Python Deployment

1. go to http://aws.amazon.com/

2. Click EC2 than click Launch Instance

3. scroll down and select Ubuntu Server 14.04 LTS

4. Click Review and Launch for the free Tier

5. Click step 6 Config Security Group

6. Add SSH ...Source Anywhere

6. Add HTTP ...Source Anywhere

6. Add HTTPS ...Source Anywhere

7. Click Review and then click Launch

8. Create a new key pair and download and store safely

9. Launch Instance

10. Click View instances

11. Terminate previous instances

12. Record public ip here: 52.88.50.7

13. In your terminal navigate to where you save the .PEM file

14. Run command: chmod 400 belt\_exam\_2.pem (NO – here do Putty commands instead and then skip to 16.)

15. then command: ssh -i belt\_exam\_2.pem ubuntu@54.149.138.156

16. when prompted in terminal type: yes and wait for the terminal to show ubuntu@ipaddress on left

17. in terminal : sudo apt-get update

18. terminal: sudo apt-get install python-pip python-dev libpq-dev postgresql postgresql-contrib nginx git

19. tap y when prompted

20: terminal: sudo su - postgres

21: terminal: psql

22. terminal: CREATE DATABASE belt\_exam;

23. CREATE USER danyal WITH PASSWORD 'password';

24. GRANT ALL PRIVILEGES ON DATABASE belt\_exam TO danyal;

25. to exit postgresql, terminal: \q

26. to exit postgres user shell, terminal: exit

27. to transfer files in a different terminal cd to project file with the .pem file

28. in 2nd terminal: scp -i belt\_exam\_2.pem -r belt\_exam ubuntu@54.149.138.156:~/

29. check if your ubuntu server has the project now using: ls

30. back into your terminal with Ubuntu terminal: sudo pip install virtualenv

31. terminal: cd ~/belt\_exam

32. terminal: virtualenv belt\_exam\_env

33. terminal: source belt\_exam\_env/bin/activate

34. terminal: pip install django gunicorn psycopg2 bcrypt

35. in the folder containing settings.py terminal: nano settings.py

36. in that file replace:

DATABASES = {

'default': {

'ENGINE': 'django.db.backends.postgresql\_psycopg2',

'NAME': 'belt\_exam',

'USER': 'danyal',

'PASSWORD': 'password',

'HOST': 'localhost',

'PORT': '',

}

}

37. and at the bottom add:

STATIC\_ROOT = os.path.join(BASE\_DIR, "static/")

38. Add ip address in allowed host:

ALLOWED\_HOSTS = ["54.149.138.156"]

39. in terminal tap contol x and save file

40. then in terminal:

cd ~/belt\_exam

./manage.py makemigrations

./manage.py migrate

./manage.py createsuperuser

(superuser process)

./manage.py collectstatic

(gunicorn steps)

cd ~/belt\_exam

gunicorn --bind 0.0.0.0:8000 belt\_exam.wsgi:application

(hit CRTL-C after done loading then type:)

deactivate

sudo nano /etc/init/gunicorn.conf

(add the below text)

description "Gunicorn application server handling belt\_exam"

start on runlevel [2345]

stop on runlevel [!2345]

respawn

setuid ubuntu

setgid www-data

chdir /home/ubuntu/belt\_exam

exec belt\_exam\_env/bin/gunicorn --workers 3 --bind unix:/home/ubuntu/belt\_exam/belt\_exam.sock belt\_exam.wsgi:application

(CTRL-x to exit and save file)

(start gunicorn)

sudo service gunicorn start

(if any errors go back to gunicorn file and check for typos)

sudo nano /etc/nginx/sites-available/belt\_exam

(edit file to add the following:)

server {

listen 80;

server\_name 54.149.138.156;

location = /favicon.ico { access\_log off; log\_not\_found off; }

location /static/ {

root /home/ubuntu/belt\_exam;

}

location / {

include proxy\_params;

proxy\_pass http://unix:/home/ubuntu/belt\_exam/belt\_exam.sock;

}

}

(exit file and save, then)

sudo ln -s /etc/nginx/sites-available/belt\_exam /etc/nginx/sites-enabled

sudo nginx -t

(if you get any errors go back and check the file you edited, if successful continue:)

sudo service nginx restart

and now visit your ip address on the web!!!