Django URL Mapping

Well, till here, we have learned to create a model, view, and template. Now, we will learn about the routing of application.

Since Django is a web application framework, it gets user requests by URL locater and responds back. To handle URL, **django.urls** module is used by the framework.

Let's open the file **urls.py** of the project and see the what it looks like:

**// urls.py**

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1. from django.contrib **import** admin
2. from django.urls **import** path
4. urlpatterns = [
5. path('admin/', admin.site.urls),
6. ]

See, Django already has mentioned a URL here for the admin. The path function takes the first argument as a route of string or regex type.

The view argument is a view function which is used to return a response (template) to the user.

The **django.urls** module contains various functions, **path(route,view,kwargs,name)** is one of those which is used to map the URL and call the specified view.

Django URL Functions

Here, we are giving some commonly used functions for URL handling and mapping.

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| --- | --- | --- |
| **Name** | **Description** | **Example** |
| path(route, view, kwargs=None, name=None) | It returns an element for inclusion in urlpatterns. | path('index/', views.index, name='main-view') |
| re\_path(route, view, kwargs=None, name=None) | It returns an element for inclusion in urlpatterns. | re\_path(r'^index/$', views.index, name='index'), |
| include(module, namespace=None) | It is a function that takes a full Python import path to another URLconf module that should be "included" in this place. |  |
| register\_converter(converter, type\_name) | It is used for registering a converter for use in path() routes. |  |

Let's see an example that gets user request and map that route to call specified view function. Have a look at the steps.

1. Create a function **hello** in the views.py file. This function will be mapped from the url.py file.

**// views.py**

1. from django.shortcuts **import** render
2. # Create your views here.
3. from django.http **import** HttpResponse, HttpResponseNotFound
4. from django.views.decorators.http **import** require\_http\_methods
5. @require\_http\_methods(["GET"])
6. def hello(request):
7. **return** HttpResponse('<h1>This is Http GET request.</h1>')

**// urls.py**

1. from django.contrib **import** admin
2. from django.urls **import** path
3. from myapp **import** views
4. urlpatterns = [
5. path('admin/', admin.site.urls),
6. path('index/', views.index),
7. path('hello/',  views.hello),
8. ]

Now, start the server and enter **localhost:8000/hello** to the browser. This URL will be mapped into the list of URLs and then call the corresponding function from the views file.

In this example, hello will be mapped and call hello function from the views file. It is called URL mapping.