**Amazon Linux2 Frontend Deployment instructions:**

1)Requirements-check if python version is **3.10** by running **python3 --version**

IF **NOT** install python 3.10 following these steps:

sudo yum update -y

sudo yum groupinstall "Development Tools" -y

sudo yum erase openssl-devel -y

sudo yum install openssl11 openssl11-devel libffi-devel bzip2-devel wget -y

sudo wget https://www.python.org/ftp/python/3.10.4/Python-3.10.4.tgz

sudo tar -xf Python-3.10.4.tgz

cd Python-3.10.4/

./configure --enable-optimizations

nproc

make -j $(nproc)

sudo make altinstall

sudo yum install python3-pip

sudo ln -sf /usr/local/bin/python3.10 /usr/bin/python3

sudo yum install httpd-devel python3-devel -y

sudo yum install httpd -y

2) copy files from s3 to ec2**(sudo aws s3 cp s3://**[nyl-nylimdatasci-qa-workspace](https://us-east-1.console.aws.amazon.com/s3/buckets/nyl-nylimdatasci-qa-workspace?region=us-east-1&bucketType=general)**/frontend.zip**

**/var/www/html/)**

3)

cd /var/www/html/

sudo unzip frontend.zip

sudo git clone https://github.com/GrahamDumpleton/mod\_wsgi.git

cd mod\_wsgi

sudo ./configure

sudo make

sudo make install

sudo systemctl enable httpd

sudo systemctl start httpd

sudo systemctl status httpd(check if its active)

sudo httpd -t -D DUMP\_MODULES | grep wsgi

cd /var/www/html/frontend

sudo pip3 install -r requirements.txt

sudo pip3 install --upgrade Flask

sudo pip3 install requests

sudo pip3 install pytz

sudo chmod 777 /var/www/html/frontend/assets/uploaded\_files\_submitted\_temp/

sudo chmod 777 /var/www/html/frontend/assets/uploaded\_files\_temp/

4)Set up the three configuration files

a)sudo nano /etc/httpd/conf.modules.d/00-base.conf

*Add the below line to the end of the file:*

LoadModule wsgi\_module modules/mod\_wsgi.so

b)**cd /var/www/html**

sudo nano summarizer\_app.wsgi

———————————

*Add the below code to the file:*

import sys

sys.path.insert(0, '/var/www/html/frontend')

from dash\_home import dash\_app

c)sudo nano /etc/httpd/conf.d/fastapi.conf

————————————————————————

*Add the below code to the file but change the server name to point to the url(important)*

<VirtualHost \*:80>

ServerName qa.ai.newyorklifeinvestments.com

WSGIDaemonProcess fastapi\_app user=apache group=apache threads=5

WSGIScriptAlias / /var/www/html/summarizer\_app.wsgi

ProxyPreserveHost On

ProxyPass / http://127.0.0.1:8000/

ProxyPassReverse / http://127.0.0.1:8000/

<Location /documentsummarizer>

ProxyPass http://127.0.0.1:8000/documentsummarizer

ProxyPassReverse http://127.0.0.1:8000/documentsummarizer

</Location>

<Directory /var/www/html/frontend>

WSGIProcessGroup fastapi\_app

WSGIApplicationGroup %{GLOBAL}

Require all granted

</Directory>

ErrorLog /var/log/httpd/fastapi\_error.log

CustomLog /var/log/httpd/fastapi\_access.log combined

<Proxy \*>

Require all granted

</Proxy>

</VirtualHost>

5)sudo systemctl restart httpd

6)Run the below command to start the server (pwd to check if path is /var/www/html/frontend)

cd /var/www/html/frontend

For debugging use:

gunicorn -b 0.0.0.0:8000 dash\_home:app --reload --log-level debug

For production use:

gunicorn -b 0.0.0.0:8000 dash\_home:app --daemon