

ECE 458
Deployment Guide
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Prerequisites: Ubuntu 14.04

Deployment Steps:

Install required python, postgresql, apache packages

```
sudo apt-get update
sudo apt-get install python3-pip apache2 libapache2-mod-wsgi-py3
sudo apt-get install libpq-dev
sudo apt-get install postgresql postgresql-contrib
sudo apt-get install git
sudo pip3 install virtualenv
```

Now clone the project
git clone <https://github.com/lad-47/inventory-project.git>

```
cd inventory-project
cd mysite
virtualenv mysiteenv ###virtualenv -p python3 mysiteenv if default is python 2 (check python
                    ###--version first)
source mysiteenv/bin/activate
```

```
pip install -r requirements.txt
```

Set up database
sudo -i -u postgres
createdb inventory
Switch back to main user (bitnami for Duke VMs)
su - bitnami

```
sudo nano /etc/postgresql/9.3/main/pg_hba.conf
```

Change the following lines

```
    # TYPE DATABASE USER ADDRESS METHOD
    local all      all      peer
    local all      postgres peer
```

From peer to trust

```
sudo service postgresql restart
```

```
cd inventory-project
cd mysite
source mysiteenv/bin/activate
python manage.py makemigrations
python manage.py migrate
```

```
python manage.py createsuperuser
python manage.py collectstatic
```

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

Add the following

```
WSGIDaemonProcess myproject python-path=/home/user/myproject
python-home=/home/user/myproject/myprojectenv
<VirtualHost *:80>
. . .
```

```
Alias /static /home/user/myproject/static
<Directory /home/user/myproject/static>
    Require all granted
</Directory>
```

```
<Directory /home/user/myproject/myproject>
    <Files wsgi.py>
        Require all granted
    </Files>
</Directory>
```

```
WSGIProcessGroup myproject
WSGIScriptAlias / /home/user/myproject/myproject/wsgi.py
WSGIPassAuthorization On

</VirtualHost>
```

```
sudo service apache2 restart
```

Set up SSL certificate using Let's Encrypt

```
cd ~/
wget https://dl.eff.org/certbot-auto
chmod a+x certbot-auto
```

Comment out line WSGIDaemonProcess in .conf

```
./certbot-auto --apache -d example.com
```

Uncomment WSGIDaemonProcess line
sudo service apache2 restart

References:

https://www.digitalocean.com/community/tutorials/how-to-serve-django-applications-with-apache-and-mod_wsgi-on-ubuntu-14-04

<https://www.digitalocean.com/community/tutorials/how-to-install-and-use-postgresql-on-ubuntu-14-04>

<https://www.digitalocean.com/community/tutorials/how-to-secure-apache-with-let-s-encrypt-on-ubuntu-14-04>