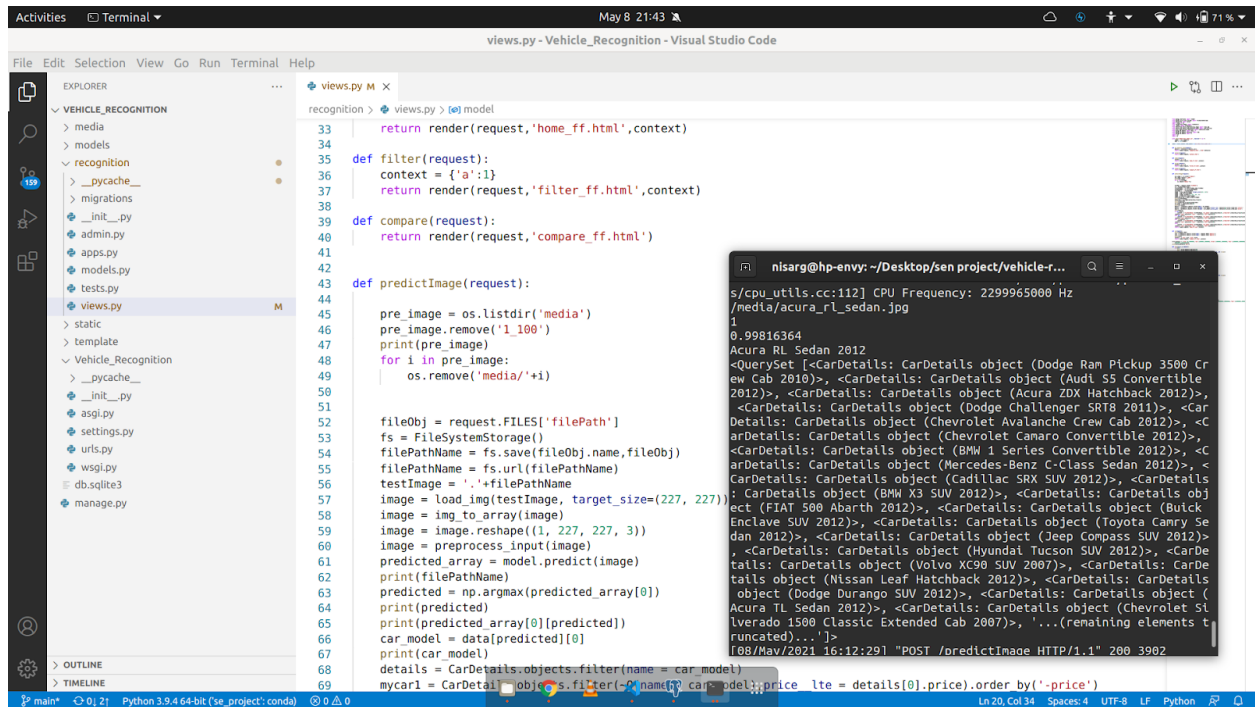


Backend and Integration Testing

Home Page function Testing



The screenshot shows the Visual Studio Code editor with the file `views.py` open. The file is part of a project named `Vehicle_Recognition`. The code defines several functions: `filter`, `compare`, and `predictImage`. The `predictImage` function uses `os.listdir` to get files from the `media` directory, loads an image, and uses a pre-trained model to predict the car class. The output of the model is displayed in a terminal window, showing a list of car models and their details.

```
views.py - Vehicle_Recognition - Visual Studio Code

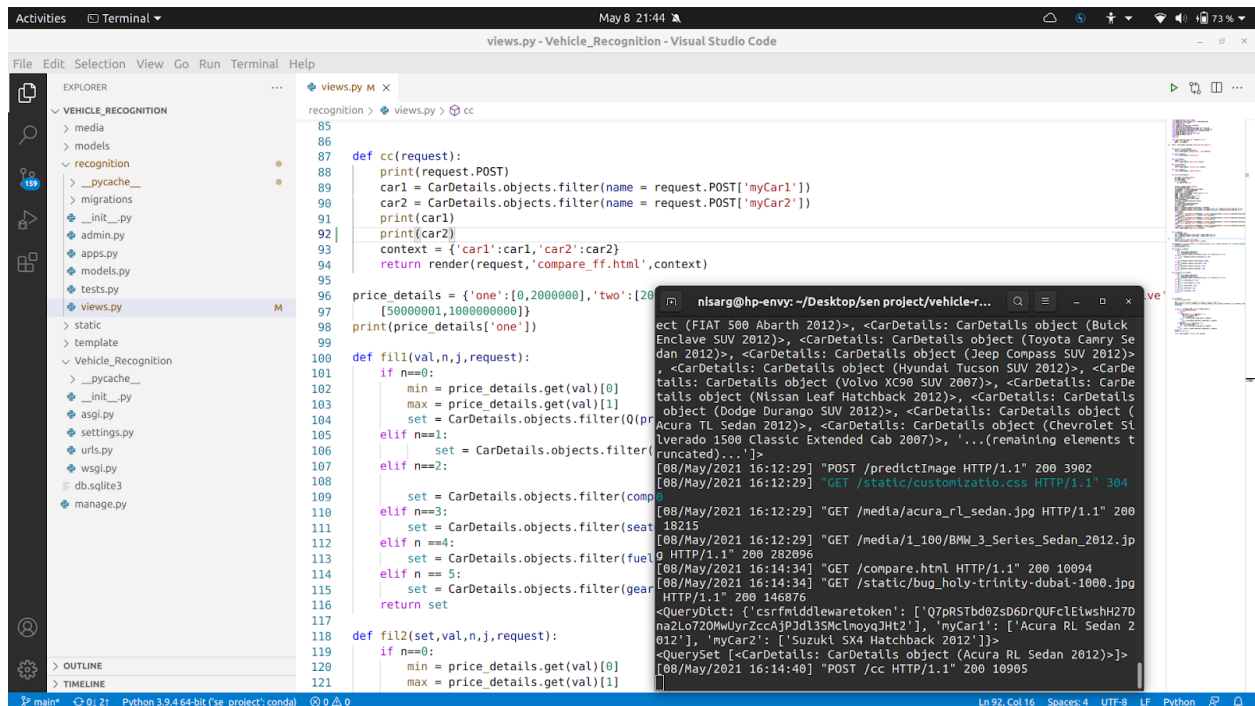
33 return render(request, 'home_ff.html', context)
34
35 def filter(request):
36     context = {'a':1}
37     return render(request, 'filter_ff.html', context)
38
39 def compare(request):
40     return render(request, 'compare_ff.html')
41
42
43 def predictImage(request):
44
45     pre_image = os.listdir('media')
46     pre_image.remove('1_100')
47     print(pre_image)
48     for i in pre_image:
49         os.remove('media/'+i)
50
51     fileObj = request.FILES['filePath']
52     fs = FileSystemStorage()
53     filePathName = fs.save(fileObj.name, fileObj)
54     filePathName = fs.url(filePathName)
55     testImage = './'+filePathName
56     image = load_img(testImage, target_size=(227, 227))
57     image = img_to_array(image)
58     image = image.reshape((1, 227, 227, 3))
59     image = preprocess_input(image)
60     predicted_array = model.predict(image)
61     print(filePathName)
62     predicted = np.argmax(predicted_array[0])
63     print(predicted)
64     print(predicted_array[0][predicted])
65     car_model = data[predicted][0]
66     details = CarDetails.objects.filter(name = car_model)
67     mycar1 = CarDetails.objects.filter(name=car_model).order_by('price')
68     mycar2 = CarDetails.objects.filter(name=car_model).order_by('price')
```

Terminal Output:

```
nisarg@hp-envy: ~/Desktop/sen project/vehicle-r...
s/cpu_utils.cc:112] CPU Frequency: 2299965000 Hz
/media/acara_rl_sedan.jpg
1
0.99816364
Acura RL Sedan 2012
<QuerySet [CarDetails: CarDetails object (Dodge Ram Pickup 3500 Cr
ew Cab 2010), <CarDetails: CarDetails object (Audi S5 Convertible
2012)>, <CarDetails: CarDetails object (Acura ZDX Hatchback 2012)>,
<CarDetails: CarDetails object (Dodge Challenger SR18 2011)>, <Car
Details: CarDetails object (Chevrolet Avalanche Crew Cab 2012)>, <C
arDetails: CarDetails object (Chevrolet Camaro Convertible 2012)>,
<CarDetails: CarDetails object (BMW 1 Series Convertible 2012)>, <C
arDetails: CarDetails object (Mercedes-Benz C-Class Sedan 2012)>, <
CarDetails: CarDetails object (Cadillac SRX SUV 2012)>, <CarDetails
: CarDetails object (BMW X3 SUV 2012)>, <CarDetails: CarDetails obj
ect (FIAT 500 Abarth 2012)>, <CarDetails: CarDetails object (Buick
Enclave SUV 2012)>, <CarDetails: CarDetails object (Toyota Camry Se
dan 2012)>, <CarDetails: CarDetails object (Jeep Compass SUV 2012)>,
<CarDetails: CarDetails object (Hyundai Tucson SUV 2012)>, <CarDe
tails: CarDetails object (Volvo XC90 SUV 2007)>, <CarDetails: CarDe
tails object (Nissan Leaf Hatchback 2012)>, <CarDetails: CarDetails
object (Dodge Durango SUV 2012)>, <CarDetails: CarDetails object (
Acura TL Sedan 2012)>, <CarDetails: CarDetails object (Chevrolet SI
lverado 1500 Classic Extended Cab 2007)>, ... (remaining elements t
runcated)...]>
[08/May/2021 16:12:29] "POST /predictImage HTTP/1.1" 200 3902
```

Code and its backend output.

Compare Page function testing



The screenshot shows the Visual Studio Code editor with the file `views.py` open. The file is part of a project named `Vehicle_Recognition`. The code defines several functions: `cc`, `fill`, and `fill2`. The `cc` function filters car details based on the request parameters `myCar1` and `myCar2`. The `fill` function fills the context with car details based on the request parameters. The `fill2` function fills the context with car details based on the request parameters. The output of the model is displayed in a terminal window, showing a list of car models and their details.

```
views.py - Vehicle_Recognition - Visual Studio Code

85
86
87 def cc(request):
88     print(request.POST)
89     car1 = CarDetails.objects.filter(name = request.POST['myCar1'])
90     car2 = CarDetails.objects.filter(name = request.POST['myCar2'])
91     print(car1)
92     print(car2)
93     context = {'car1':car1, 'car2':car2}
94     return render(request, 'compare_ff.html', context)
95
96 price_details = {'one': [0, 2000000], 'two': [20
97 [50000001, 10000000000]}
98 print(price_details['one'])
99
100 def fill(val, n, j, request):
101     if n==0:
102         min = price_details.get(val)[0]
103         max = price_details.get(val)[1]
104         set = CarDetails.objects.filter(Q(pr
105     elif n==1:
106         set = CarDetails.objects.filter(
107     elif n==2:
108         set = CarDetails.objects.filter(com
109     elif n==3:
110         set = CarDetails.objects.filter(seat
111     elif n==4:
112         set = CarDetails.objects.filter(fuel
113     elif n==5:
114         set = CarDetails.objects.filter(gear
115     elif n==6:
116         set = CarDetails.objects.filter(gear
117     return set
118
119 def fill2(set, val, n, j, request):
120     min = price_details.get(val)[0]
121     max = price_details.get(val)[1]
```

Terminal Output:

```
nisarg@hp-envy: ~/Desktop/sen project/vehicle-r...
ect (FIAT 500 Abarth 2012)>, <CarDetails: CarDetails object (Buick
Enclave SUV 2012)>, <CarDetails: CarDetails object (Toyota Camry Se
dan 2012)>, <CarDetails: CarDetails object (Jeep Compass SUV 2012)>,
<CarDetails: CarDetails object (Hyundai Tucson SUV 2012)>, <CarDe
tails: CarDetails object (Volvo XC90 SUV 2007)>, <CarDetails: CarDe
tails object (Nissan Leaf Hatchback 2012)>, <CarDetails: CarDetails
object (Dodge Durango SUV 2012)>, <CarDetails: CarDetails object (
Acura TL Sedan 2012)>, <CarDetails: CarDetails object (Chevrolet SI
lverado 1500 Classic Extended Cab 2007)>, ... (remaining elements t
runcated)...]>
[08/May/2021 16:12:29] "POST /predictImage HTTP/1.1" 200 3902
[08/May/2021 16:12:29] "GET /static/customizatio.css HTTP/1.1" 304
[08/May/2021 16:12:29] "GET /media/acara_rl_sedan.jpg HTTP/1.1" 200
18215
[08/May/2021 16:12:29] "GET /media/1_100/BMW_3_Series_Sedan_2012.jp
g HTTP/1.1" 200 282096
[08/May/2021 16:14:34] "GET /compare.html HTTP/1.1" 200 10094
[08/May/2021 16:14:34] "GET /static/bug_holy-trinity-dubai-1000.jpg
HTTP/1.1" 200 146976
<QueryDict: {'csrfmiddlewaretoken': ['07pRSTbd0zsd6DrQUfclEwshH270
na2Lo720MwLyrZccA3Pjd13SMclnoyqJHt2'], 'myCar1': ['Acura RL Sedan 2
012'], 'myCar2': ['Suzuki SX4 Hatchback 2012']}>
<QuerySet [CarDetails: CarDetails object (Acura RL Sedan 2012)>]>
[08/May/2021 16:14:40] "POST /cc HTTP/1.1" 200 10905
```

Filter Function testing

