

Django Project

E-Classroom

Tools: -

- 1) Virtual Studio
- 2) Xampp and Command Prompt.

Code:

- 1) Python
- 2) HTML
- 3) MySQL

Steps to create E-classroom Project: -

Step 1: - Install Virtual Studio.

Step 2: - Create a folder in C-drive.

Step 3: - Go to terminal and use command Prompt.

Step 4: - Install once virtual environment if you are doing project for the first time.

Syntax: -

```
pip install virtualenv
```

Step 5: - Create virtual environment.

Syntax:

```
Virtualenv environmentname
```

In my Project i.e.

```
Virtualenv env
```

Step 6: - Activate Virtual Environment.

Syntax: -

```
env\Scripts\activate
```

Deactivate Virtual Environment

Syntax: -

```
env\Scripts\deactivate
```

Step 7: - Install Django in virtual Environment.

Syntax: -

```
pip install Django
```

Step 8: - Create Django Project

Syntax: -

```
django-admin startproject projectname
```

In my Project, i.e.

```
django-admin startproject learningProject
```

Step 9: - Create Application.

Syntax: -

```
python manage.py startapp appname
```

In my Project, i.e.

```
python manage.py startapp learningapp
```

Step 10: - Running Server.

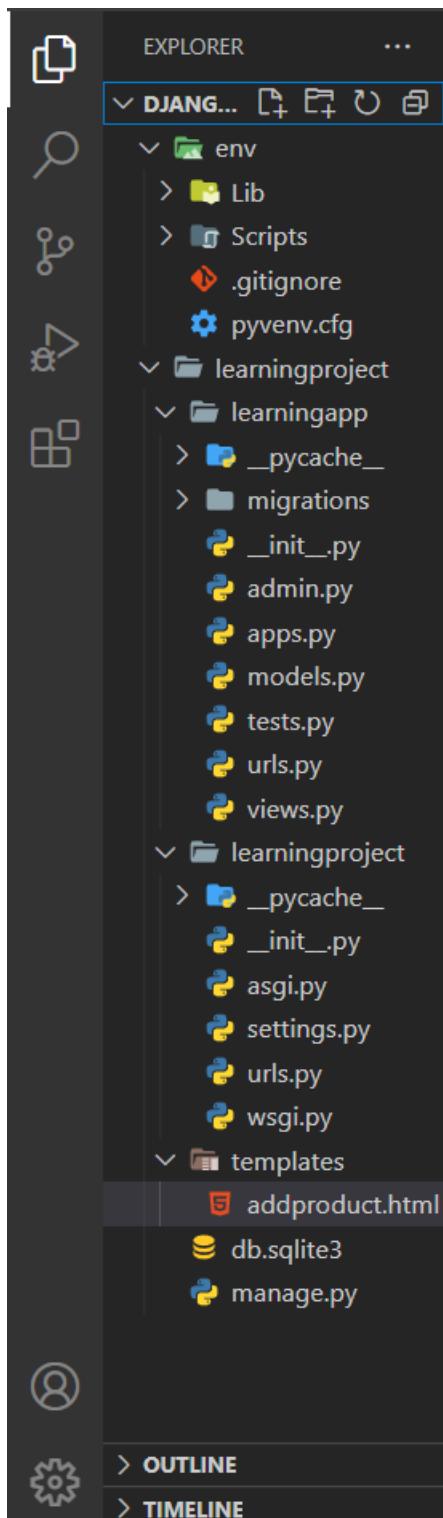
Syntax: -

```
python manage.py runserver
```

To stop server.

```
Ctrl + C
```

- **File Content:** -



Step 11: -

- 1) Create urls.py file in application folder.
- 2) Register urls.py file from application folder into urls.py file in project folder. So that Django server recognised all urls define in urls.py file in application folder.

```
17  from django.contrib import admin
18  from django.urls import path,include
19  from learningapp import views
20
21  urlpatterns = [
22      path('admin/', admin.site.urls),
23      path('',include('learningapp.urls')),
24  ]
25
```

Step 12: -

- 1) Create templates folder in project folder.
- 2) Go to settings.py in project folder to make some changes.
- 3) Write import os on line no.14

```
13  from pathlib import Path
14  import os
15
16 # Build paths inside the project like this: BASE_DIR / 'subdir'.
17 BASE_DIR = Path(__file__).resolve().parent.parent
18
```

- 4) Write application name in INSTALLED_APP on line no.41.

```
34  INSTALLED_APPS = [
35      'django.contrib.admin',
36      'django.contrib.auth',
37      'django.contrib.contenttypes',
38      'django.contrib.sessions',
39      'django.contrib.messages',
40      'django.contrib.staticfiles',
41      'learningapp'
42  ]
```

- 5) Add one code on line no.59.

```
os.path.join(BASE_DIR,'templates')
```

BASE_DIR: - path which is create in C-drive

```
56  TEMPLATES = [
57      {
58          'BACKEND': 'django.template.backends.django.DjangoTemplates',
59          'DIRS': [os.path.join(BASE_DIR,'templates')],
60          'APP_DIRS': True,
61          'OPTIONS': [
62              'context_processors': [
63                  'django.template.context_processors.debug',
64                  'django.template.context_processors.request',
65                  'django.contrib.auth.context_processors.auth',
66                  'django.contrib.messages.context_processors.messages',
67              ],
68          ],
69      },
70  ]
```

Step 13: -

- 1) Create a database in DBMS

Create database learn1234.

- 2) Make changes in setting.py

Change the default sqlite3 to mysql

```
learningproject > learningproject > 📄 settings.py > ...
75 # Database
76 # https://docs.djangoproject.com/en/4.2/ref/settings/#databases
77
78 # DATABASES = {
79 #     'default': {
80 #         'ENGINE': 'django.db.backends.sqlite3',
81 #         'NAME': BASE_DIR / 'db.sqlite3',
82 #     }
83 # }
84
85 DATABASES = {
86     'default': {
87         'ENGINE': 'django.db.backends.mysql',
88         'NAME': 'learn1234',
89         'HOST': 'localhost',
90         'USER': 'root',
91         'PASSWORD': '',
92     }
93 }
```



- 3) Getting an error then do install mysqlclient.

- Stop the server.
- pip install mysqlclient

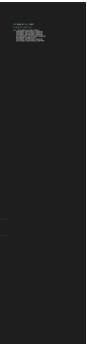
Step 14: -

- 1) from models.py import models

```
from Django.db import models
```

- 2) creating table/model in Django.

```
learningproject > learningapp > 📄 models.py > 📁 LearningCourses
1 from django.db import models
2
3 # Create your models here.
4
5 class LearningCourses(models.Model):
6     name=models.CharField(max_length=50)
7     cat1=models.CharField(max_length=50)
8     cat2=models.CharField(max_length=50)
9     job_type=models.CharField(max_length=50)
10    price=models.IntegerField()
11    time=models.CharField(max_length=50)
12    status=models.CharField(max_length=50)
```



- 3) After Creating table/model in Django make migrations.

```
python manage.py makemigrations
```

4) Run migration.

```
python manage.py migrate
```

Note: - It will migrate all the pending application.

Step 15: -

- 1) Create addproduct.html, dashboard.html and edit.html inside templates folder.

- **addproduct.html: -**

- I. **Views.py**

- II. **Urls.py**

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Welcome to E-Class</title>
</head>
<body>
    <h1>E-Class Courses</h1>
    <hr>
    <form method="POST" action="">
        {% csrf_token %}
        <table>
            <tr>
                <th>Batch Name:</th>
                <td><input type="text" name="bname"></td>
            </tr>

```

```

<tr>
    <th>Course Category:</th>
    <td>
        <input type="radio" name="cat" value="1">Python,Django,MySQL,HTML,CSS,Javascripts
        <input type="radio" name="cat" value="2">Java,React,Angular,MySQL,HTML,CSS,Javascripts
        <input type="radio" name="cat" value="3">C,C++,Java,Python
        <input type="radio" name="cat" value="4">Salesforce
        <input type="radio" name="cat" value="5">Oracle fusion
        <input type="radio" name="cat" value="6">None
    </td>
</tr>
<tr>
    <th>Other Courses:</th>
    <td>
        <input type="radio" name="oc" value="1">Microsoft office,Resume Building Session,Career Guidance Session,Profile Building Session
        <input type="radio" name="oc" value="2">None
    </td>
</tr>

```

```

<tr>
    <th>Recruitment:</th>
    <td>
        <select name="re">
            <option value="1">Non-IT Functional</option>
            <option value="2">IT Technical</option>
        </select>
    </td>
</tr>
<tr>
    <th>Price:</th>
    <td><input type="number" name="amount"></td>
</tr>

```

```

<tr>
    <th>Batch Timing:</th>
    <td>
        <select name="bt">
            <option value="1">9 AM TO 11 AM</option>
            <option value="2">3 PM TO 5 PM</option>
            <option value="3">7 PM TO 9 PM</option>
        </select>
    </td>
</tr>
<tr>
    <th>Status:</th>
    <td>
        <input type="radio" name="stat" value="1">Available
        <input type="radio" name="stat" value="0">Unavailable
    </td>
</tr>
<tr>
    <td><button type="submit">save</button></td>
</tr>

```

views.py for addproduct: -

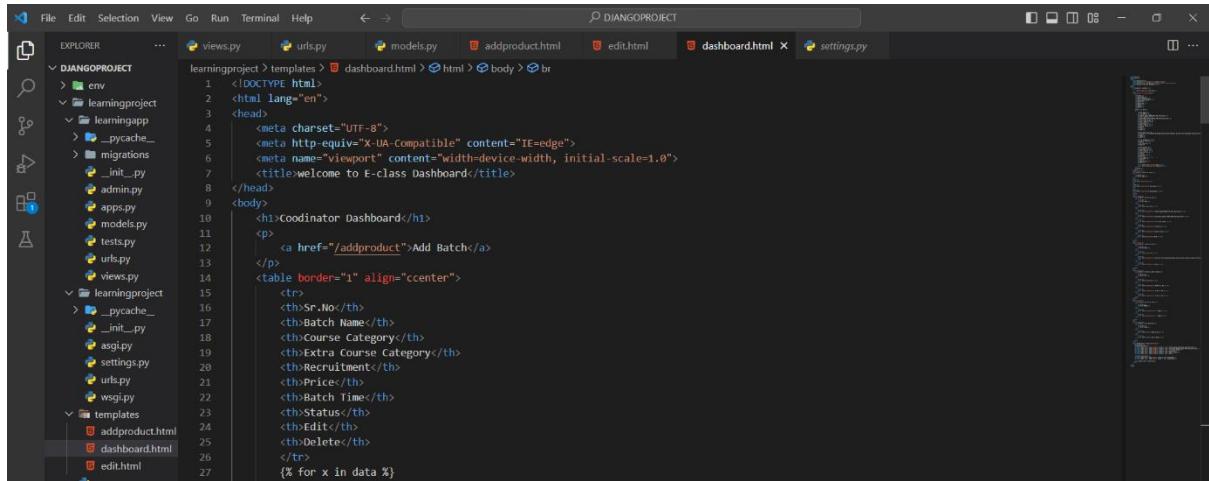
```
33 def addproduct(request):
34
35     if request.method=="POST":
36         Batch_Name=request.POST['bname']
37         Course_Category=request.POST['cat']
38         Other_Course=request.POST['oc']
39         Recruitment=request.POST['re']
40         Price=request.POST['amount']
41         Batch_Timing=request.POST['bt']
42         Status=request.POST['stat']
43
44         p=LearningCourses.objects.create(name=Batch_Name,cat1=Course_Category,cat2=Other_Course,job_type=Recruitment,price=Price,time=Batch_Timing,status=Status)
45         p.save()
46
47         return redirect('/dash')
48
49     else:
50         return render(request,'addproduct.html')
```

urls.py for addproduct: -

```
path('addproduct',views.addproduct),
```

- [dashboard.html](#):

In dashboard also added edit, delete, filter, sort and multifilter.



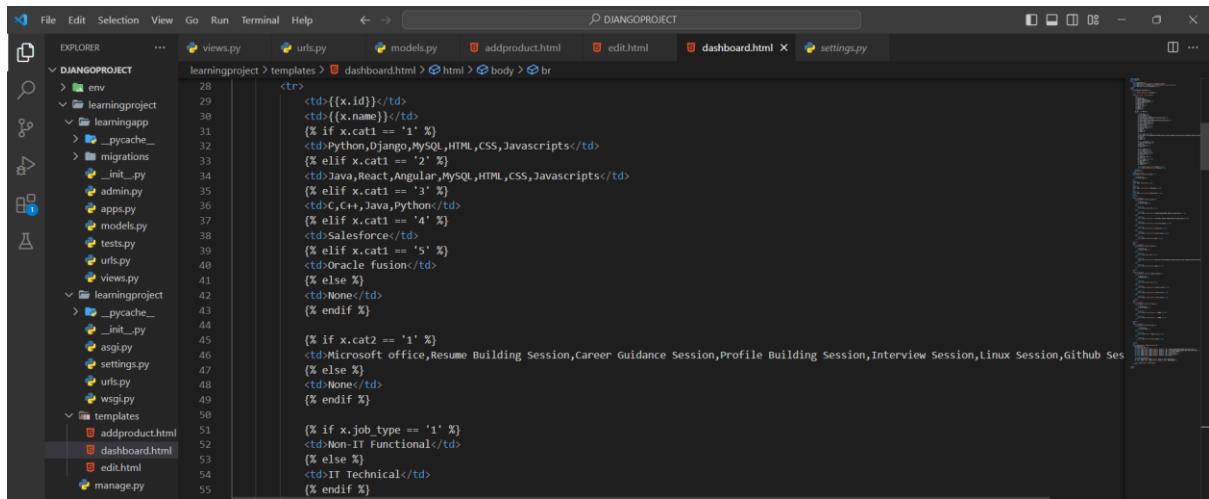
```

<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>welcome to E-class Dashboard</title>
  </head>
  <body>
    <h1>Coordinator Dashboard</h1>
    <p>
      <a href="/addproduct">Add Batch</a>
    </p>
    <table border="1" align="center">
      <tr>
        <th>Sr.No</th>
        <th>Batch Name</th>
        <th>Course Category</th>
        <th>Extra course Category</th>
        <th>Recruitment</th>
        <th>Price</th>
        <th>Hatch Time</th>
        <th>Status</th>
        <th>Edit</th>
        <th>Delete</th>
      </tr>
      {% for x in data %}
        <tr>
          <td>{{x.id}}</td>
          <td>{{x.name}}</td>
          {% if x.cat1 == '1' %}
            <td>Python,Django,MySQL,HTML,CSS,Javascripts</td>
          {% elif x.cat1 == '2' %}
            <td>Java,React,Angular,MySQL,HTML,CSS,Javascripts</td>
          {% elif x.cat1 == '3' %}
            <td>C,C++,Java,Python</td>
          {% elif x.cat1 == '4' %}
            <td>Salesforce</td>
          {% elif x.cat1 == '5' %}
            <td>Oracle Fusion</td>
          {% else %}
            <td>None</td>
          {% endif %}

          {% if x.cat2 == '1' %}
            <td>Microsoft office,Resume Building Session,Career Guidance Session,Profile Building Session,Interview Session,Linux Session,github Sessions</td>
          {% else %}
            <td>None</td>
          {% endif %}

          {% if x.job_type == '1' %}
            <td>Non-IT Functional</td>
          {% else %}
            <td>IT Technical</td>
          {% endif %}
        </tr>
      {% endfor %}
    </table>
  </body>

```



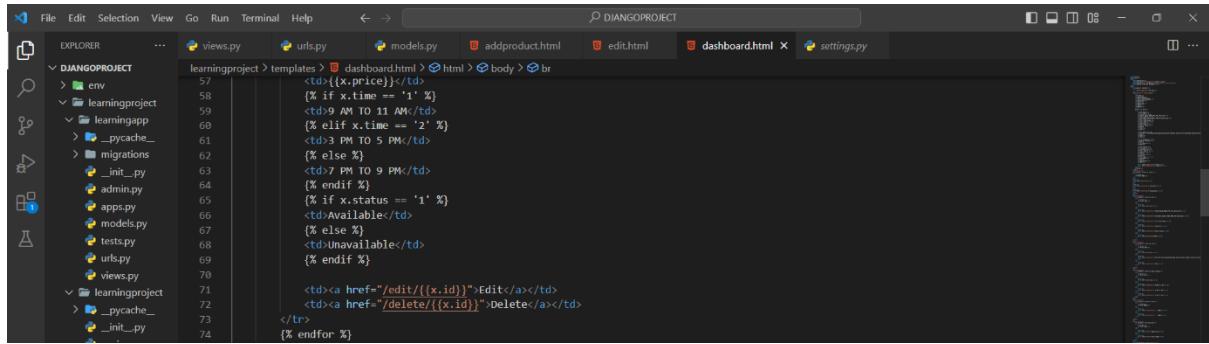
```

<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>welcome to E-class Dashboard</title>
  </head>
  <body>
    <h1>Coordinator Dashboard</h1>
    <p>
      <a href="/addproduct">Add Batch</a>
    </p>
    <table border="1" align="center">
      <tr>
        <th>Sr.No</th>
        <th>Batch Name</th>
        <th>Course Category</th>
        <th>Extra course Category</th>
        <th>Recruitment</th>
        <th>Price</th>
        <th>Hatch Time</th>
        <th>Status</th>
        <th>Edit</th>
        <th>Delete</th>
      </tr>
      {% for x in data %}
        <tr>
          <td>{{x.id}}</td>
          <td>{{x.name}}</td>
          {% if x.cat1 == '1' %}
            <td>Python,Django,MySQL,HTML,CSS,Javascripts</td>
          {% elif x.cat1 == '2' %}
            <td>Java,React,Angular,MySQL,HTML,CSS,Javascripts</td>
          {% elif x.cat1 == '3' %}
            <td>C,C++,Java,Python</td>
          {% elif x.cat1 == '4' %}
            <td>Salesforce</td>
          {% elif x.cat1 == '5' %}
            <td>Oracle Fusion</td>
          {% else %}
            <td>None</td>
          {% endif %}

          {% if x.cat2 == '1' %}
            <td>Microsoft office,Resume Building Session,Career Guidance Session,Profile Building Session,Interview Session,Linux Session,github Sessions</td>
          {% else %}
            <td>None</td>
          {% endif %}

          {% if x.job_type == '1' %}
            <td>Non-IT Functional</td>
          {% else %}
            <td>IT Technical</td>
          {% endif %}
        </tr>
      {% endfor %}
    </table>
  </body>

```



```

<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>welcome to E-class Dashboard</title>
  </head>
  <body>
    <h1>Coordinator Dashboard</h1>
    <p>
      <a href="/addproduct">Add Batch</a>
    </p>
    <table border="1" align="center">
      <tr>
        <th>Sr.No</th>
        <th>Batch Name</th>
        <th>Course Category</th>
        <th>Extra course Category</th>
        <th>Recruitment</th>
        <th>Price</th>
        <th>Hatch Time</th>
        <th>Status</th>
        <th>Edit</th>
        <th>Delete</th>
      </tr>
      {% for x in data %}
        <tr>
          <td>{{x.id}}</td>
          <td>{{x.name}}</td>
          {% if x.time == '1' %}
            <td>9 AM TO 11 AM</td>
          {% elif x.time == '2' %}
            <td>3 PM TO 5 PM</td>
          {% else %}
            <td>7 PM TO 9 PM</td>
          {% endif %}

          {% if x.status == '1' %}
            <td>Available</td>
          {% else %}
            <td>Unavailable</td>
          {% endif %}

          <td><a href="/edit/{{x.id}}">Edit</a></td>
          <td><a href="/delete/{{x.id}}">Delete</a></td>
        </tr>
      {% endfor %}
    </table>
  </body>

```

views.py for dashboard: -

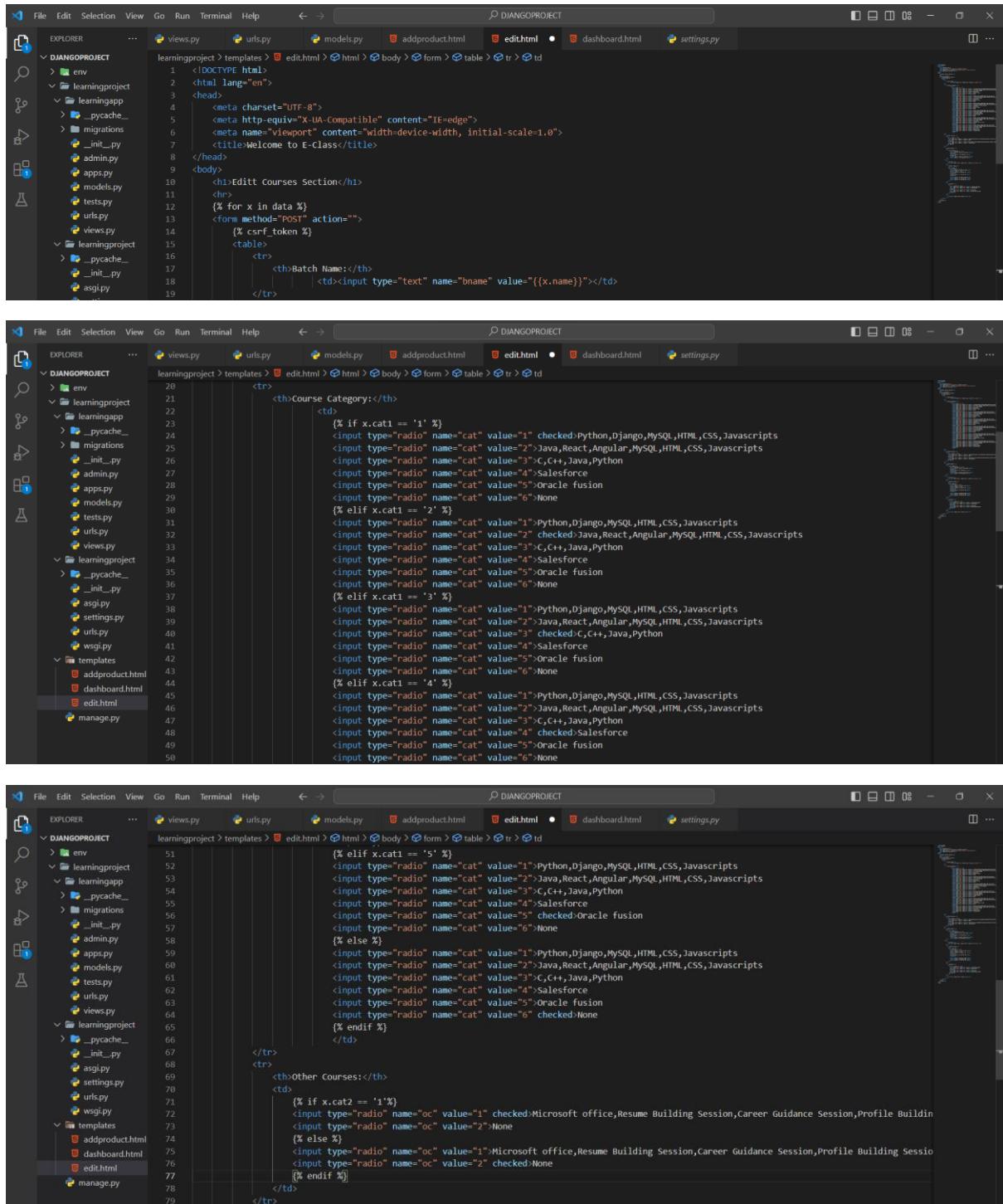
```
def dashboard(request):
    da=LearningCourses.objects.all()
    content={}
    content['data']=da
    return render(request,'dashboard.html',content)
```

urls.py for dashboard: -

```
path('dash',views.dashboard),
```

I. Edit:-

First create edit.html in the template folder copy and past addproduct html code inside edit.html file.



```

File Edit Selection View Go Run Terminal Help < > DIANGOPROJECT
EXPLORER ... views.py urls.py models.py addproduct.html edit.html dashboard.html settings.py
DIANGOPROJECT
> env
learningproject
> learningapp
> learningapp
> _pycache_
> migrations
> __init__.py
> admin.py
> apps.py
> models.py
> tests.py
> urls.py
> views.py
> learningproject
> _pycache_
> __init__.py
> asgi.py
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <meta charset="UTF-8">
5     <meta http-equiv="X-UA-Compatible" content="IE=edge">
6     <meta name="viewport" content="width=device-width, initial-scale=1.0">
7     <title>Welcome to E-Class</title>
8   </head>
9   <body>
10    <h1>Edit Courses Section</h1>
11    <hr>
12    {% for x in data %}
13    <form method="POST" action="">
14      {% csrf_token %}
15      <table>
16        <tr>
17          <th>Batch Name:</th>
18          <td><input type="text" name="bname" value="{{x.name}}></td>
19        </tr>
20      </table>
21    <tr>
22      <th>Course Category:</th>
23      <td>
24        {% if x.cat == '1' %}
25          <input type="radio" name="cat" value="1" checked>Python,Django,MySQL,HTML,CSS,Javascripts
26          <input type="radio" name="cat" value="2">Java,React,Angular,MySQL,HTML,CSS,Javascripts
27          <input type="radio" name="cat" value="3">C,C++,Java,Python
28          <input type="radio" name="cat" value="4">Salesforce
29          <input type="radio" name="cat" value="5">Oracle fusion
30          <input type="radio" name="cat" value="6">None
31        {% elif x.cat == '2' %}
32          <input type="radio" name="cat" value="1">Python,Django,MySQL,HTML,CSS,Javascripts
33          <input type="radio" name="cat" value="2" checked>Java,React,Angular,MySQL,HTML,CSS,Javascripts
34          <input type="radio" name="cat" value="3">C,C++,Java,Python
35          <input type="radio" name="cat" value="4">Salesforce
36          <input type="radio" name="cat" value="5">Oracle fusion
37          <input type="radio" name="cat" value="6">None
38        {% elif x.cat == '3' %}
39          <input type="radio" name="cat" value="1">Python,Django,MySQL,HTML,CSS,Javascripts
40          <input type="radio" name="cat" value="2">Java,React,Angular,MySQL,HTML,CSS,Javascripts
41          <input type="radio" name="cat" value="3" checked>C,C++,Java,Python
42          <input type="radio" name="cat" value="4">Salesforce
43          <input type="radio" name="cat" value="5">Oracle fusion
44          <input type="radio" name="cat" value="6">None
45        {% elif x.cat == '4' %}
46          <input type="radio" name="cat" value="1">Python,Django,MySQL,HTML,CSS,Javascripts
47          <input type="radio" name="cat" value="2">Java,React,Angular,MySQL,HTML,CSS,Javascripts
48          <input type="radio" name="cat" value="3">C,C++,Java,Python
49          <input type="radio" name="cat" value="4" checked>Salesforce
50          <input type="radio" name="cat" value="5">Oracle fusion
51          <input type="radio" name="cat" value="6">None
52      </td>
53    <tr>
54      <th>Other Courses:</th>
55      <td>
56        {% if x.cat2 == '1' %}
57          <input type="radio" name="oc" value="1" checked>Microsoft office,Resume Building Session,Career Guidance Session,Profile Buildin
58          <input type="radio" name="oc" value="2">None
59        {% else %}
60          <input type="radio" name="oc" value="1">Python,Django,MySQL,HTML,CSS,Javascripts
61          <input type="radio" name="oc" value="2">Java,React,Angular,MySQL,HTML,CSS,Javascripts
62          <input type="radio" name="oc" value="3">C,C++,Java,Python
63          <input type="radio" name="oc" value="4">Salesforce
64          <input type="radio" name="oc" value="5">Oracle fusion
65          <input type="radio" name="oc" value="6" checked>None
66        {% endif %}
67      </td>
68    <tr>
69      <th></th>
70      <td>
71        {% if x.cat2 == '1' %}
72          <input type="radio" name="oc" value="1" checked>Microsoft office,Resume Building Session,Career Guidance Session,Profile Building Session
73          <input type="radio" name="oc" value="2">None
74        {% else %}
75          <input type="radio" name="oc" value="1">Python,Django,MySQL,HTML,CSS,Javascripts
76          <input type="radio" name="oc" value="2" checked>None
77        {% endif %}
78      </td>
79    </tr>

```

```
<tr>
    <th>Recruitment:</th>
    <td>
        <select name="re">
            {% if x.job_type == '1' %}
                <option value="1">Non-IT Functional</option>
            {% else %}
                <option value="2">IT Technical</option>
            {% endif %}
            <option value="1">Non-IT Functional</option>
            <option value="2">IT Technical</option>
        </select>
    </td>
</tr>
<tr>
    <th>Price:</th>
    <td><input type="number" name="amount" value="{{x.price}}></td>
</tr>
<tr>
    <th>Batch Timing:</th>
    <td>
        <select name="bt">
            {% if x.time == '1' %}
                <option value="1">9 AM TO 11 AM</option>
            {% elif x.time == '2' %}
                <option value="2">3 PM TO 5 PM</option>
            {% else %}
                <option value="3">7 PM TO 9 PM</option>
            {% endif %}
            <option value="1">9 AM TO 11 AM</option>
            <option value="2">3 PM TO 5 PM</option>
            <option value="3">7 PM TO 9 PM</option>
        </select>
    </td>
</tr>
```

```
<tr>
    <th>Status:</th>
    <td>
        {% if x.status == '1' %}
            <input type="radio" name="stat" value="1" checked>Available
        <input type="radio" name="stat" value="0">Unavailable
        {% else %}
            <input type="radio" name="stat" value="1">Available
            <input type="radio" name="stat" value="0" checked>Unavailable
        {% endif %}
    </td>
</tr>
<tr>
    <td><button type="submit">save</button></td>
</tr>
</table>
</form>
{% endfor %}
</body>
</html>
```

views.py for edit: -

Syntax: -

```
p=LearningCourses.objects.filter(id=rid)
```

```
p.update(name=Batch_Name,cat1=Course_Category,cat2=Other_Course,job_type=Recruitment,price=Price,time=Batch_Timing,status=Status)
```

```
def edit(request,rid):
    if request.method=="POST":
        Batch_Name=request.POST['bname']
        Course_Category=request.POST['cat']
        Other_Course=request.POST['oc']
        Recruitment=request.POST['re']
        Price=request.POST['amount']
        Batch_Timing=request.POST['bt']
        Status=request.POST['stat']
        p=LearningCourses.objects.filter(id=rid)
        p.update(name=Batch_Name,cat1=Course_Category,cat2=Other_Course,job_type=Recruitment,price=Price,time=Batch_Timing,status=Status)
        return redirect('/dash')
    else:
        p=LearningCourses.objects.filter(id=rid)
        content={}
        content['data']=p
        return render(request,'edit.html',content)
```

urls.py for edit: -

```
learningproject > learningapp > urls.py > ...
1   from django.urls import path,include
2   from learningapp import views
3
4   urlpatterns = [
5       path('edit/<rid>',views.edit),
```

II. Delete:-

Do not create any html file for delete.

views.py for delete:-

Syntax:-

```
p=LearningCourses.objects.filter(id=rid)  
p.delete()
```

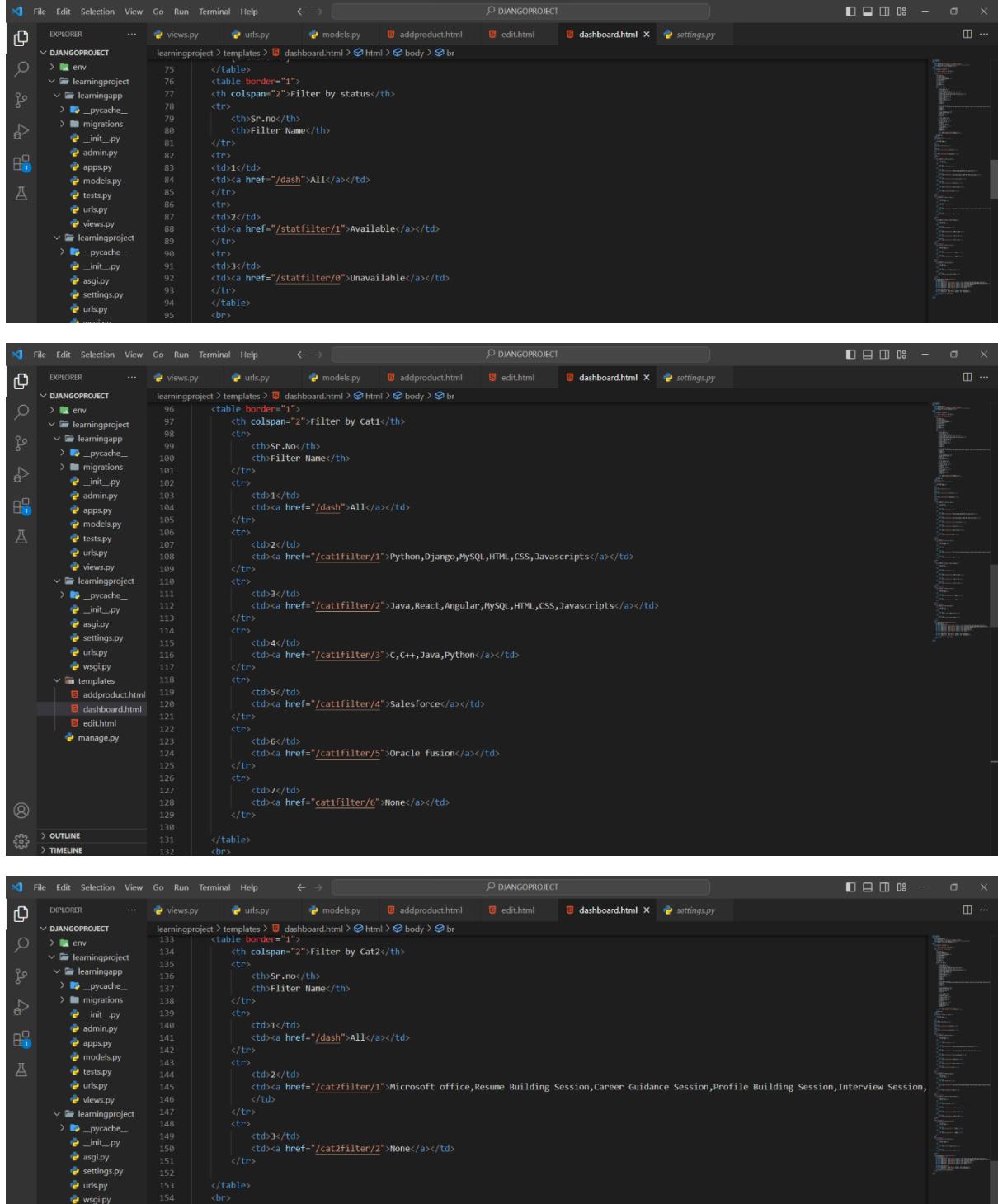
```
def delete(request,rid):  
    p=LearningCourses.objects.filter(id=rid)  
    p.delete()  
    return redirect('/dash')
```

urls.py for delete:-

```
path('delete/<rid>',views.delete),
```

III. Filters for dashboard: -

Do not create html file for filter. Assign it to dashboard.html.



```
DIANGOPROJECT
  learningproject > templates > dashboard.html > html > body >
    </table>
    <table border="1">
      <th colspan="2">filter by status</th>
      <tr>
        <th>Sr.no</th>
        <th>Filter Name</th>
      </tr>
      <tr>
        <td>1</td>
        <td><a href="/dash">All</a></td>
      </tr>
      <tr>
        <td>2</td>
        <td><a href="/statfilter/1">Available</a></td>
      </tr>
      <tr>
        <td>3</td>
        <td><a href="/statfilter/0">Unavailable</a></td>
      </tr>
    </table>
    <br>
```



```
DIANGOPROJECT
  learningproject > templates > dashboard.html > html > body >
    <table border="1">
      <th colspan="2">Filter by cat1</th>
      <tr>
        <th>Sr.No</th>
        <th>filter Name</th>
      </tr>
      <tr>
        <td>1</td>
        <td><a href="/dash">All</a></td>
      </tr>
      <tr>
        <td>2</td>
        <td><a href="/cat1filter/1">Python,Django,MySQL,HTML,CSS,Javascripts</a></td>
      </tr>
      <tr>
        <td>3</td>
        <td><a href="/cat1filter/2">Java,React,Angular,MySQL,HTML,CSS,Javascripts</a></td>
      </tr>
      <tr>
        <td>4</td>
        <td><a href="/cat1filter/3">C,C++,Java,Python</a></td>
      </tr>
      <tr>
        <td>5</td>
        <td><a href="/cat1filter/4">Salesforce</a></td>
      </tr>
      <tr>
        <td>6</td>
        <td><a href="/cat1filter/5">Oracle fusion</a></td>
      </tr>
      <tr>
        <td>7</td>
        <td><a href="/cat1filter/6">None</a></td>
      </tr>
    </table>
    <br>
```



```
DIANGOPROJECT
  learningproject > templates > dashboard.html > html > body >
    <table border="1">
      <th colspan="2">Filter by Cat2</th>
      <tr>
        <th>Sr.no</th>
        <th>filter Name</th>
      </tr>
      <tr>
        <td>1</td>
        <td><a href="/dash">All</a></td>
      </tr>
      <tr>
        <td>2</td>
        <td><a href="/cat2filter/1">Microsoft office,Resume Building Session,Career Guidance Session,Profile Building Session,Interview Session,</a></td>
      </tr>
      <tr>
        <td>3</td>
        <td><a href="/cat2filter/2">None</a></td>
      </tr>
    </table>
    <br>
```

```

File Edit Selection View Go Run Terminal Help <- > DIANGOPROJECT
EXPLORER ... views.py urls.py models.py addproduct.html edit.html dashboard.html settings.py
DIANGOPROJECT
> env
learningproject
> learningapp
> __pycache__
> migrations
> __init__.py
> admin.py
> apps.py
> models.py
> tests.py
> urls.py
> views.py
> learningproject
> __pycache__
> __init__.py
> asgi.py
> settings.py
> urls.py
> wsgi.py
> templates
> addproduct.html
> dashboard.html
> edit.html
> settings.py
learningproject > templates > dashboard.html > body > br
155     <th colspan="2">Filter by Batch Timings</th>
156     <tr>
157         <th>Sr.no</th>
158         <th>Batch Time</th>
159     </tr>
160     <tr>
161         <td>1</td>
162         <td><a href="/dash">All</a></td>
163     </tr>
164     <tr>
165         <td>2</td>
166         <td><a href="/timefilter/1">9 AM TO 11 AM</a></td>
167     </tr>
168     <tr>
169         <td>3</td>
170         <td><a href="/timefilter/2">3 PM TO 5 PM</a></td>
171     </tr>
172     <tr>
173         <td>4</td>
174         <td><a href="/timefilter/3">7 PM TO 9 PM</a></td>
175     </tr>
176     </table>
177     <br>
178

```

```

File Edit Selection View Go Run Terminal Help <- > DIANGOPROJECT
EXPLORER ... views.py urls.py models.py addproduct.html edit.html dashboard.html settings.py
DIANGOPROJECT
> env
learningproject
> learningapp
> __pycache__
> migrations
> __init__.py
> admin.py
> apps.py
> models.py
> tests.py
> urls.py
> views.py
> learningproject
> __pycache__
> __init__.py
learningproject > templates > dashboard.html > body > br
179     <th colspan="2">Filter by Price</th>
180     <tr>
181         <th>Sr.No</th>
182         <th>Price Range</th>
183     </tr>
184     <tr>
185         <td>1</td>
186         <td><a href="/pricefilter/1"> > 30000 </a></td>
187     </tr>
188     <tr>
189         <td>2</td>
190         <td><a href="/pricefilter/2"> < 30000</a></td>
191     </tr>
192     </table>
193     <br>
194
195

```

views.py for Filter: -

```

File Edit Selection View Go Run Terminal Help <- > DIANGOPROJECT
EXPLORER ... views.py urls.py models.py addproduct.html edit.html dashboard.html settings.py
DIANGOPROJECT
> env
learningproject
> learningapp
> __pycache__
> migrations
> __init__.py
> admin.py
> apps.py
> models.py
> tests.py
> urls.py
> views.py
> learningproject
> __pycache__
> __init__.py
> asgi.py
> settings.py
> urls.py
> wsgi.py
> templates
> addproduct.html
> dashboard.html
> edit.html
> settings.py
learningproject > learningapp > views.py > delete
57     # filter
58
59     def statfilter(request,sv):
60         p=LearningCourses.objects.filter(status=sv)
61         content={}
62         content['data']=p
63         return render(request,'dashboard.html',content)
64
65     def cat1filter(request,cv1):
66         p=LearningCourses.objects.filter(cat1=cv1)
67         content={}
68         content['data']=p
69         return render(request,'dashboard.html',content)
70
71     def cat2filter(request,cv2):
72         p=LearningCourses.objects.filter(cat2=cv2)
73         content={}
74         content['data']=p
75         return render(request,'dashboard.html',content)
76
77     def timefilter(request,tf):
78         p=LearningCourses.objects.filter(time=tf)
79         content={}
80         content['data']=p
81         return render(request,'dashboard.html',content)
82
83     def pricefilter(request,pf):
84         if pf=='1' :
85             p=LearningCourses.objects.filter(price__gt=30000)
86         else:
87             p=LearningCourses.objects.filter(price__lt=30000)
88         content={}
89         content['data']=p
90         return render(request,'dashboard.html',content)
91
92
93

```

url.py for Filter: -

```

path('statfilter/<sv>',views.statfilter),
path('cat1filter/<cv1>',views.cat1filter),
path('cat2filter/<cv2>',views.cat2filter),
path('timefilter/<tf>',views.timefilter),
path('pricefilter/<pf>',views.pricefilter),

```

IV. Sort for Dashboard:-

Do not create html file for filter. Assign it to dashboard.html

```
<table border="1">
  <th colspan="2">sort by price</th>
  <tr>
    <th>Sr.No</th>
    <th>Price range</th>
  </tr>
  <tr>
    <td>1</td>
    <td><a href="/sort/1">High to Low</a></td>
  </tr>
  <tr>
    <td>2</td>
    <td><a href="/sort/0">Low to High</a></td>
  </tr>
</table>
  
>
```

views.py for Sort:-

Syntax: -

```
p=LearningCourses.objects.order_by('price/-price')
```

where,

price is ascending order.

-price is descending order.

```
def sortfilter(request,s):
    if s=='0':
        p=LearningCourses.objects.order_by('price')
    else:
        p=LearningCourses.objects.order_by('-price')
    content={}
    content['data']=p
    return render(request,'dashboard.html',content)
```

urls.py for sort:-

```
path('sort/<s>',views.sortfilter),
```

V. Multifilter for dashboard: -

Do not create html file for filter. Assign it to dashboard.html

```
213 |     <form method="POST" action="/multifilter">
214 |     {% csrf_token %}
215 |     <h2>Filtered by Cat1</h2>
216 |     <p><input type="radio" name="category" value="1" id="">Python,Django,MySQL,HTML,CSS,Javascripts</p>
217 |     <p><input type="radio" name="category" value="2" id="">Java,React,Angular,MySQL,HTML,CSS,Javascripts</p>
218 |     <p><input type="radio" name="category" value="3" id="">C,C++,Java,Python</p>
219 |     <p><input type="radio" name="category" value="4" id="">Salesforce</p>
220 |     <p><input type="radio" name="category" value="5" id="">Oracle fusion</p>
221 |     <p><input type="radio" name="category" value="6" id="">None</p>
222 |
223 |     <h2>Filter by status</h2>
224 |     <p><input type="radio" name="status" value="1" id="">Available</p>
225 |     <p><input type="radio" name="status" value="0" id="">Unavailable</p>
226 |
227 |     <input type="submit" value="Apply">
228 |   </form>
229 |
230 | </body>
231 | </html>
```



Views.py for multifilter: -

In views, import Q from django.db.models

Syntax: -

```
from django.db.models import Q
```

```
q1 = Q(condition 1)
```

```
q2 = Q(condition 2)
```

```
queryset = Modelname.objects.filter(q1 & q2)
```

```
def multifilter(request):
    if request.method=="POST":
        sv=request.POST['status']
        cv1=request.POST['category']
        q1=Q(cat1=cv1)
        q2=Q(status=sv)
        p=LearningCourses.objects.filter(q1 & q2)
        content={}
        content['data']=p
        return render(request,'dashboard.html',content)
```

urls.py for multifilter: -

```
path('multifilter',views.multifilter),
]
```

