serve-django-applications-with-apache-and-mod_wsgi-on-ubuntu-16-04>

15 Add the required ports in /etc/apache2/ports.conf which is used in the virtual host.

16 Save and close the file and restart the apache server using the following command

* sudo systemctl restart apache2

17 sudo apache2ctl configtest to test any syntax error in virtual host configuration

Reference:-

<http://blog.dscpl.com.au/2012/10/requests-running-in-wrong-django.html>