

# CM3035 Advanced Web Development

Lesson 6

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# Django forms (Add New Record)

Add New record



## Add Data into Database

Name:

Hobby:

Submit

# Django forms (Add New Record)

Set Url.py

```
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

```
53 def addData(request):  
54     template = loader.get_template('addData.html')  
55     return HttpResponse(template.render({}, request))  
56
```

Apps OEM USB Drivers... Good book for be... 127.0.0.1:8000/pay/

## Add Data into Database

Name:

Hobby:

Submit

```
views.py  
1 <!DOCTYPE html>  
2 <html>  
3 <body>  
4  
5     <h1>Add Data into Database</h1>  
6  
7     <form action="addrecord/" method="post">  
8         {% csrf_token %}  
9         Name:<br>  
10        <input name="name">  
11        <br><br>  
12        Hobby:<br>  
13        <input name="hobby">  
14        <br><br>  
15        <input type="submit" value="Submit">  
16    </form>  
17  
18 </body>  
19 </html>  
20
```

# Django forms (Add New Record)

Submit form to database via 'post' method

```
6 from django.template import loader
7 from .models import L3app
8 from django.urls import reverse
9 from .models import Pizza, Topping
10 from L3app.models import School, Principa
```

```
6 |
7 def addrecord(request):
8     x = request.POST['name']
9     y = request.POST['hobby']
10    insertData = L3app(name=x, hobby=y)
11    insertData.save()
12    return HttpResponseRedirect(reverse('displayDatabase'))
13
```

# Django forms (Add New Record)

## Display the Inserted Records

```
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>
```

```
5 def displayDatabase(request):
6     allData = L3app.objects.all().values()
7     template = loader.get_template('displayFullData.html')
8     context = {
9         'allData': allData,
10    }
11    return HttpResponse(template.render(context, request))
12
```

# 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)

Add path to delete record

```
path('addData/addrecord/', views.addrecord, name='addrecord'),  
path('deleteData/', views.deleteData, name='deleteData'),  
path('deleteRecord/<int:id>', views.deleteRecord, name='deleteRecord'),  
path('updateData/', views.updateData, name='updateData'),
```

# Django forms (Delete Data)

Delete function in views.py

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

# Django forms (Delete Data)

## Delete Data via html form

Apps OEM USB Drivers... Good

### Delete Data

1	john	tennis	<a href="#">delete</a>
31	Sam	fishing	<a href="#">delete</a>
35	Tom	hiking	<a href="#">delete</a>
36	Jane	dancing	<a href="#">delete</a>
37	Emil	swimming	<a href="#">delete</a>
38	Mary	hiking	<a href="#">delete</a>
39	Jerry	dancing	<a href="#">delete</a>
40	Tom	swimming	<a href="#">delete</a>
41	Anorld	Gym	<a href="#">delete</a>
42	Bella	Running	<a href="#">delete</a>

[Add Friends](#)

```
deleteData.html  displayFullData.html  x  views.py  uris.py
1  <!DOCTYPE html>
2  <html>
3  <body>
4
5  <h1>Delete Data</h1>
6
7  <table border="1">
8    {% for x in myFriends %}
9      <tr>
10       <td>{{ x.id }}</td>
11       <td>{{ x.name }}</td>
12       <td>{{ x.hobby }}</td>
13       <td><a href=" ../deleteRecord/{{ x.id }}">delete</a></td>
14     </tr>
15   {% endfor %}
16 </table>
17
18 <p>
19   <a href=" ../addData/">Add Friends</a>
20 </p>
21
22 </body>
23 </html>
24
```

# Django forms (Delete Data)

Delete Data with function in view.py

```
31  
32 def deleteRecord(request, id):  
33     FriendToDelete = L3app.objects.get(id=id)  
34     FriendToDelete.delete()  
35     return HttpResponseRedirect(reverse('displayDatabase'))  
36
```

# Django forms (Delete Data)

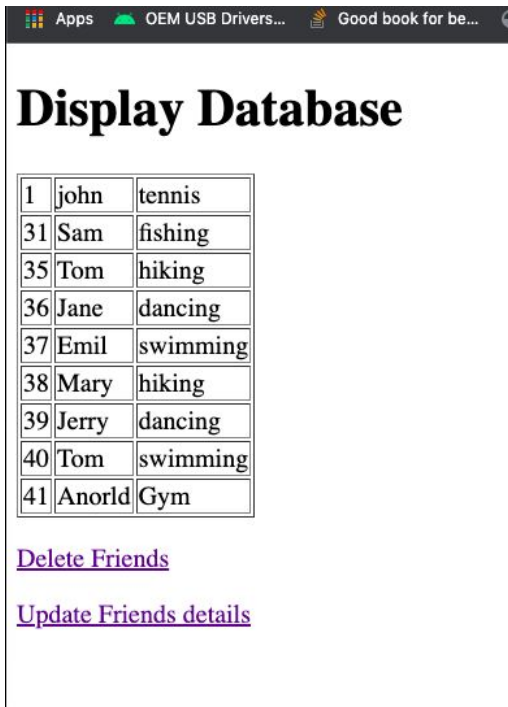
## Display the Deleted Records

```
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>
```

```
5 def displayDatabase(request):
6     allData = L3app.objects.all().values()
7     template = loader.get_template('displayFullData.html')
8     context = {
9         'allData': allData,
10     }
11     return HttpResponse(template.render(context, request))
12
```

# Django forms (Delete Data)

## Display the Deleted 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

[Delete Friends](#)

[Update Friends details](#)

# Django forms (Update Data)

[Update Friends details](#)

# Django forms (Update Data)

Add path for update records

```
1 path('addData/addrecord/', views.addrecord, name='addrecord'),
2 path('deleteData/', views.deleteData, name='deleteData'),
3 path('deleteRecord/<int:id>', views.deleteRecord, name='deleteRecord'),
4 path('updateData/', views.updateData, name='updateData'),
5 path('updateRecord/<int:id>', views.updateRecord, name='updateRecord'),
6 path('updateRecord/updateRecordConfirmation/<int:id>', views.updateRecordConfirmation, name='updateRecordConfirmation'),
7 #path('displayCompany/', views.displayCompany, name='displayCompany'),
8 path('displayPizza/', views.displayPizza, name='displayPizza'),
```



# Django forms (Update Data)

Display records from database

```
7 def updateData(request):
8     myFriends = L3app.objects.all().values()
9     template = loader.get_template('updateData.html')
10    context = {
11        'myFriends': myFriends,
12    }
13    return HttpResponse(template.render(context, request))
```

# Django forms (Update Data)

## Display records from database

localhost:8000/L3app/updateData

### Update Database

<a href="#">1</a>	john	tennis	<a href="#">delete</a>
<a href="#">31</a>	Sam	fishing	<a href="#">delete</a>
<a href="#">35</a>	Tom	hiking	<a href="#">delete</a>
<a href="#">36</a>	Jane	dancing	<a href="#">delete</a>
<a href="#">37</a>	Emil	swimming	<a href="#">delete</a>
<a href="#">38</a>	Mary	hiking	<a href="#">delete</a>
<a href="#">39</a>	Jerry	dancing	<a href="#">delete</a>
<a href="#">40</a>	Tom	swimming	<a href="#">delete</a>
<a href="#">41</a>	Anorld	Gym	<a href="#">delete</a>

[Add Friends](#)

```
deleteData.html x updateData.html views.py
1 <!DOCTYPE html>
2 <html>
3 <body>
4
5     <h1>Update Database</h1>
6
7     <table border="1">
8         {% for x in myFriends %}
9         <tr>
10             <td><a href=" ../updateRecord/{{ x.id }}">{{ x.id }}</a></td>
11             <td>{{ x.name }}</td>
12             <td>{{ x.hobby }}</td>
13             <td><a href=" ../deleteRecord/{{ x.id }}">delete</a>
14         </tr>
15         {% endfor %}
16     </table>
17
18     <p>
19         <a href=" ../addData/">Add Friends</a>
20     </p>
21
22 </body>
23 </html>
```

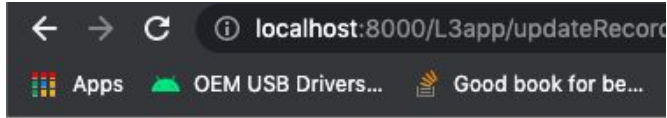
# Django forms (Update Data)

Id for record to be updated sent to function

```
5 def updateRecord(request, id):  
6     myFriendid = L3app.objects.get(id=id)  
7     template = loader.get_template('updateRecord.html')  
8     context = {  
9         'myFriendid': myFriendid,  
10    }  
11    return HttpResponse(template.render(context, request))
```

# Django forms (Update Data)

## Object display on html form



## Update Friends

First Name:

Last Name:

```
updateData.html  views.py  updateRecord.html  url
1  <!DOCTYPE html>
2  <html>
3  <body>
4
5      <h1>Update Friends</h1>
6
7      <form action="updateRecordConfirmation/{{ myFriendid.id }}" method="post">
8          {% csrf_token %}
9          First Name:<br>
10         <input name="name" value="{{ myFriendid.name }}">
11         <br><br>
12         Last Name:<br>
13         <input name="hobby" value="{{ myFriendid.hobby }}">
14         <br><br>
15         <input type="submit" value="Submit">
16     </form>
17
18 </body>
19 </html>
20
```

# Django forms (Update Data)

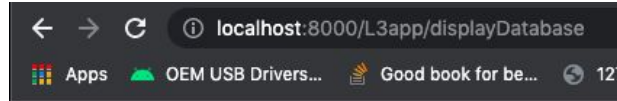
Once submitted via html function update database

```
5 from django.template import loader
7 from .models import L3app
8 from django.urls import reverse
9 from .models import Pizza, Topping
10 from L3app.models import School, Principa
```

```
2
3 def updateRecordConfirmation(request, id):
4     name = request.POST['name']
5     hobby = request.POST['hobby']
6     friends = L3app.objects.get(id=id)
7     friends.name = name
8     friends.hobby = hobby
9     friends.save()
10    return HttpResponseRedirect(reverse('displayDatabase'))
11
```

# Django forms (Update Data)

Display updated records on html



## 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](#)

```
5 def displayDatabase(request):
6     allData = L3app.objects.all().values()
7     template = loader.get_template('displayFullData.html')
8     context = {
9         'allData': allData,
10    }
11    return HttpResponse(template.render(context, request))
```

# Django forms (Update Data)

Display updated records on html

```
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>
```

# Django forms (Upload images)

Models.py

Remember to makemigrations

```
9 class Image(models.Model):
0     #have to pip3 install Pillow
1     title = models.CharField(max_length=200)
2     image = models.ImageField(null=True, blank=True, upload_to="images")
3
4     def __str__(self):
5         return self.title
6
```



# Django forms (Upload images)

Pip3 Install Pillow

# Django forms (Upload images)

Settings.py in L3Proj folder

```
12  
13 from pathlib import Path  
14 import os  
15
```

```
32  
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

```
15 from django.conf.urls import include, path  
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
```

```
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

```
views.py  models.py  settings.py  urls.py — L3proj  forms.py
1  from django import forms
2  from .models import Image
3
4
5  class ImageForm(forms.ModelForm):
6      """Form for the image model"""
7      class Meta:
8          model = Image
9          fields = ('title', 'image')
10
```

# Django forms (Upload images)

uploadImages.html

```
views.py  models.py  settings.py  urls.py — L3proj  forms.py  uploadImages.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     
16 {% endif %}
17
18 </body>
19 </html>
20
```

# Django forms (Upload images)

## views.py

```
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
```

```
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})
```

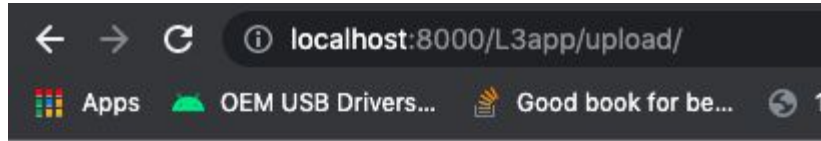
# Django forms (Upload images)

Urls.py in L3app folder

```
urlpatterns = [
    path('accessDatabase', views.accessDatabase, name='accessDatabase'),
    path('writeData', views.writeData, name='writeData'),
    path('writeMultipleData', views.writeMultipleData, name='writeMultipleData'),
    path('displayName', views.displayName, name='displayName'),
    path('displayDatabase', views.displayDatabase, name='displayDatabase'),
    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='deleteRecord'),
    path('updateData/', views.updateData, name='updateData'),
    path('updateRecord/<int:id>', views.updateRecord, name='updateRecord'),
    path('updateRecord/updateRecordConfirmation/<int:id>', views.updateRecordConfirmation, name='updateRecordConfirmation'),
    #path('displayCompany/', views.displayCompany, name='displayCompany'),
    path('displayPizza/', views.displayPizza, name='displayPizza'),
    path('displaySchool/', views.displaySchool, name='displaySchool'),
    path('displayPresident/', views.displayPresident, name='displayPresident'),
    path('mycss/', views.mycss, name='mycss'),
    path('upload/', views.image_upload_view),
]
```

# Django forms (Upload images)

## Browser output



## Upload images

Title:

Image:  No file chosen



End of Lesson 6