CM3035 Advanced Web Development

Lesson 6

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Django forms (Add New Record)

Add New record

Django forms (Add New Record)

Set Url.py

```python
urlpatterns = [

path('displayDatabase', views.displayDatabase, name='displayDatabase'),
path('addData/', views.addData, name='addData'),
path('addData/addrecord/', views.addrecord, name='addrecord'),

]
```

Django forms (Add New Record)

New record form

```python
def addData(request):
    template = loader.get_template('addData.html')
    return HttpResponse(template.render({}, request))
```

Add Data into Database

Name:

Hobby:

Submit

```html
<!DOCTYPE html>
<html>
<body>

  <h1>Add Data into Database</h1>

  <form action="addrecord/" method="post">
  {% csrf_token %}
  Name:<br>
  <input name="name">
  <br><br>
  Hobby:<br>
  <input name="hobby">
  <br><br>
  <input type="submit" value="Submit">
  </form>

</body>
</html>
```

Django forms (Add New Record)

Submit form to database via 'post' method

```python
def addrecord(request):
    x = request.POST['name']
    y = request.POST['hobby']
    insertData = L3app(name=x, hobby=y)
    insertData.save()
    return HttpResponseRedirect(reverse('displayDatabase'))
```

Django forms (Add New Record)

Display the Inserted Records

```html
displayFullData.html                    views.py
1  <!DOCTYPE html>
2  <html>
3  <body>
4
5    <h1>Display Database</h1>
6
7    <table border="1">
8    {% for x in allData %}
9    <tr>
10   <td>{{ x.id }}</td>
11   <td>{{ x.name }}</td>
12   <td>{{ x.hobby }}</td>
13   </tr>
14   {% endfor %}
15   </table>
16
17   <p>
18   <a href="deleteData/">Delete Friends</a>
19   </p>
20
21   <p>
22   <a href="updateData/">Update Friends details</a>
23   </p>
24
25 </body>
26 </html>
27
```

```python
5  def displayDatabase(request):
6      allData = L3app.objects.all().values()
7      template = loader.get_template('displayFullData.html')
8      context = {
9      'allData': allData,
0      }
1      return HttpResponse(template.render(context, request))
```

Django forms (Add New Record)

Display the Inserted Records

Display Database

1	john	tennis
31	Sam	fishing
35	Tom	hiking
36	Jane	dancing
37	Emil	swimming
38	Mary	hiking
39	Jerry	dancing
40	Tom	swimming
41	Anorld	Gym
42	Bella	Running

Delete Friends

Update Friends details

Django forms (Delete Data)

Delete Data via html form

42	Bella	Running

Delete Friends

Django forms (Delete Data)

Delete Data via html form

Delete Data

1	john	tennis	delete
31	Sam	fishing	delete
35	Tom	hiking	delete
36	Jane	dancing	delete
37	Emil	swimming	delete
38	Mary	hiking	delete
39	Jerry	dancing	delete
40	Tom	swimming	delete
41	Anorld	Gym	delete
42	Bella	Running	delete

Add Friends

```html
<!DOCTYPE html>
<html>
<body>

<h1>Delete Data</h1>

<table border="1">
{% for x in myFriends %}
  <tr>
  <td>{{ x.id }}</td>
  <td>{{ x.name }}</td>
  <td>{{ x.hobby }}</td>
  <td><a href="../deleteRecord/{{ x.id }}">delete</a></td>
  </tr>
{% endfor %}
</table>

<p>
<a href="../addData/">Add Friends</a>
</p>

</body>
</html>
```

Django forms (Delete Data)

Delete Data with function in view.py

```python
def deleteRecord(request, id):
    FriendtoDelete = L3app.objects.get(id=id)
    FriendtoDelete.delete()
    return HttpResponseRedirect(reverse('displayDatabase'))
```

Django forms (Delete Data)

Display the Deleted Records

```html
displayFullData.html          views.py
1  <!DOCTYPE html>
2  <html>
3  <body>
4
5    <h1>Display Database</h1>
6
7    <table border="1">
8    {% for x in allData %}
9    <tr>
10   <td>{{ x.id }}</td>
11   <td>{{ x.name }}</td>
12   <td>{{ x.hobby }}</td>
13   </tr>
14   {% endfor %}
15   </table>
16
17   <p>
18   <a href="deleteData/">Delete Friends</a>
19   </p>
20
21   <p>
22   <a href="updateData/">Update Friends details</a>
23   </p>
24
25 </body>
26 </html>
27
```
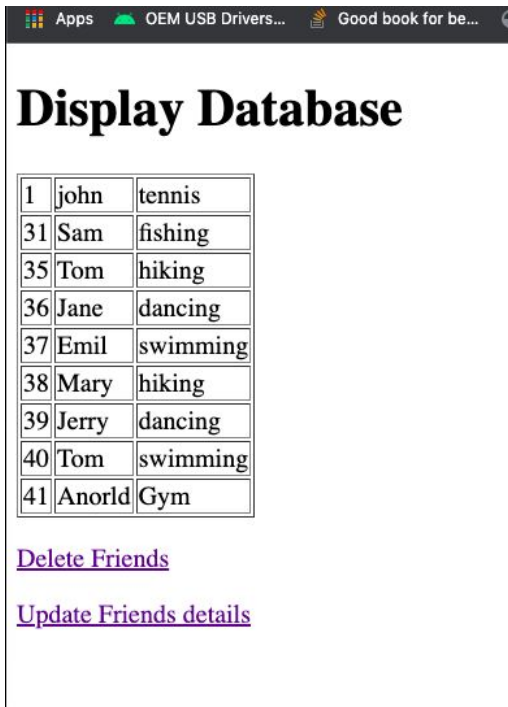
```python
5  def displayDatabase(request):
6      allData = L3app.objects.all().values()
7      template = loader.get_template('displayFullData.html')
8      context = {
9      'allData': allData,
0      }
1      return HttpResponse(template.render(context, request))
```

Django forms (Delete Data)

Display the Deleted Records

Django forms (Update Data)

Update Friends details

Django forms (Update Data)

Display records from database

```python
def updateData(request):
    myFriends = L3app.objects.all().values()
    template = loader.get_template('updateData.html')
    context = {
        'myFriends': myFriends,
    }
    return HttpResponse(template.render(context, request))
```

Django forms (Update Data)

Display records from database

Browser showing "Update Database" page:

1	john	tennis	delete
31	Sam	fishing	delete
35	Tom	hiking	delete
36	Jane	dancing	delete
37	Emil	swimming	delete
38	Mary	hiking	delete
39	Jerry	dancing	delete
40	Tom	swimming	delete
41	Anorld	Gym	delete

Add Friends

updateData.html

```html
<!DOCTYPE html>
<html>
<body>

  <h1>Update Database</h1>

  <table border="1">
  {% for x in myFriends %}
  <tr>
  <td><a href="../updateRecord/{{ x.id }}">{{ x.id }}</a></td>
  <td>{{ x.name }}</td>
  <td>{{ x.hobby }}</td>
  <td><a href="../deleteRecord/{{ x.id }}">delete</a></td>
  </tr>
  {% endfor %}
  </table>


  <p>
  <a href="../addData/">Add Friends</a>
  </p>


</body>
</html>
```
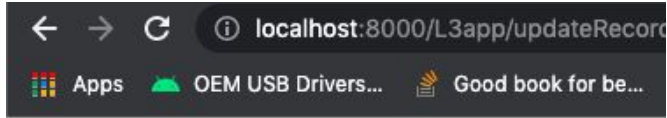
Django forms (Update Data)

Id for record to be updated sent to function

```python
def updateRecord(request, id):
    myFriendid = L3app.objects.get(id=id)
    template = loader.get_template('updateRecord.html')
    context = {
        'myFriendid': myFriendid,
    }
    return HttpResponse(template.render(context, request))
```

Django forms (Update Data)

Object display on html form


```html
<!DOCTYPE html>
<html>
<body>

  <h1>Update Friends</h1>

  <form action="updateRecordConfirmation/{{ myFriendid.id }}" method="post">
  {% csrf_token %}
  First Name:<br>
  <input name="name" value="{{ myFriendid.name }}">
  <br><br>
  Last Name:<br>
  <input name="hobby" value="{{ myFriendid.hobby }}">
  <br><br>
  <input type="submit" value="Submit">
  </form>

</body>
</html>
```

Django forms (Update Data)

Once submitted via html function update database

```python
def updateRecordConfirmation(request, id):
    name = request.POST['name']
    hobby = request.POST['hobby']
    friends = L3app.objects.get(id=id)
    friends.name = name
    friends.hobby = hobby
    friends.save()
    return HttpResponseRedirect(reverse('displayDatabase'))
```

Django forms (Update Data)

Display updated records on html

localhost:8000/L3app/displayDatabase

Apps   OEM USB Drivers...   Good book for be...   127
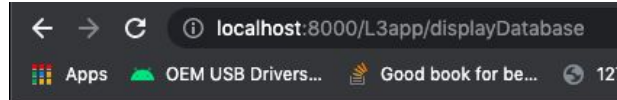
Display Database

1	john	tennis
31	Sam	fishing
35	Tom	hiking
36	Jane	dancing
37	Emil	swimming
38	Mary	hiking
39	Jerry	skating

Delete Friends

Update Friends details

```python
def displayDatabase(request):
    allData = L3app.objects.all().values()
    template = loader.get_template('displayFullData.html')
    context = {
    'allData': allData,
    }
    return HttpResponse(template.render(context, request))
```

Django forms (Update Data)

Display updated records on html


```html
<!DOCTYPE html>
<html>
<body>

  <h1>Display Database</h1>

  <table border="1">
  {% for x in allData %}
  <tr>
  <td>{{ x.id }}</td>
  <td>{{ x.name }}</td>
  <td>{{ x.hobby }}</td>
  </tr>
  {% endfor %}
  </table>

  <p>
  <a href="deleteData/">Delete Friends</a>
  </p>

  <p>
  <a href="updateData/">Update Friends details</a>
  </p>

</body>
</html>
```

Django forms (Upload images)

Models.py
Remember to makemigrations

```python
class Image(models.Model):
    #have to pip3 install Pillow
    title = models.CharField(max_length=200)
    image = models.ImageField(null=True, blank=True, upload_to="images")

    def __str__(self):
        return self.title
```

Django forms (Upload images)

Pip3 Install Pillow

Django forms (Upload images)

Settings.py in L3Proj folder

```
13    from pathlib import Path
14    import os
```

```
33    # Base url to serve media files
34    MEDIA_URL = '/media/'
35
36    # Path where media is stored
37    MEDIA_ROOT = os.path.join(BASE_DIR, 'media/')
38
```

Django forms (Upload images)

url.py in L3Proj folder

```python
15
16    from django.contrib import admin
17    from django.urls import include, path
18    from django.conf import settings
19    from django.conf.urls.static import static
20
```

```python
urlpatterns = [
    path('L3app/', include('L3app.urls')),
    path('admin/', admin.site.urls),
]
if settings.DEBUG:
    urlpatterns += static(settings.MEDIA_URL, document_root=settings.MEDIA_ROOT)
```

Django forms (Upload images)

forms.py in L3app folder

```python
from django import forms
from .models import Image


class ImageForm(forms.ModelForm):
    """Form for the image model"""
    class Meta:
        model = Image
        fields = ('title', 'image')
```

Django forms (Upload images)

uploadImages.html

views.py	models.py	settings.py	urls.py — L3proj	forms.py	**uploadImages.html**

```html
1  <!DOCTYPE html>
2  <html>
3  <body>
4
5  <h1>Upload images</h1>
6
7  <form method="post" enctype="multipart/form-data">
8    {% csrf_token %}
9     {{ form.as_p }}
10    <button type="submit">Upload</button>
11  </form>
12
13  {% if img_obj %}
14    <h3>Succesfully uploaded : {{img_obj.title}}</h3>
15    <img src="{{ img_obj.image.url}}" alt="connect" style="max-height:300px">
16  {% endif %}
17
18  </body>
19  </html>
20
```

Django forms (Upload images)

views.py

```python
0  from L3app.models import School , Principal
1  from L3app.models import Citizen , President
2  #from L3app.models import Company , Boss
3  from django.shortcuts import render
4  from .forms import ImageForm
5
```

```python
def image_upload_view(request):
    """Process images uploaded by users"""
    if request.method == 'POST':
        form = ImageForm(request.POST, request.FILES)
        if form.is_valid():
            form.save()
            # Get the current instance object to display in the template
            img_obj = form.instance
            return render(request, 'uploadImages.html', {'form': form, 'img_obj': img_obj})
    else:
        form = ImageForm()
    return render(request, 'uploadImages.html', {'form': form})
```
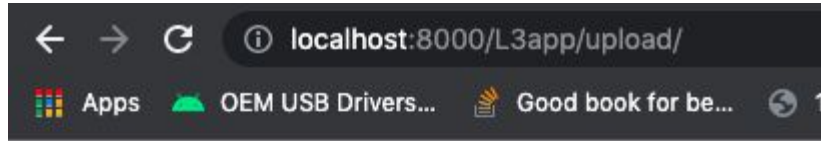
Django forms (Upload images)

Urls.py in L3app folder

```python
urlpatterns = [
    path('accessDatabase', views.accessDatabase, name='accessDatabas
    path('writeData', views.writeData, name='writeData'),
    path('writeMultipleData', views.writeMultipleData, name='writeMu
    path('displayName', views.displayName, name='displayName'),
    path('displayDatabase', views.displayDatabase, name='displayData
    path('addData/', views.addData, name='addData'),
    path('addData/addrecord/', views.addrecord, name='addrecord'),
    path('deleteData/', views.deleteData, name='deleteData'),
    path('deleteRecord/<int:id>', views.deleteRecord, name='deleteRe
    path('updateData/', views.updateData, name='updateData'),
    path('updateRecord/<int:id>', views.updateRecord, name='updateRe
    path('updateRecord/updateRecordConfirmation/<int:id>', views.upd
    #path('displayCompany/', views.displayCompany, name='displayComp
    path('displayPizza/', views.displayPizza, name='displayPizza'),
    path('displaySchool/', views.displaySchool, name='displaySchool'
    path('displayPresident/', views.displayPresident, name='displayP
    path('mycss/', views.mycss, name='mycss'),
    path('upload/', views.image_upload_view),
]
```

Django forms (Upload images)

Browser output

End of Lesson 6