Django Outer URLs and Inner URLs - Complete Guide

1) Basic Idea:

Outer URL (Project level) → Main Gate of the house
Inner URL (App level) → Rooms inside the house

Flow:
Browser → Project urls.py → App urls.py → View → Response

2) Project Structure Example:

```
myproject/
■
■■■ myproject/
■    ■■■ settings.py
■    ■■■ urls.py  ← OUTER URL
■
■■■ accounts/
■    ■■■ views.py
■    ■■■ urls.py  ← INNER URL
```


3) Inner URL (accounts/urls.py):

```
from django.urls import path
from . import views

urlpatterns = [
    path('login/', views.login_view),
    path('register/', views.register_view),
]
```


4) Views (accounts/views.py):

```
from django.http import HttpResponse

def login_view(request):
    return HttpResponse("Login Page")

def register_view(request):
    return HttpResponse("Register Page")
```


5) Outer URL (myproject/urls.py):

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

urlpatterns = [
    path('admin/', admin.site.urls),
    path('accounts/', include('accounts.urls')),
]
```


6) Final URL Example:

http://127.0.0.1:8000/accounts/login/

Flow:
1. Project urls.py checks "accounts/"
2. include() opens accounts/urls.py
3. "login/" matches
4. login_view runs
5. Response shown

7) Important Rule:

```
Outer URL → connects project to app
Inner URL → connects app to view
include() → connects outer and inner
```

8) Common Mistake:

Wrong:
```
path('accounts/login/', views.login_view)
```

Correct:
```
path('login/', views.login_view)
```

Because "accounts/" is already defined in outer urls.py.