

Original script:

```
1  # Reference URL:
2  # https://www.django-rest-framework.org/
3
4  pip install djangorestframework
5  pip install markdown          # Markdown support for the browsable API.
6  pip install django-filter     # Filtering support
7
8  # Add 'rest_framework'
9
10 from django.urls import path, include
11 from django.contrib.auth.models import User
12 from rest_framework import routers, serializers, viewsets
13
14 # Serializers define the API representation.
15 class UserSerializer(serializers.HyperlinkedModelSerializer):
16     class Meta:
17         model = User
18         fields = ['url', 'username', 'email', 'is_staff']
19
20 # ViewSets define the view behavior.
21 class UserViewSet(viewsets.ModelViewSet):
22     queryset = User.objects.all()
23     serializer_class = UserSerializer
24
25 # Routers provide an easy way of automatically determining the URL conf.
26 router = routers.DefaultRouter()
27 router.register(r'users', UserViewSet)
28
29 # Wire up our API using automatic URL routing.
30 # Additionally, we include login URLs for the browsable API.
31 urlpatterns = [
32     path('', include(router.urls)),
33     path('api-auth/', include('rest_framework.urls', namespace='rest_framework'))
34 ]
```

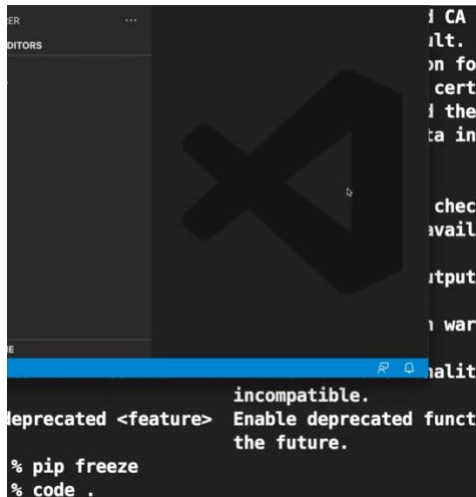
I was trying to build a Web API using Django REST framework using Python.

# To test it's working: python-request

1. Setup Python virtual environment, install requirements and start Django

```
mkdir -p ~/dev/drf  
cd ~/dev/drf
```

2. A cool way to open VS code:



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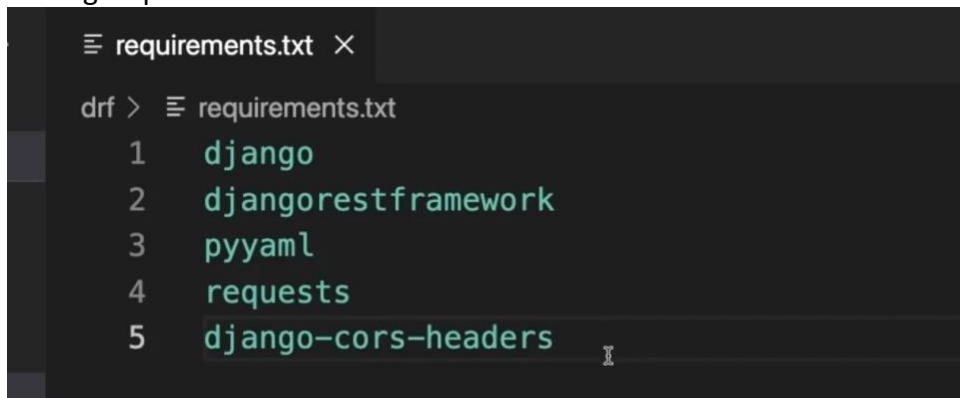
rput

war

% pip freeze
% code .

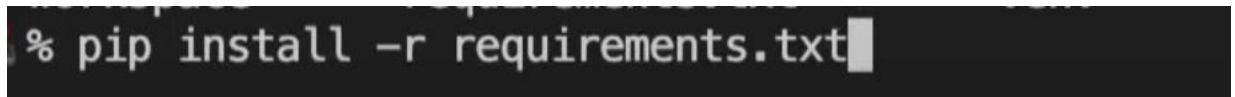
incompatible.
Enable deprecated funct
the future.
```

3. Adding requirements.txt



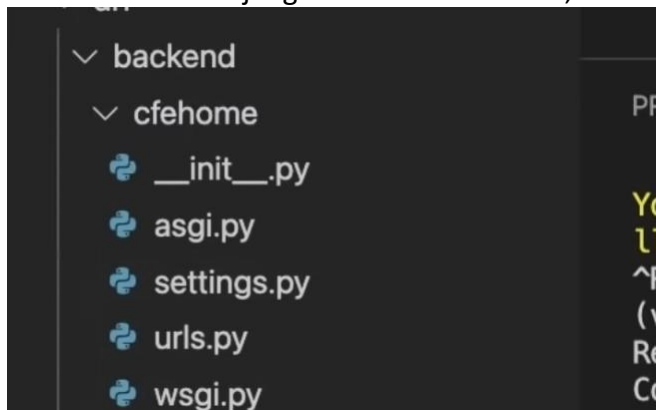
```
requirements.txt X
drf > requirements.txt
1 django
2 djangorestframework
3 pyyaml
4 requests
5 django-cors-headers
```

4. RUN IT



```
% pip install -r requirements.txt
```

5. Backend: where Django framework resides; and we call project cfefhome



```

  backend
    cfefhome
      __init__.py
      asgi.py
      settings.py
      urls.py
      wsgi.py
```

6. Create a python client & setup endpoint

```

5      manage.py
python manage.py runserver 8000
  file changes with StatReloader
system checks...

  identified no issues (0 silenced).

unapplied migration(s). Your project may not work properly
until you apply the migrations for app(s): admin, auth,
contenttypes, sessions.
manage.py migrate' to apply them.
2022 - 18:03:08
on 4.0.2, using settings 'cfhome.settings'
development server at http://127.0.0.1:8000/
Press Ctrl+C to quit

```

```

4 # endpoint = "https://httpbin.org/anything"
5 endpoint = "http://localhost:8000/" #http://127.0.0.1:8000/
6

```

7. Create app called api

```

python manage.py startapp api

```

Also inside settings.py:

```

37     'django.contrib.sessions',
38     'django.contrib.messages',
39     'django.contrib.staticfiles',
40     'api',
41

```

8. Create view.py

```

basic.py  views.py U
drf > backend > api > views.py > api_home
1  from django.http import JsonResponse
2
3
4  def api_home(request, *args, **kwargs):
5      return JsonResponse({"message": "Hi there, this is
    your Django API response!!"})

```

9. Inside urls.py: specify path

```
drf > backend > api > urls.py > ...
1  from django.urls import path
2
3  from . import views
4  # from .views import api_home
5
6
7  urlpatterns = [
8      path('', views.api_home) # localhost:8000/api/
9  ]
```

10. Run our project:

```
manage.py
python manage.py runserver 8000
```

Got the port going

```
Performing system checks...

System check identified no issues (0 silenced).

You have 18 unapplied migration(s). Your project may not work properly until you apply the migrations for app(s): admin, auth, contenttypes, sessions.
Run 'python manage.py migrate' to apply them.
February 11, 2022 - 18:12:50
Django version 4.0.2, using settings 'cfefhome.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CONTROL-C.
```

And adding our new url path /api

```
drf > py_client > basic.py > ...
1  import requests
2
3  # endpoint = "https://httpbin.org/status/200/"
4  # endpoint = "https://httpbin.org/anything"
5  endpoint = "http://localhost:8000/api/" #http://
6
7  get_response = requests.get(endpoint, json={"name": "John", "age": 30})
```

After run

```
python py_client/basic.py
```

We can get

```
{"message": "Hi there, this is your Django API response!!"}  
200  
Hi there, this is your Django API response!!
```