University of Windsor

Master of Applied Computing
COMP8347 Internet Applications and Distributed Systems
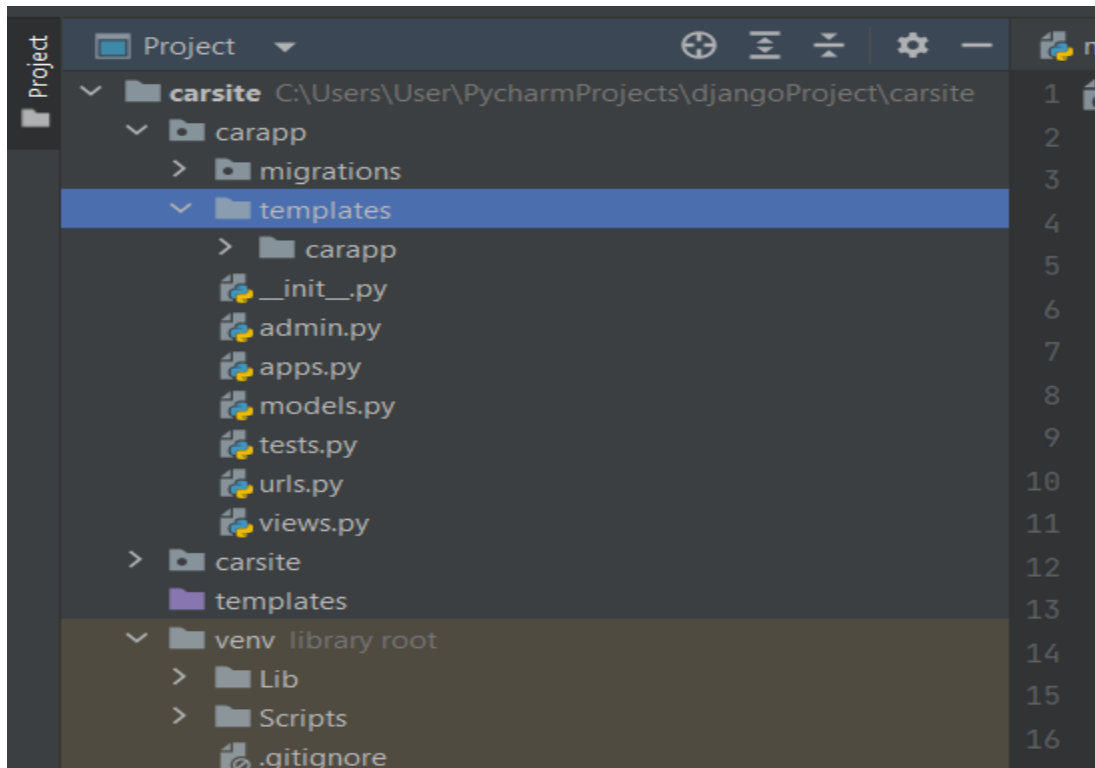## Lab - 6

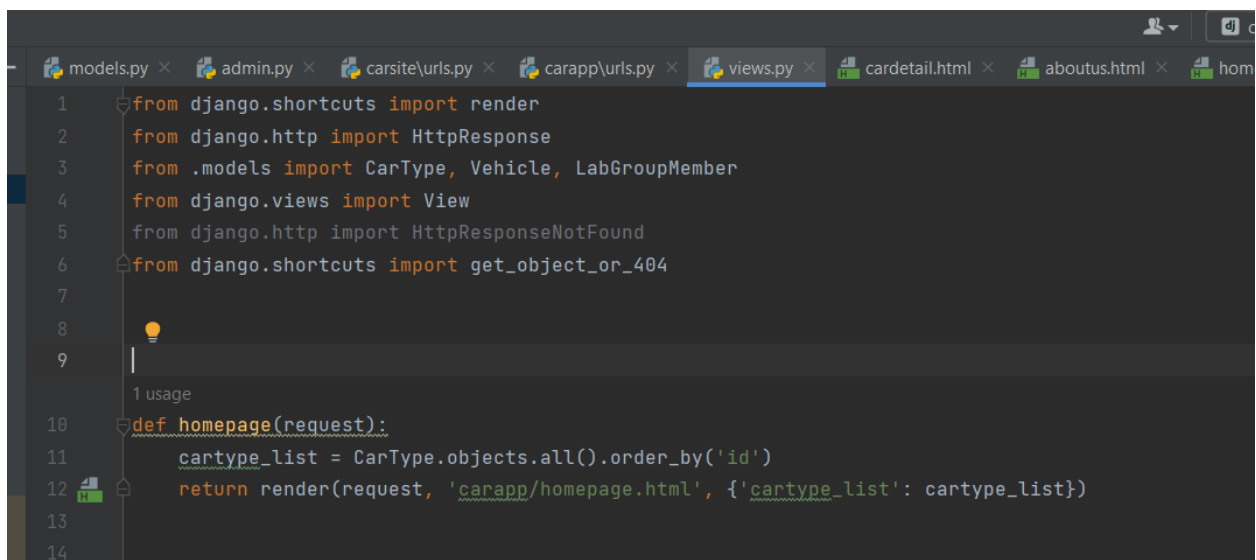# Group 5

Name: Shivam Sunil Bhosale (110090402)

Part 1

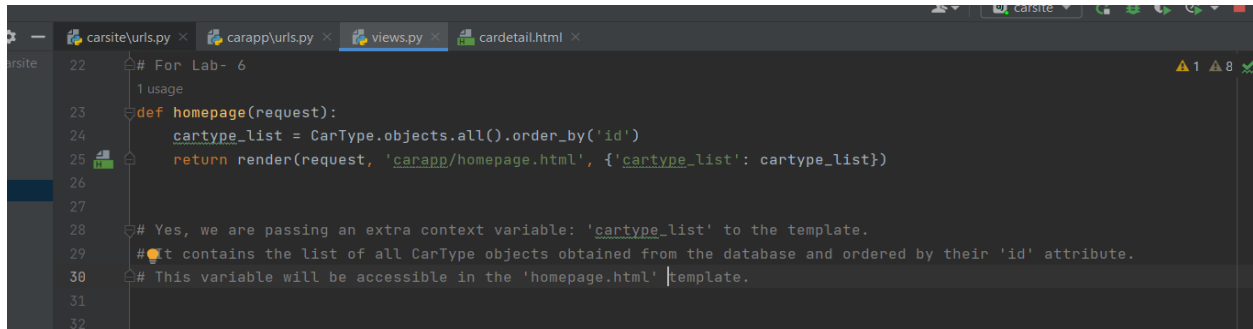## (a) Creating a directory for your templates

(b) Updating the index view


```python
from django.shortcuts import render
from django.http import HttpResponse
from .models import CarType, Vehicle, LabGroupMember
from django.views import View
from django.http import HttpResponseNotFound
from django.shortcuts import get_object_or_404



1 usage
def homepage(request):
    cartype_list = CarType.objects.all().order_by('id')
    return render(request, 'carapp/homepage.html', {'cartype_list': cartype_list})
```

Are you passing any extra context variables to the template? YES OR NO. If yes, then what are these extra variables? Write your answer as comments in your *views.py* file.
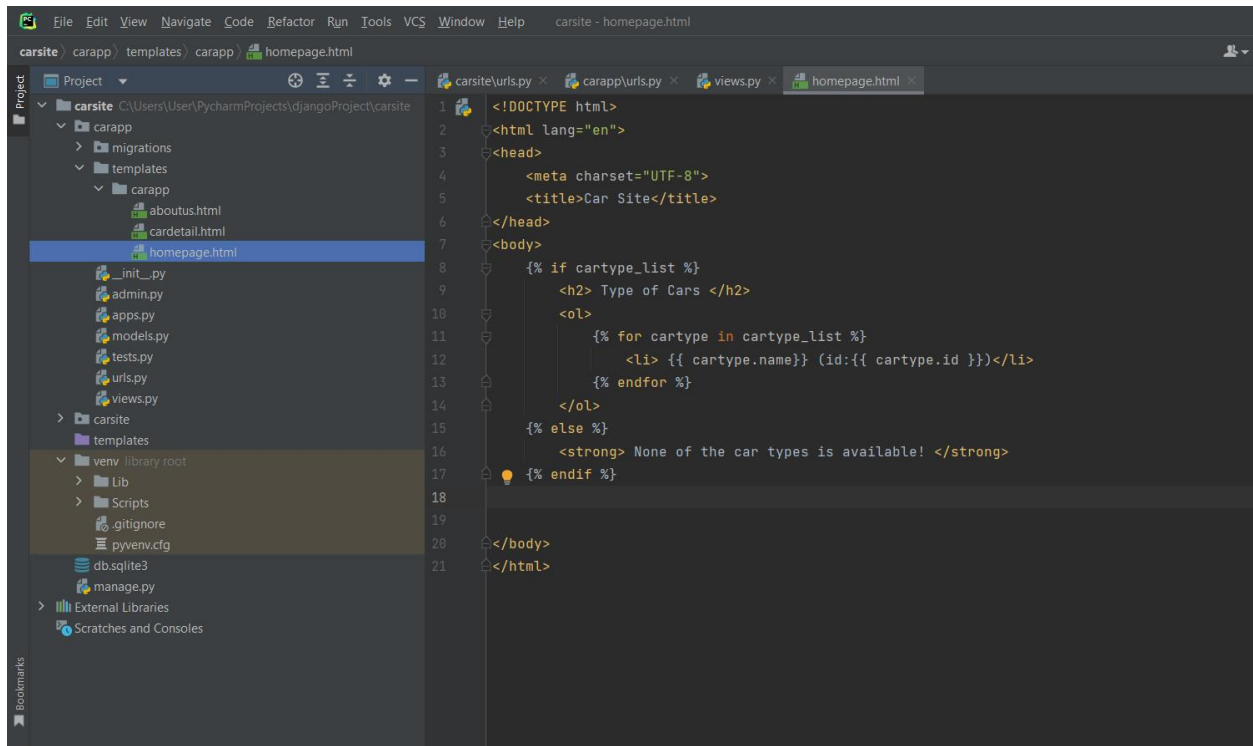
Answer: Yes. Answer as comments in *views.py* file is attached below.


```python
22      # For Lab- 6
        1 usage
23      def homepage(request):
24          cartype_list = CarType.objects.all().order_by('id')
25          return render(request, 'carapp/homepage.html', {'cartype_list': cartype_list})
26
27
28      # Yes, we are passing an extra context variable: 'cartype_list' to the template.
29      # It contains the list of all CarType objects obtained from the database and ordered by their 'id' attribute.
30      # This variable will be accessible in the 'homepage.html' template.
31
32
```

(c) Create *homepage.html*
Create a new file homepage.html in dir carsite/carapp/templates/carapp. Edit homepage.html as follows


```html
1   <!DOCTYPE html>
2   <html lang="en">
3   <head>
4       <meta charset="UTF-8">
5       <title>Car Site</title>
6   </head>
7   <body>
8       {% if cartype_list %}
9           <h2> Type of Cars </h2>
10          <ol>
11              {% for cartype in cartype_list %}
12                  <li> {{ cartype.name}} (id:{{ cartype.id }})</li>
13              {% endfor %}
14          </ol>
15      {% else %}
16          <strong> None of the car types is available! </strong>
17      {% endif %}
18
19
20  </body>
21  </html>
```
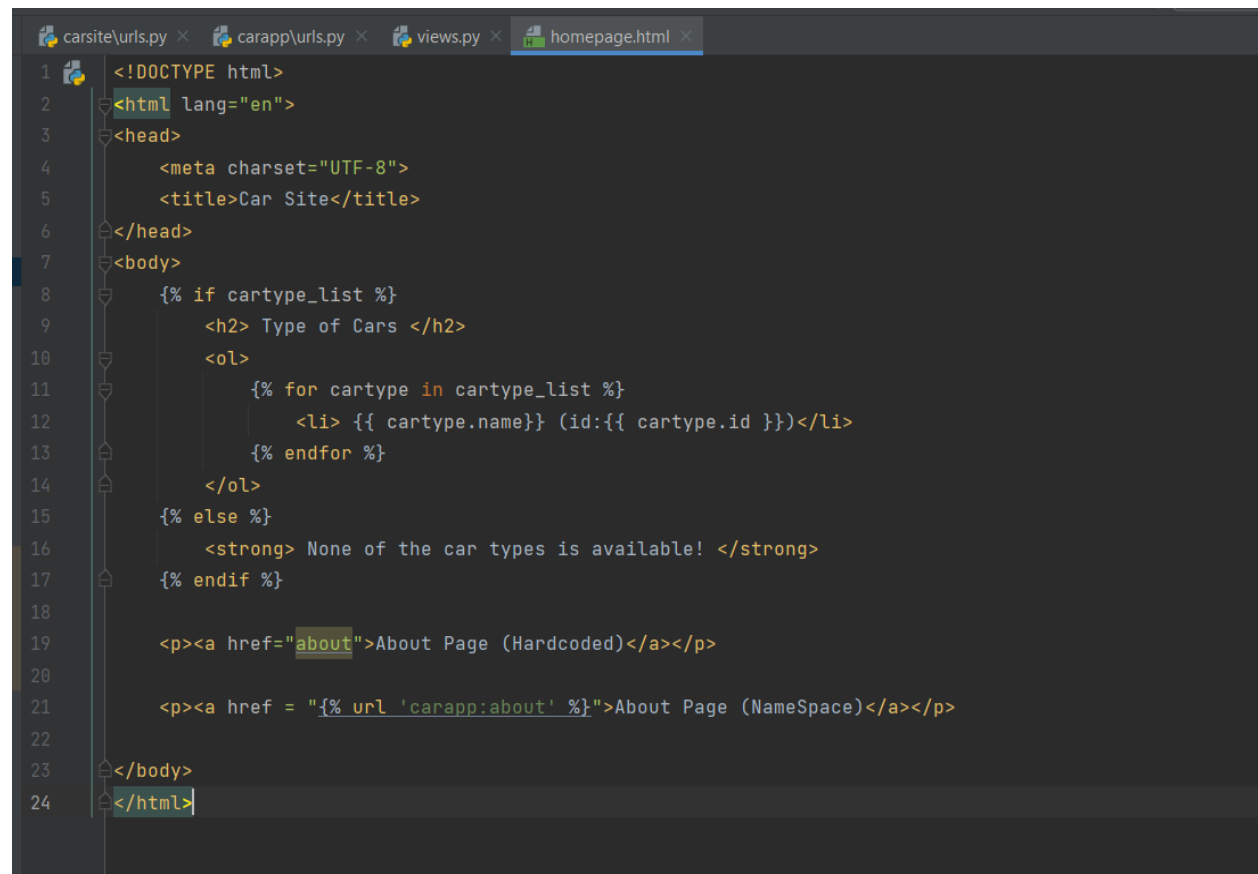
Go to the related URL to view your created template/webpage

← → C ① 127.0.0.1:8000

Type of Cars

1. Toyota (id:6)
2. Nissan (id:7)
3. Ford (id:8)
4. Honda (id:9)
5. Mercedes (id:10)
6. Cadillac (id:11)

At the bottom of the home page, add a link to go to the 'aboutus' page by adding the following line: <p>About Page</p>

Change the above hardcoded URL to a URL with namespacing.

carsite\urls.py ×   carapp\urls.py ×   views.py ×   homepage.html ×

```html
1   <!DOCTYPE html>
2   <html lang="en">
3   <head>
4       <meta charset="UTF-8">
5       <title>Car Site</title>
6   </head>
7   <body>
8       {% if cartype_list %}
9           <h2> Type of Cars </h2>
10          <ol>
11              {% for cartype in cartype_list %}
12                  <li> {{ cartype.name}} (id:{{ cartype.id }})</li>
13              {% endfor %}
14          </ol>
15      {% else %}
16          <strong> None of the car types is available! </strong>
17      {% endif %}
18
19      <p><a href="about">About Page (Hardcoded)</a></p>
20
21      <p><a href = "{% url 'carapp:about' %}">About Page (NameSpace)</a></p>
22
23  </body>
24  </html>
```
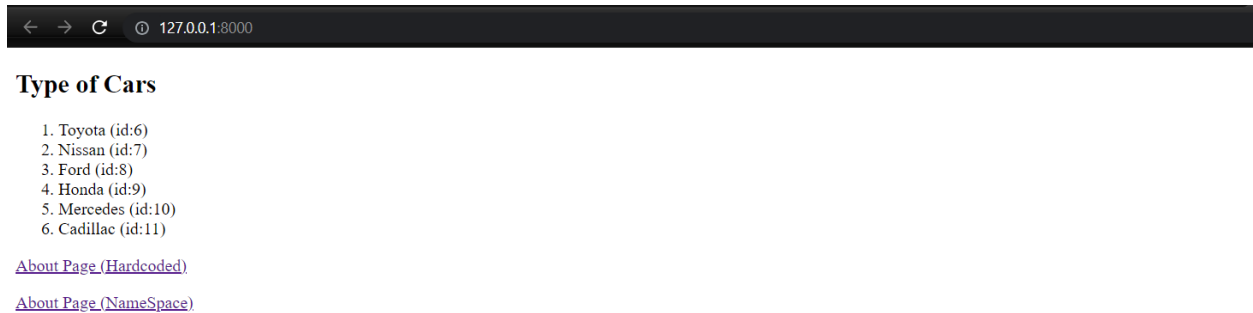
Type of Cars

1. Toyota (id:6)
2. Nissan (id:7)
3. Ford (id:8)
4. Honda (id:9)
5. Mercedes (id:10)
6. Cadillac (id:11)

About Page (Hardcoded)

About Page (NameSpace)

(d) Create aboutus.html

i. Create a new file aboutus.html in dir carsite/carapp/templates/carapp.
In addition to displaying the text for the about page, it should have a link to go back to our home page. Try using both hardcoded url and url namespacing for this.
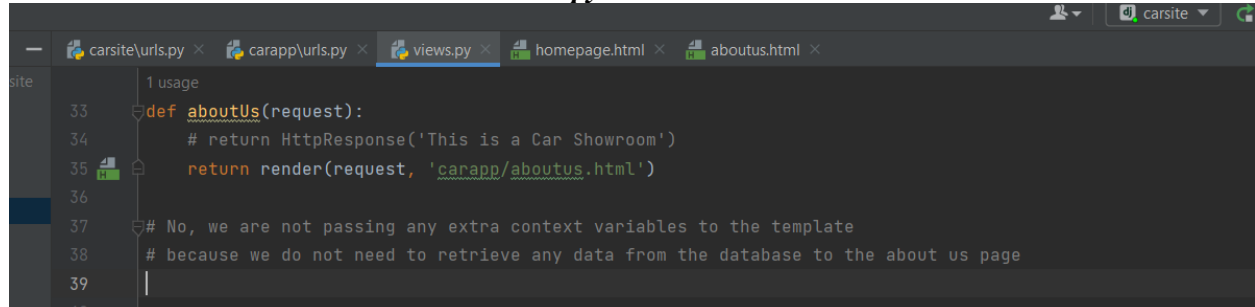
ii. Update the aboutus view function in views.py so that it uses the aboutus.html template.

```
carsite\urls.py ×    carapp\urls.py ×    views.py ×    homepage.html ×    aboutus.html ×

1   <!DOCTYPE html>
2   <html lang="en">
3   <head>
4       <meta charset="UTF-8">
5       <title>Title</title>
6   </head>
7   <body>
8     <h1>This is a Car Showroom</h1>
9       <p><a href="/">Home Page (Hardcoded)</a></p>
10      <p><a href = "{% url 'carapp:homepage' %}">Home Page (NameSpace)</a></p>
11  </body>
12  </html>
```

```
carsite\urls.py ×    carapp\urls.py ×    views.py ×    homepage.html ×    aboutus.html ×

30      |
31

        1 usage
32      def aboutUs(request):
33          # return HttpResponse('This is a Car Showroom')
34          return render(request, 'carapp/aboutus.html')
35
36
```

iii. Do you need to pass any extra context variables to the template? YES OR NO.
iv. If yes, what variable(s) are you passing? Write your answer as comments in your views.py file.

Answer: No. Answer as comments in *views.py* file is attached below.

```python
33  def aboutUs(request):
34      # return HttpResponse('This is a Car Showroom')
35      return render(request, 'carapp/aboutus.html')
36
37  # No, we are not passing any extra context variables to the template
38  # because we do not need to retrieve any data from the database to the about us page
39
```

(e) Create cardetail.html
i. Create a new file cardetail.html in dir carsite/carapp/templates/carapp.

ii. The above html will be rendered if you go to the url: carapp/<cartype_no>
It should display the name for the Car Type with id = cartype_no. It should also display the list of Vehicles for each Car Type. For example, this cardetail page should appear like this for cartype no. 1:
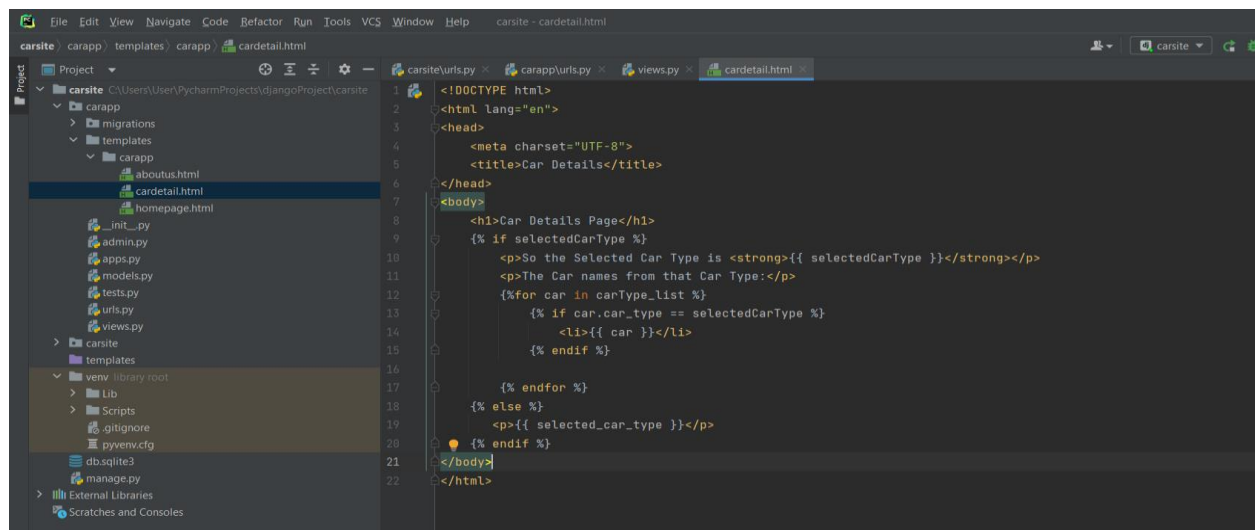**Following are the Vehicles in Toyota with Cartype No 1:**
• Corolla
• RAV4
And similarly for rest of the car types.
The cardetail page should also have a link to go back to the home page. Use url namespacing for this as well.

iii. Update the cardetail view function in views.py so that it uses the cardetail.html template.

```html
1   <!DOCTYPE html>
2   <html lang="en">
3   <head>
4       <meta charset="UTF-8">
5       <title>Car Details</title>
6   </head>
7   <body>
8       <h1>Car Details Page</h1>
9       {% if selectedCarType %}
10          <p>So the Selected Car Type is <strong>{{ selectedCarType }}</strong></p>
11          <p>The Car names from that Car Type:</p>
12          {%for car in carType_list %}
13              {% if car.car_type == selectedCarType %}
14                  <li>{{ car }}</li>
15              {% endif %}
16
17          {% endfor %}
18      {% else %}
19          <p>{{ selected_car_type }}</p>
20      {% endif %}
21  </body>
22  </html>
```

```
te    77    # For Lab- 6
            1 usage
      78    def cardetail(request, cartype_no):
      79        carType_list = Vehicle.objects.all()
      80        cartype_id = int(cartype_no)
      81        selectedCarType = ''
      82        selected_car_type = get_object_or_404(Vehicle, id=int(cartype_no))
      83        hasCarType = False
      84        for cartype in carType_list:
      85            if cartype.id == cartype_id:
      86                selectedCarType = cartype.car_type
      87                hasCarType = True
      88        if (hasCarType):
      89            return render(request, 'carapp/cardetail.html',
      90                          {"selectedCarType": selectedCarType, "carType_list": carType_list})
      91        else:
      92            return render(request, 'carapp/cardetail.html',
      93                          {"selected_car_type": selected_car_type})
      94
```

← → C ① 127.0.0.1:8000/carapp/8

Car Details Page

So the Selected Car Type is **Ford**

The Car names from that Car Type:

- FUSION HYBRID
- Escape SEL
- Explorer XLT
- EcoSport
- Bronco Sport Badlands

iv. Do you need to pass any extra context variables to the template? YES OR NO
v. If yes, what variable(s) are you passing? Write your answer as comments in your views.py file.

Answer: Yes. Answer as comments in *views.py* file is attached below.

```
te    77    # For Lab- 6
            1 usage
      78    def cardetail(request, cartype_no):
      79        carType_list = Vehicle.objects.all().order_by("car_type_id")
      80        cartype_id = int(cartype_no)
      81        selectedCarType = ''
      82        selected_car_type = get_object_or_404(Vehicle, id=int(cartype_no))
      83        hasCarType = False
      84        for cartype in carType_list:
      85            if cartype.id == cartype_id:
      86                selectedCarType = cartype.car_type
      87                hasCarType = True
      88        if (hasCarType):
      89            return render(request, 'carapp/cardetail.html',
      90                          {"selectedCarType": selectedCarType, "carType_list": carType_list})
      91        else:
      92            return render(request, 'carapp/cardetail.html',
      93                          {"selected_car_type": selected_car_type})
      94    # Yes, we are passing an extra context variable: 'selectedCarType','carType_list' to the template.
      95    # It contains the selected car type that was typed as a number on the address bar
      96    # It also contains the list of all CarType objects obtained from the database and ordered by their 'id' attribute.
      97    # These variables will be accessible in the 'cardetail.html' template.
      98
```

(f) Update Homepage Template
Update homepage.html so that you can click on a Car Type Name to go to the cardetail page for that Car Type. Ex. When you click on Toyota, it should show you Corolla, Rav4, etc.

```
        <title>Car Site</title>
    </head>
    <body>
        {% if cartype_list %}
            <h2> Type of Cars </h2>
            <ol>
                {% for cartype in cartype_list %}
                    <li> {{ cartype.name}} (id:{{ cartype.id }})</li>
                {% endfor %}
            </ol>
        {% else %}
            <strong> None of the car types is available! </strong>
        {% endif %}

        <p><a href="about">About Page (Hardcoded)</a></p>

        <p><a href = "{% url 'carapp:about' %}">About Page (NameSpace)</a></p>

        <p><a href = "{% url 'carapp:cardetail' %}">Car Detail Page </a></p>

    </body>
```
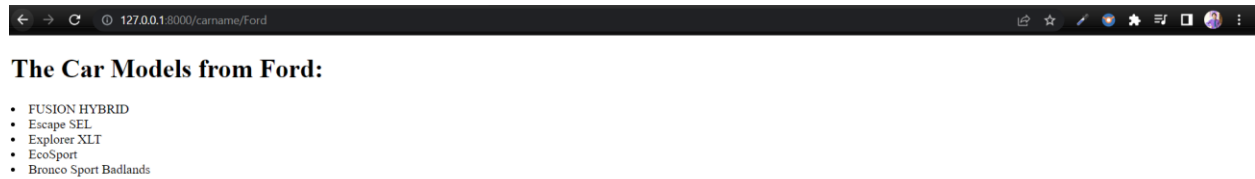
```
<!doctype html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport"
          content="width=device-width, user-scalable=no, initial-scale=1.0, maximum-scale=1.0, minimum-scale=1.0">
    <meta http-equiv="X-UA-Compatible" content="ie=edge">
    <title>Car Detail</title>
</head>
<body>

    <h1>Car Detail Page</h1>
    {% for car in carTypeList %}
    <p><a href="/carname/{{ car }}">{{ car }}</a></p>
    {% endfor %}
{#    <p><a href="/carname/Toyota">Toyota</a></p>#}
{#    <p><a href="/carname/Nissan">Nissan</a></p>#}
{#    <p><a href="/carname/Ford">Ford</a></p>#}
{#    <p><a href="/carname/Honda">Honda</a></p>#}
{#    <p><a href="/carname/Mercedes">Mercedes</a></p>#}
body
```
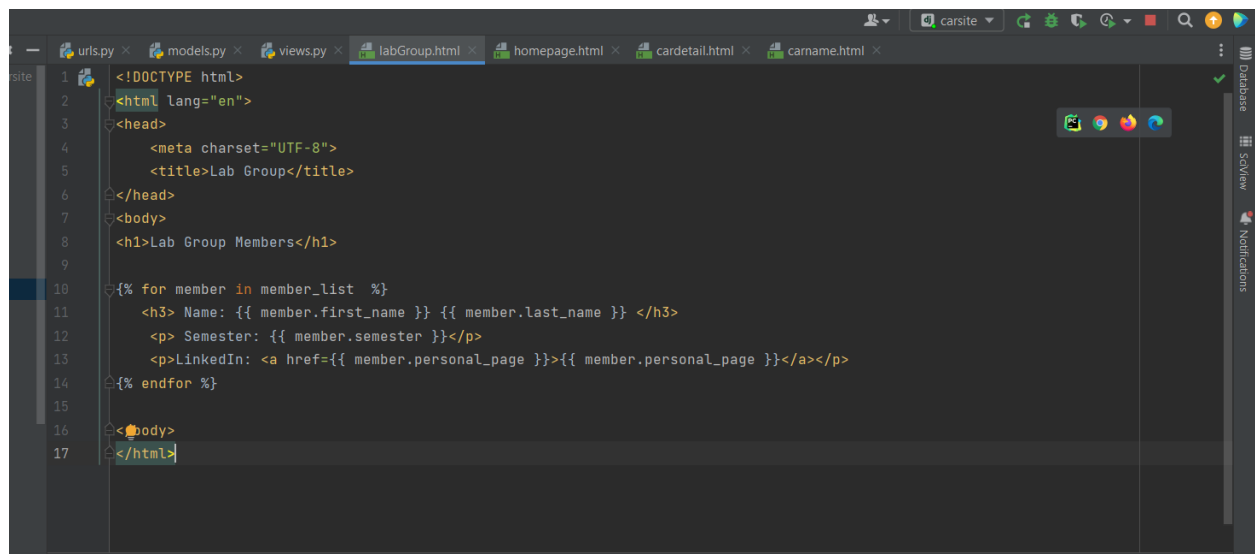
```html
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <title>Car Name</title>
6  </head>
7  <body>
8
9    <h1>The Car Models from {{ car_name }}:</h1>
10 {% for car in selected_car %}
11     <li>{{ car }}</li>
12 {% endfor %}
13
14
15
16 <body>
17 </html>
```

html

127.0.0.1:8000

Type of Cars

1. Toyota (id:6)
2. Nissan (id:7)
3. Ford (id:8)
4. Honda (id:9)
5. Mercedes (id:10)
6. Cadillac (id:11)

About Page (Hardcoded)

About Page (NameSpace)

Car Detail Page

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Car Detail Page

Toyota

Nissan

Ford

Honda

Mercedes

Ferrari

The Car Models from Ford:

- FUSION HYBRID
- Escape SEL
- Explorer XLT
- EcoSport
- Bronco Sport Badlands

(g) Final Step

Convert your team details view to a class-based view and create a template for it. This template should display the names and the links to professional pages (Ex. Linkedin) of your team members.

```python
1 usage
class GroupMember(View):
    def get(self, request):
        member_list = LabGroupMember.objects.all().order_by("first_name")
        return render(request, 'carapp/labGroup.html', {'member_list': member_list})
```

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Lab Group</title>
</head>
<body>
<h1>Lab Group Members</h1>

{% for member in member_list %}
    <h3> Name: {{ member.first_name }} {{ member.last_name }} </h3>
    <p> Semester: {{ member.semester }}</p>
    <p>LinkedIn: <a href={{ member.personal_page }}>{{ member.personal_page }}</a></p>
{% endfor %}

<body>
</html>
```

Lab Group Members

Name: Khondoker Aminuzzaman

Semester: 3

LinkedIn: https://www.linkedin.com/in/aminuzz110090822/

Name: Shivam Sunil Bhosale

Semester: 3

LinkedIn: https://www.linkedin.com/in/shivambhosale/

Name: Vishva Deliwala

Semester: 3

LinkedIn: https://www.linkedin.com/in/vishva-deliwala/