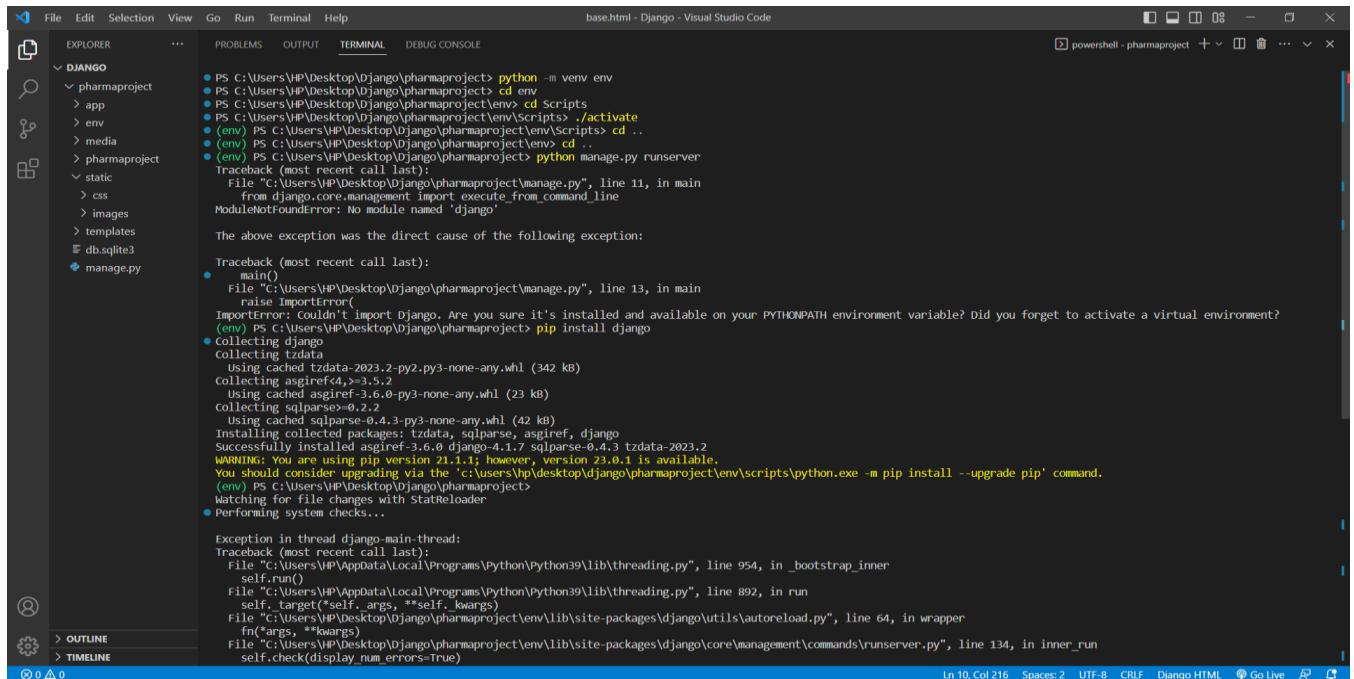


TASK -1: Host a dynamic Website

1] Creating a dynamic website:

Created a Django website - Pharmacy management website and a virtual environment



```
base.html - Django - Visual Studio Code
EXPLORER
  DJANGO
    pharmaproject
      app
      env
      media
      pharmaproject
      static
      css
      images
      templates
      db.sqlite3
      manage.py
PROBLEMS
OUTPUT
TERMINAL
  PS C:\Users\HP\Desktop\Django\pharmaproject> python -m venv env
  PS C:\Users\HP\Desktop\Django\pharmaproject> cd env
  PS C:\Users\HP\Desktop\Django\pharmaproject\env> cd Scripts
  PS C:\Users\HP\Desktop\Django\pharmaproject\env\Scripts> .\activate
  (env) PS C:\Users\HP\Desktop\Django\pharmaproject\env\Scripts> cd ..
  (env) PS C:\Users\HP\Desktop\Django\pharmaproject\env> cd ..
  (env) PS C:\Users\HP\Desktop\Django\pharmaproject> python manage.py runserver
Traceback (most recent call last):
  File "C:\Users\HP\Desktop\Django\pharmaproject\manage.py", line 11, in main
    from django.core.management import execute_from_command_line
ModuleNotFoundError: No module named 'django'

The above exception was the direct cause of the following exception:

Traceback (most recent call last):
  main()
  File "C:\Users\HP\Desktop\Django\pharmaproject\manage.py", line 13, in main
    raise ImportError(
ImportError: Couldn't import Django. Are you sure it's installed and available on your PYTHONPATH environment variable? Did you forget to activate a virtual environment?
(env) PS C:\Users\HP\Desktop\Django\pharmaproject> pip install django
Collecting django
  Using cached tzdata-2023.2-py2.py3-none-any.whl (342 kB)
Collecting asgiref<4,>=3.5.2
  Using cached asgiref-3.6.0-py3-none-any.whl (23 kB)
Collecting sqlparse<0.4.3-py3-none-any.whl (42 kB)
Installing collected packages: tzdata, sqlparse, asgiref, django
Successfully installed asgiref-3.6.0 django-4.1.7 sqlparse-0.4.3 tzdata-2023.2
WARNING: You are using pip version 21.1.1; however, version 23.0.1 is available.
You should consider upgrading via the 'c:\Users\hp\desktop\django\pharmaproject\env\scripts\python.exe -m pip install --upgrade pip' command.
(env) PS C:\Users\HP\Desktop\Django\pharmaproject>
Watching for file changes with StatReloader
Performing system checks...

Exception in thread django-main-thread:
Traceback (most recent call last):
  File "C:\Users\HP\AppData\Local\Programs\Python\Python39\Lib\threading.py", line 954, in _bootstrap_inner
    self.run()
  File "C:\Users\HP\AppData\Local\Programs\Python\Python39\Lib\threading.py", line 892, in run
    self.target(*self.args, **self.kwargs)
  File "C:\Users\HP\Desktop\Django\pharmaproject\env\lib\site-packages\django\utils\autoreload.py", line 64, in wrapper
    fn(*args, **kwargs)
  File "C:\Users\HP\Desktop\Django\pharmaproject\env\lib\site-packages\django\core\management\commands\runtime.py", line 134, in inner_run
    self.check(display_num_errors=True)
  File "C:\Users\HP\Desktop\Django\pharmaproject\env\lib\site-packages\django\core\management\base.py", line 546, in check
    raise SystemCheckError(msg)
django.core.management.base.SystemCheckError: SystemCheckError: System check identified some issues:

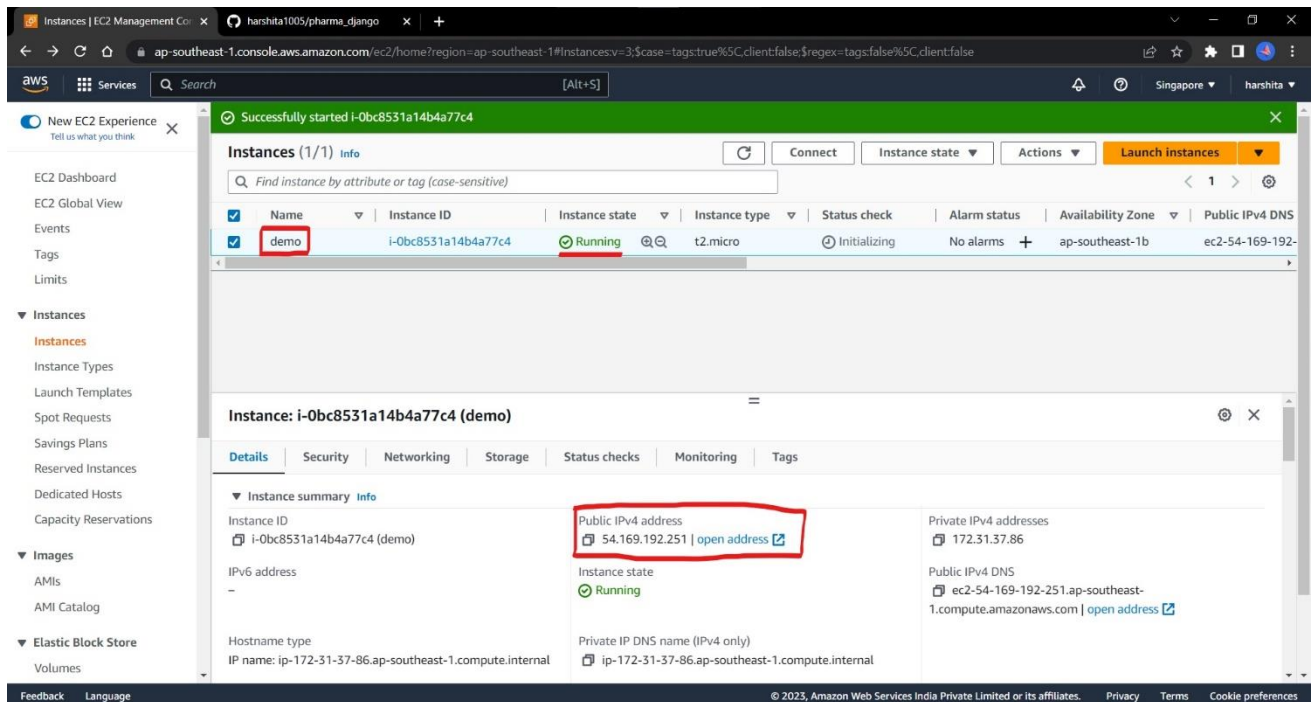
ERRORS:
app.Medicines.img: (fields.E210) Cannot use ImageField because Pillow is not installed.
HINT: Get Pillow at https://pypi.org/project/Pillow/ or run command "python -m pip install Pillow".
app.ProductItem.prod_image: (fields.E210) Cannot use ImageField because Pillow is not installed.
HINT: Get Pillow at https://pypi.org/project/Pillow/ or run command "python -m pip install Pillow".

System check identified 2 issues (0 silenced).
(env) PS C:\Users\HP\Desktop\Django\pharmaproject> pip install Pillow
Collecting Pillow
  Using cached Pillow-9.4.0-cp39-cp39-win_amd64.whl (2.5 MB)
Installing collected packages: Pillow
Successfully installed Pillow-9.4.0
WARNING: You are using pip version 21.1.1; however, version 23.0.1 is available.
You should consider upgrading via the 'c:\Users\hp\desktop\django\pharmaproject\env\scripts\python.exe -m pip install --upgrade pip' command.
(env) PS C:\Users\HP\Desktop\Django\pharmaproject> python manage.py runserver
Watching for file changes with StatReloader
Performing system checks...

System check identified no issues (0 silenced).
March 27, 2023 - 20:09:42
Django version 4.1.7, using settings 'pharmaproject.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CTRL-BREAK.
[27/Mar/2023 20:09:42] "GET / HTTP/1.1" 200 5884
[27/Mar/2023 20:09:42] "GET /static/static/css/main.css HTTP/1.1" 404 1816
[27/Mar/2023 20:09:42] "GET /static/css/style.css HTTP/1.1" 404 1798
(env) PS C:\Users\HP\Desktop\Django\pharmaproject> deactivate
PS C:\Users\HP\Desktop\Django\pharmaproject>
fwd-1-search: _
```

Website running on localhost:8000

2] Creating an EC2 Instance:

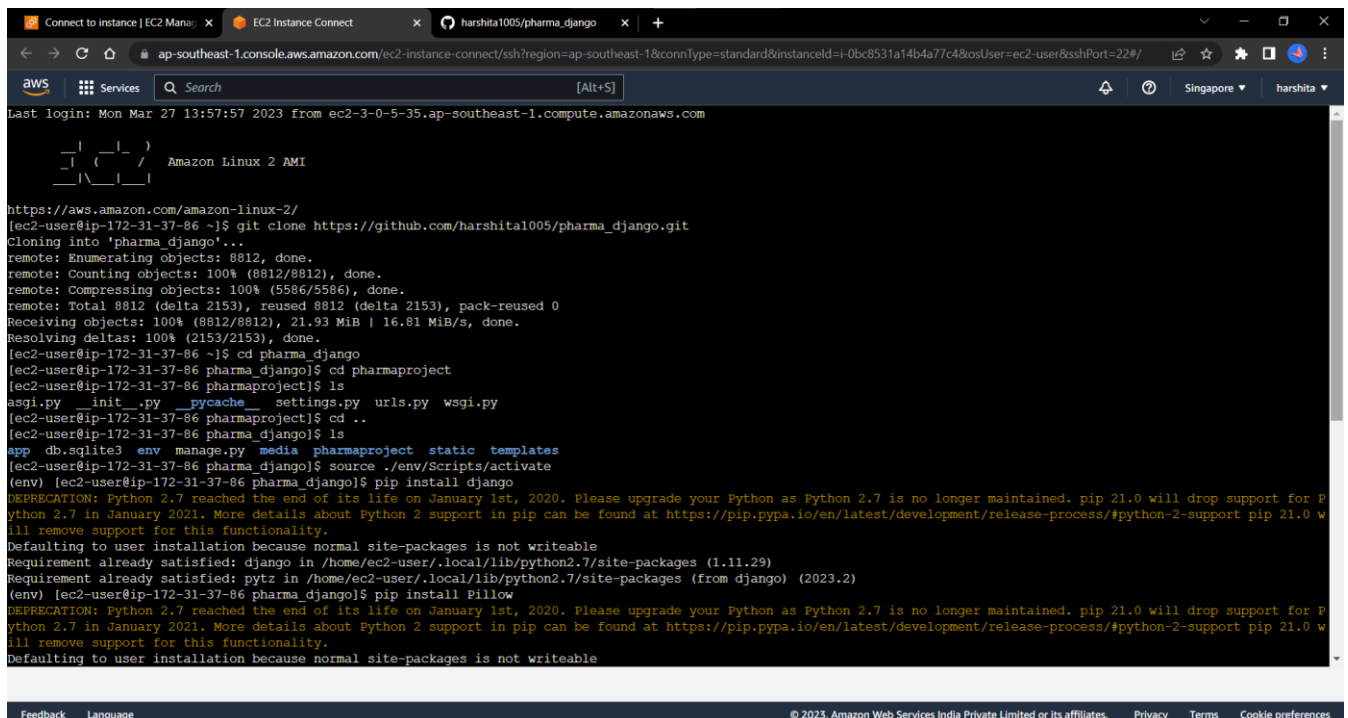


The screenshot shows the AWS Management Console with a green banner at the top stating "Successfully started i-0bc8531a14b4a77c4". The "Instances (1/1) Info" section displays a table with one instance:

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
demo	i-0bc8531a14b4a77c4	Running	t2.micro	Initializing	No alarms	ap-southeast-1b	ec2-54-169-192-

Below the table, the "Instance: i-0bc8531a14b4a77c4 (demo)" details are shown. The "Public IPv4 address" is highlighted with a red box and is 54.169.192.251, with a link to "open address". Other details include the Instance ID, IP address, Hostname type, and Private IP DNS name.

3] Connecting the EC2 instance and running our application:



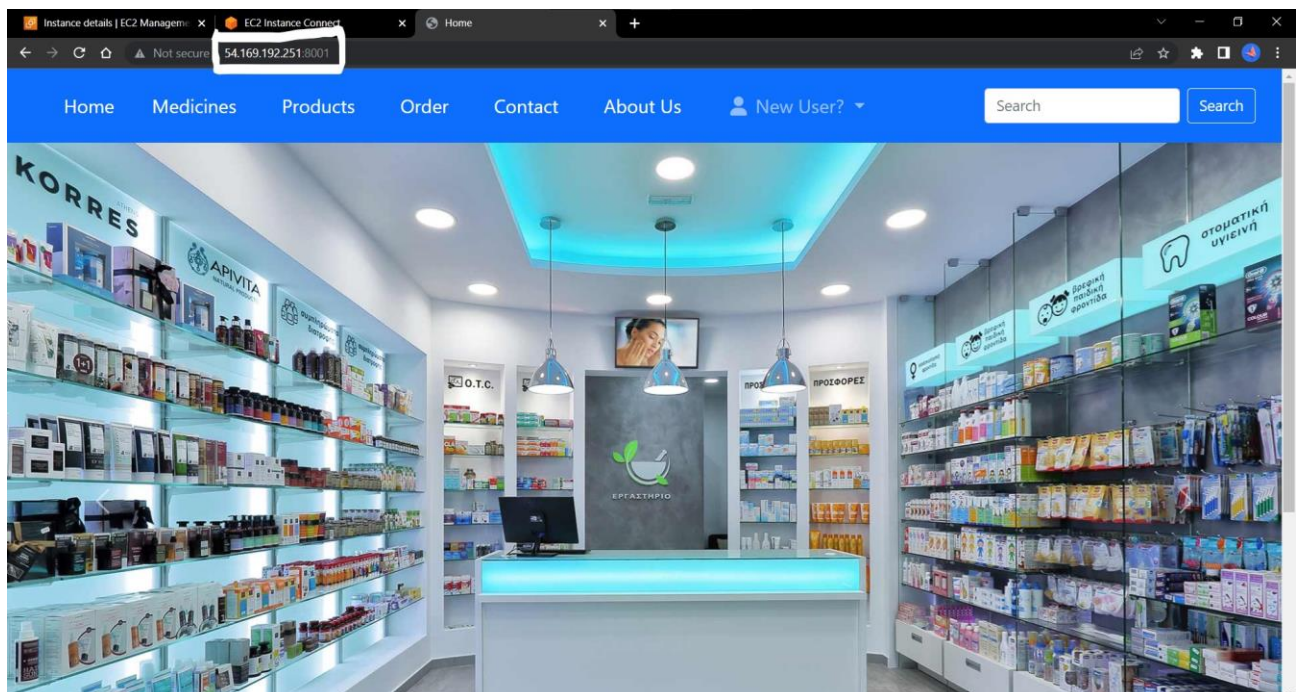
The screenshot shows the AWS Management Console with a terminal window open. The terminal output shows the user connecting to the EC2 instance and running a Django application. The output includes the following commands and their results:

```
https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-172-31-37-86 ~]$ git clone https://github.com/harshital005/pharma_django.git
Cloning into 'pharma_django'...
remote: Enumerating objects: 8812, done.
remote: Counting objects: 100% (8812/8812), done.
remote: Compressing objects: 100% (5586/5586), done.
remote: Total 8812 (delta 2153), reused 8812 (delta 2153), pack-reused 0
Receiving objects: 100% (8812/8812), 21.93 MiB | 16.81 MiB/s, done.
Resolving deltas: 100% (2153/2153), done.
[ec2-user@ip-172-31-37-86 ~]$ cd pharma_django
[ec2-user@ip-172-31-37-86 pharma_django]$ cd pharmaproject
[ec2-user@ip-172-31-37-86 pharmaproject]$ ls
asgi.py  __init__.py  __pycache__  settings.py  urls.py  wsgi.py
[ec2-user@ip-172-31-37-86 pharmaproject]$ cd ..
[ec2-user@ip-172-31-37-86 pharma_django]$ ls
app  db.sqlite3  env  manage.py  media  pharmaproject  static  templates
[ec2-user@ip-172-31-37-86 pharma_django]$ source ./env/Scripts/activate
(env) [ec2-user@ip-172-31-37-86 pharmaproject]$ pip install django
DEPRECATION: Python 2.7 reached the end of its life on January 1st, 2020. Please upgrade your Python as Python 2.7 is no longer maintained. pip 21.0 will drop support for Python 2.7 in January 2021. More details about Python 2 support in pip can be found at https://pip.pypa.io/en/latest/development/release-process/#python-2-support pip 21.0 will remove support for this functionality.
Defaulting to user installation because normal site-packages is not writeable
Requirement already satisfied: django in /home/ec2-user/.local/lib/python2.7/site-packages (1.11.29)
Requirement already satisfied: pytz in /home/ec2-user/.local/lib/python2.7/site-packages (from django) (2023.2)
(env) [ec2-user@ip-172-31-37-86 pharma_django]$ pip install Pillow
DEPRECATION: Python 2.7 reached the end of its life on January 1st, 2020. Please upgrade your Python as Python 2.7 is no longer maintained. pip 21.0 will drop support for Python 2.7 in January 2021. More details about Python 2 support in pip can be found at https://pip.pypa.io/en/latest/development/release-process/#python-2-support pip 21.0 will remove support for this functionality.
Defaulting to user installation because normal site-packages is not writeable
```

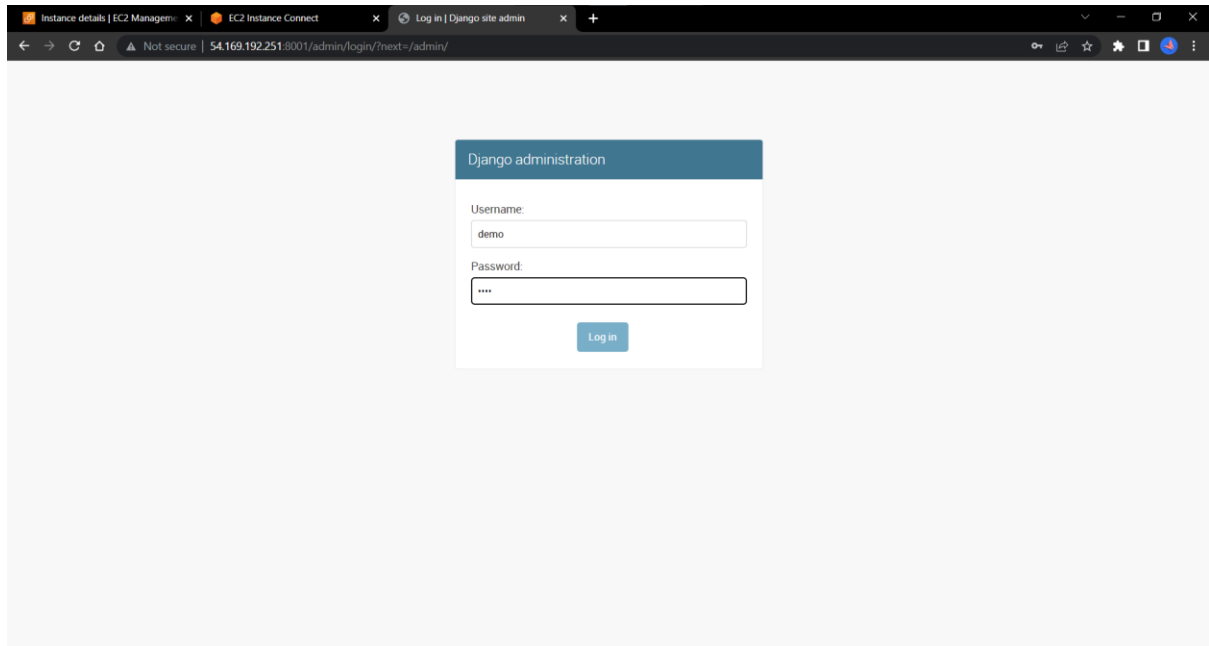
```
Connect to instance | EC2 Manag... x EC2 Instance Connect x harshita1005/pharma_django x +
ap-southeast-1.console.aws.amazon.com/ec2-instance-connect/ssh?region=ap-southeast-1&connType=standard&instanceId=i-0bc8531a14b4a77c4&osUser=ec2-user&sshPort=22#/
aws Services Search [Alt+S] Singapore harshita
Defaulting to user installation because normal site-packages is not writeable
Requirement already satisfied: django in /home/ec2-user/.local/lib/python2.7/site-packages (1.11.29)
Requirement already satisfied: pytz in /home/ec2-user/.local/lib/python2.7/site-packages (from django) (2023.2)
(env) [ec2-user@ip-172-31-37-86 pharma_django]$ pip install Pillow
DEPRECATION: Python 2.7 reached the end of its life on January 1st, 2020. Please upgrade your Python as Python 2.7 is no longer maintained. pip 21.0 will drop support for Python 2.7 in January 2021. More details about Python 2 support in pip can be found at https://pip.pypa.io/en/latest/development/release-process/#python-2-support pip 21.0 will remove support for this functionality.
Defaulting to user installation because normal site-packages is not writeable
Requirement already satisfied: Pillow in /usr/lib64/python2.7/site-packages (2.0.0)
(env) [ec2-user@ip-172-31-37-86 pharma_django]$ cd pharmaproject
(env) [ec2-user@ip-172-31-37-86 pharmaproject]$ ls
asgi.py __init__.py __pycache__ settings.py urls.py wsgi.py
(env) [ec2-user@ip-172-31-37-86 pharmaproject]$ nano settings.py
(env) [ec2-user@ip-172-31-37-86 pharmaproject]$ cd ..
(env) [ec2-user@ip-172-31-37-86 pharma_django]$ python manage.py makemigrations
Migrations for 'app':
  app/migrations/0008_auto_20230327_1609.py
    - Alter field id on contact
    - Alter field id on medicines
    - Alter field id on myorders
    - Alter field id on productitem
(env) [ec2-user@ip-172-31-37-86 pharma_django]$ python manage.py migrate
Operations to perform:
  Apply all migrations: admin, app, auth, contenttypes, sessions
Running migrations:
  Applying app.0008_auto_20230327_1609... OK
(env) [ec2-user@ip-172-31-37-86 pharma_django]$ python manage.py runserver 0.0.0.0:8001
Performing system checks...

System check identified no issues (0 silenced).
March 27, 2023 - 16:10:03
Django version 2.1.15, using settings 'pharmaproject.settings'
Starting development server at http://0.0.0.0:8001/
Quit the server with CONTROL-C.
```

4] The website is running on port 8001 as shown with IP address of that instance:



5] Creating a superuser in Django admin:

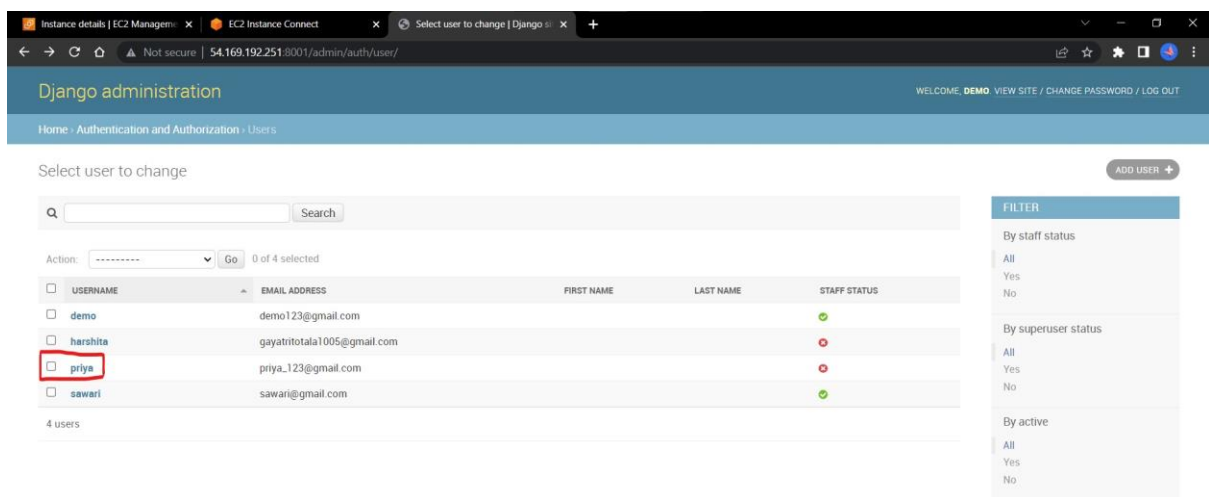


Django administration

Username:
demo

Password:

Log in



Django administration

WELCOME, DEMO. [VIEW SITE](#) / [CHANGE PASSWORD](#) / [LOG OUT](#)

Home > Authentication and Authorization > Users

Select user to change

ADD USER +

Q Search

Action: ----- Go 0 of 4 selected

<input type="checkbox"/>	USERNAME	EMAIL ADDRESS	FIRST NAME	LAST NAME	STAFF STATUS
<input type="checkbox"/>	demo	demo123@gmail.com			✓
<input type="checkbox"/>	harshita	gayatritotala1005@gmail.com			✗
<input checked="" type="checkbox"/>	priya	priya_123@gmail.com			✗
<input type="checkbox"/>	sawari	sawari@gmail.com			✓

4 users

FILTER

By staff status

All
Yes
No

By superuser status

All
Yes
No

By active

All
Yes
No