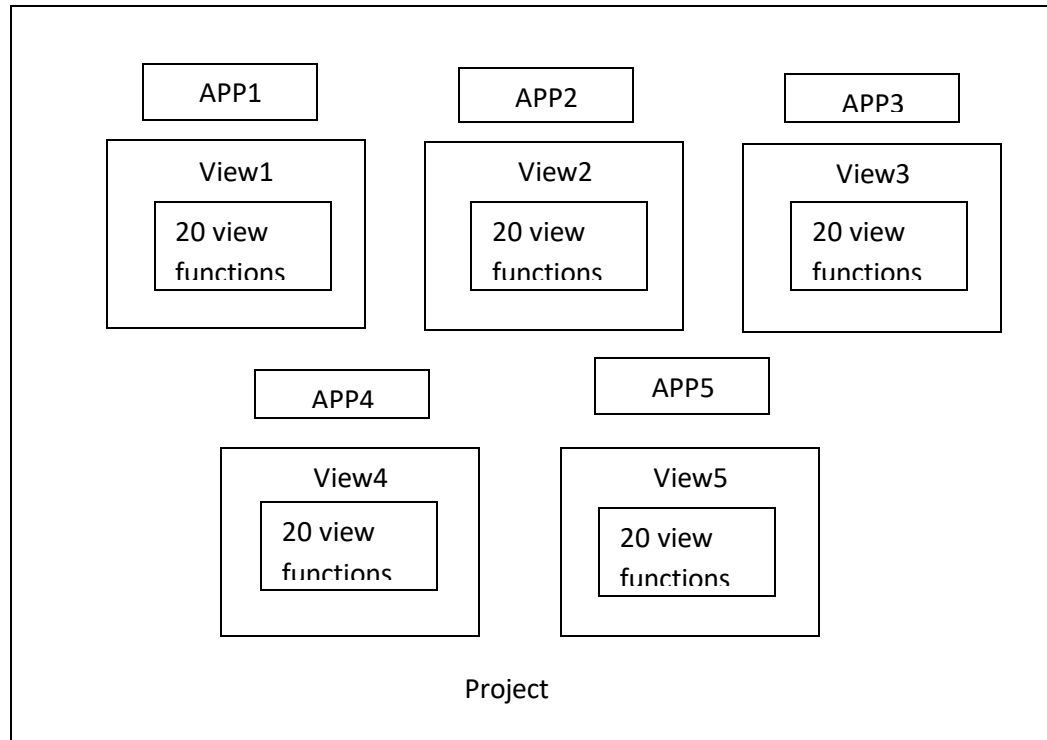


## Applications wise URL Mappings (or) Application Level URL:



### For Example:

Every application contains 20 views function.

1. When we open 100 url patterns will be there at the time we will get confused which url pattern is corresponding to which view.
2. Readability will be reduced in url.
3. To use application in some other project we required all the url patterns related to that application have to copy in other applications. So, defining url at project level reduces reusability of the application.

4. To overcome about disadvantage maintain separate url files at application level instead of project level.
5. Django default url support is always project level.
6. For each and every application we have to create urls.py file.
7. At project level urls.py we have to tell to project urls.py go and check the application level.
8. Django project can contain multiple applications and each application can contain multiple views.
9. Defining url patterns for all views of all applications inside urls.py file of project creates maintenance problem and reduces reusability of applications.
10. We can solve this problem by defining url patterns at application level instead of project level.
11. For every application we have to create a separate urls.py file and we have to define all that application specific urls in that file.
12. We have to link this application level in urls.py file to project level urls.py file by using include ( ) method.

## **Creating Multiple Apps in a Project:**

### **Creating a Project:**

Here we are developing some School Project

1. Creating a project SchoolProject in the current directory.

```
django-admin startproject SchoolProject
```

2. Move to that current directory

cd SchoolProject

3. To run the server if server is working

python manage.py runserver

4. Go to browser window and type this url <http://127.0.0.1:8000>

After checking the servers is worked and drag and drop the SchoolProject into the atom IDE.

## Creating an First Application

Here we are creating the first application name as admissions

1. Creating an application admissions

django-admin startapp admissions

2. Click the admissions app and select views.py

### views.py

```
from django.shortcuts import render
from django.http import HttpResponse
def addadmission(request):
    return HttpResponse('this is add admission view')
def admissionreport(request):
    return HttpResponse('this is admission report view')
```

- After finishing the views logic and add application in settings.py in project folder

### Settings.py

- In this settings.py file and go to the Installed\_Apps and add the application 'admissions' and put the comma and save it.

## Creating urls.py file in admission application

Right click on admissions app and click new file and type urls.py file

Open urls.py in the admissions app

### urls.py

```
from django.urls import path
from admissions.views import addadmission
from admissions.views import admissionreport
```

```
urlpatterns = [
    path('newadm/', addadmission),
    path('admreport/', admissionreport),
]
```

## Creating an Second Application

Here we are creating the first application name as finance

1. Creating an application finance  
django-admin startapp finance
2. Click the finance app and select views.py

### views.py

```
from django.shortcuts import render
from django.http import HttpResponse
```

```
def feecollection(request):
```

```
    return HttpResponse('<h1>I will collect the fees from this  
view</h1>')
```

```
def feeduesreport(request):
```

```
    return HttpResponse('<h1>I will get the fee dues report from this  
view</h1>')
```

```
def feecollectionreport(request):
```

```
    return HttpResponse('<h1>I will get fee collection report from this  
view</h1>')
```

- After finishing the views logic and add application in settings.py in project folder

### **Settings.py**

- In this settings.py file and go to the Installed\_Apps and add the application 'finance' and put the comma and save it.

### **Creating urls.py file in finance application**

Right click on finance app and click new file and type urls.py file

Open urls.py in the finance app

### **urls.py**

```
from django.urls import path  
from finance.views import feecollection  
from finance.views import feeduesreport  
from finance.views import feecollectionreport
```

```
urlpatterns = [  
    path('feecoll/', feecollection),  
    path('duesreport/', feeduesreport),  
    path('collectionreport/', feecollectionreport),  
  
]
```

## **Open urls.py in the project folder**

### **urls.py**

```
from django.contrib import admin  
from django.urls import path,include
```

```
urlpatterns = [  
    path('admin/', admin.site.urls),  
    path('ad/', include('admissions.urls')),  
    path('fin/', include('finance.urls')),  
  
]
```

## **To run the server application**

```
python manage.py runserver
```

- Go to browser window and type this url <http://127.0.0.1:8000>
- It will shows the view action and choose the view particular action

<http://127.0.0.1:8000/ad/newadm>

## **Making urls at project level**

1. Create project
2. Create applications

3. Add applications in settings.py file
4. Define Views in applications
5. Create urls at project level->click applications on that right click and create urls.py file.
6. Define urls patterns at application level
7. Go to project level urls.py file and define include function.
8. Run the Server
9. Send the request <http://127.0.0.1:8000/ad/newadm/>

**Advantage:**

The main advantage of defining url patterns at application level instead of project level

1. It promotes reusability of django applications across multiple projects.
2. Project level urls.py file will be clean and more readable.